

Calendar No. 695

111TH CONGRESS
2^D SESSION

S. 1078

To authorize a comprehensive national cooperative geospatial imagery mapping program through the United States Geological Survey, to promote use of the program for education, workforce training and development, and applied research, and to support Federal, State, tribal, and local government programs.

IN THE SENATE OF THE UNITED STATES

MAY 19, 2009

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

DECEMBER 14, 2010

Reported by Mr. ROCKEFELLER, with an amendment

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

A BILL

To authorize a comprehensive national cooperative geospatial imagery mapping program through the United States Geological Survey, to promote use of the program for education, workforce training and development, and applied research, and to support Federal, State, tribal, and local government programs.

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 “AmericaView
3 Geospatial Imagery Mapping Program Act”.

4 **SEC. 2. FINDINGS.**

5 Congress finds that—

6 (1) when Federal geospatial imagery is avail-
7 able in a cost-effective and timely manner, State and
8 local governments and educational institutions are
9 able to develop new scientific, educational, and prac-
10 tical applications for the data and to adopt new tools
11 for applied research, education, and training, as evi-
12 denced by—

13 (A) the success of the United States Geo-
14 logical Survey (referred to in this Act as the
15 “USGS”) cooperative pilot projects OhioView
16 and Gateway to the Earth; and

17 (B) the 35 member StateView programs
18 cooperating in the AmericaView program;

19 (2) increased access to geospatial imagery for
20 research and educational purposes, made available
21 through the USGS and from State-level archives
22 linked to StateView program support, benefits user
23 communities that have traditionally struggled to af-
24 ford the data because it enables—

25 (A) educators to train—

1 (i) students at institutions of higher
2 education for technology careers in remote
3 sensing; and

4 (ii) teachers for use of remote sensing
5 data to enhance student learning in ele-
6 mentary and secondary education;

7 (B) historically black colleges and univer-
8 sities to partner with StateView program uni-
9 versities to enhance learning and training op-
10 portunities for students; and

11 (C) Native Americans to provide training
12 and education regarding—

13 (i) the use and application of remote
14 sensing data for Native American students;
15 and

16 (ii) developing satellite-based applica-
17 tions for managing reservation resources;

18 (3) institutions of higher education and State
19 and local government agencies use geospatial im-
20 agery to support practical mapping and monitoring
21 purposes, including—

22 (A) monitoring the health of Federal and
23 State land and forests;

24 (B) understanding ecosystems and pre-
25 dicting ecosystem change;

1 (C) mapping hydrologic systems and as-
2 sessing water quality;

3 (D) monitoring crop productivity, assessing
4 damage, and predicting crop yield;

5 (E) assisting with transportation and land-
6 use planning in the urban areas of the United
7 States;

8 (F) predicting and assisting with the man-
9 agement of human and wildlife disease out-
10 breaks; and

11 (G) mapping natural hazards and assess-
12 ing risk; and

13 (4) the AmericaView program is uniquely posi-
14 tioned to help each State develop applications and
15 skills necessary—

16 (A) to effectively apply geospatial imagery
17 for multiple State-focused mapping purposes;
18 and

19 (B) to expand the use and benefits of
20 geospatial imagery for research and operational
21 purposes within each State.

22 **SEC. 3. DEFINITIONS.**

23 In this Act:

24 (1) **AMERICAVIEW.**—The term “AmericaView”
25 means the national nonprofit collaboration of

1 StateView program participants cooperating with the
2 USGS to achieve the purposes of the AmericaView
3 program.

4 (2) AMERICAVIEW PROGRAM.—The term
5 “AmericaView program” means the national remote
6 sensing education, outreach, and research program
7 of the USGS established under section 4(a), com-
8 prised of—

9 (A) the AmericaView project; and

10 (B) AmericaView.

11 (3) AMERICAVIEW PROJECT.—The term
12 “AmericaView project” means the USGS data ar-
13 chive, development, maintenance, and product dis-
14 tribution program conducted at the Earth Resources
15 Observation and Science (EROS) Data Center.

16 (4) EDUCATIONAL INSTITUTION.—The term
17 “educational institution” means—

18 (A) any public or private elementary or
19 secondary school, vocational school, correspond-
20 ence school, business school, institution of high-
21 er education (including a junior college or
22 teachers’ college), normal school, professional
23 school, or scientific or technical institution; and

24 (B) any other institution that provides an
25 educational program.

1 (5) ~~GEOSPATIAL IMAGERY.~~—The term
 2 “geospatial imagery” means all information acquired
 3 from above the surface of the Earth by satellite or
 4 airplane.

5 (6) ~~NATIONAL SPATIAL DATA INFRASTRUC-~~
 6 ~~TURE.~~—The term “national spatial data infrastruc-

7 ture” means the technology, policies, standards, and
 8 human resources necessary to acquire, process,
 9 store, distribute, and improve use of geospatial data
 10 for the United States established by Executive Order
 11 12906 (59 Fed. Reg. 17671 (April 13, 1994)).

12 (7) ~~SECRETARY.~~—The term “Secretary” means
 13 the Secretary of the Interior, acting through the Di-
 14 rector of the USGS.

15 (8) ~~STATE.~~—The term “State” means—

16 (A) each of the several States of the
 17 United States;

18 (B) the District of Columbia;

19 (C) the Commonwealth of Puerto Rico;

20 (D) Guam;

21 (E) American Samoa;

22 (F) the Commonwealth of the Northern
 23 Mariana Islands; and

24 (G) the United States Virgin Islands.

1 (9) STATEVIEW PROGRAM.—The term
 2 “StateView program” means the AmericaView pro-
 3 gram of an individual State, comprised of edu-
 4 cational institutions and State and local govern-
 5 ments.

6 **SEC. 4. AMERICAVIEW PROGRAM.**

7 (a) IN GENERAL.—The Secretary shall establish and
 8 maintain a national remote sensing education, outreach,
 9 and research program within the USGS to advance the
 10 availability, timely distribution, and widespread use of
 11 geospatial imagery for education, research, assessment,
 12 and monitoring purposes in each State.

13 (b) PURPOSES.—The purposes of the AmericaView
 14 program are—

15 (1) to increase accessibility to, and expand the
 16 use of, remote sensing data in a standard, easy-to-
 17 use format by Federal, State, local, and tribal gov-
 18 ernments, communities, educational institutions, and
 19 the commercial sector; and

20 (2) to assist each StateView program in estab-
 21 lishing the cooperative infrastructure necessary to
 22 increase access to geospatial imagery for research
 23 and educational purposes.

24 (c) ACTIVITIES.—

1 (1) AMERICAVIEW PROJECT.—The Secretary,
2 acting through the AmericaView project, shall sup-
3 port the geospatial imagery mapping research and
4 educational programs of each State by cooperating
5 with States—

6 (A) to identify new geospatial imagery
7 mapping needs and infrastructure and to de-
8 fine, consolidate, and

9 (B) to maintain the data requirements of
10 the AmericaView project.

11 (2) AMERICAVIEW PROGRAM.—The Secretary,
12 acting through the AmericaView program, shall
13 maintain AmericaView in each State—

14 (A) to share and cooperate in the develop-
15 ment of geospatial imagery mapping applica-
16 tions, education, and training infrastructure in
17 each State;

18 (B) to cooperate with the AmericaView
19 project to develop nationally consistent stand-
20 ards for geospatial imagery mapping in each
21 State;

22 (C) to expand the number of geospatial im-
23 agery mapping courses taught at educational
24 institutions and provide training, remote sens-
25 ing data, and teaching tools to educators;

1 (D) to expand geospatial imagery mapping
2 research at research educational institutions;

3 (E) to expand the knowledge and use of
4 geospatial imagery and map products in the
5 current workforce through outreach programs,
6 workshops, and other training opportunities;

7 (F) to build partnerships with local govern-
8 ments to identify unique research and develop-
9 ment needs and geospatial imagery mapping
10 pilot projects;

11 (G) to promote cooperation and sharing of
12 expertise regarding geospatial imagery among
13 participating States and within each partici-
14 pating State; and

15 (H) to enable the States to provide
16 geospatial imagery to the USGS.

17 (3) GRANTS.—The Secretary annually shall
18 provide grants to sustain and develop StateView pro-
19 grams.

20 (4) FEDERAL PARTNER ADVISORY COM-
21 MITTEE.—

22 (A) IN GENERAL.—The Secretary shall
23 maintain an advisory committee to advise the
24 Director of the USGS regarding the
25 AmericaView program.

1 ~~(B)~~ MEMBERSHIP AND APPOINTMENT.—

2 The advisory committee under subparagraph

3 ~~(A)~~ shall be composed of—

4 ~~(i)~~ at least ~~1~~ representative of each
5 of—

6 ~~(I)~~ AmericaView;

7 ~~(II)~~ the USGS; and

8 ~~(III)~~ the Department of Agri-
9 culture; and

10 ~~(ii)~~ representatives of such other
11 agencies as the Secretary may designate.

12 **SEC. 5. AUTHORIZATION OF APPROPRIATIONS.**

13 There are authorized to be appropriated to the Sec-
14 retary such sums as are necessary to carry out this Act
15 for each of fiscal years 2010 through 2014.

16 **SECTION 1. SHORT TITLE.**

17 *This Act may be cited as the “AmericaView Geospatial*
18 *Imagery Mapping Program Act”.*

19 **SEC. 2. FINDINGS.**

20 *Congress finds that—*

21 *(1) when Federal geospatial imagery is available*
22 *in a cost-effective and timely manner, State and local*
23 *governments and educational institutions are able to*
24 *develop new scientific, educational, and practical ap-*
25 *plications for the data and to adopt new tools for ap-*

1 *plied research, education, and training, as evidenced*
 2 *by—*

3 *(A) the success of the United States Geologi-*
 4 *cal Survey (referred to in this Act as the*
 5 *“USGS”) cooperative pilot projects OhioView*
 6 *and Gateway to the Earth; and*

7 *(B) the 35 member StateView programs co-*
 8 *operating in the AmericaView program;*

9 *(2) increased access to geospatial imagery for re-*
 10 *search and educational purposes, made available*
 11 *through the USGS and from State-level archives*
 12 *linked to StateView program support, benefits user*
 13 *communities that have traditionally struggled to af-*
 14 *ford the data because it enables—*

15 *(A) educators to train—*

16 *(i) students at institutions of higher*
 17 *education for technology careers in remote*
 18 *sensing; and*

19 *(ii) teachers for use of remote sensing*
 20 *data to enhance student learning in elemen-*
 21 *tary and secondary education;*

22 *(B) historically black colleges and univer-*
 23 *sities to partner with StateView program univer-*
 24 *sities to enhance learning and training opportu-*
 25 *nities for students; and*

1 (C) *Native Americans to provide training*
 2 *and education regarding—*

3 (i) *the use and application of remote*
 4 *sensing data for Native American students;*
 5 *and*

6 (ii) *developing satellite-based applica-*
 7 *tions for managing reservation resources;*

8 (3) *institutions of higher education and State*
 9 *and local government agencies use geospatial imagery*
 10 *to support practical mapping and monitoring pur-*
 11 *poses, including—*

12 (A) *monitoring the health of Federal and*
 13 *State land and forests;*

14 (B) *understanding ecosystems and pre-*
 15 *dicting ecosystem change;*

16 (C) *mapping hydrologic systems and assess-*
 17 *ing water quality;*

18 (D) *monitoring crop productivity, assessing*
 19 *damage, and predicting crop yield;*

20 (E) *assisting with transportation and land-*
 21 *use planning in the urban areas of the United*
 22 *States;*

23 (F) *predicting and assisting with the man-*
 24 *agement of human and wildlife disease out-*
 25 *breaks; and*

1 (G) mapping natural hazards and assessing
2 risk; and

3 (4) the AmericaView program is uniquely posi-
4 tioned to help each State develop applications and
5 skills necessary—

6 (A) to effectively apply geospatial imagery
7 for multiple State-focused mapping purposes;
8 and

9 (B) to expand the use and benefits of
10 geospatial imagery for research and operational
11 purposes within each State.

12 **SEC. 3. DEFINITIONS.**

13 *In this Act:*

14 (1) *AMERICAVIEW.*—The term “AmericaView”
15 means the national nonprofit collaboration of
16 StateView program participants cooperating with the
17 USGS to achieve the purposes of the AmericaView
18 program.

19 (2) *AMERICAVIEW PROGRAM.*—The term
20 “AmericaView program” means the national remote
21 sensing education, outreach, and research program of
22 the USGS established under section 4(a), comprised
23 of—

24 (A) the AmericaView project; and

25 (B) AmericaView.

1 (3) *AMERICAVIEW PROJECT.*—*The term*
 2 *“AmericaView project” means the USGS data ar-*
 3 *chive, development, maintenance, and product dis-*
 4 *tribution program conducted at the Earth Resources*
 5 *Observation and Science (EROS) Data Center.*

6 (4) *EDUCATIONAL INSTITUTION.*—*The term*
 7 *“educational institution” means—*

8 (A) *any public or private elementary or sec-*
 9 *ondary school, vocational school, correspondence*
 10 *school, business school, institution of higher edu-*
 11 *cation (including a junior college or teachers’*
 12 *college), normal school, professional school, or*
 13 *scientific or technical institution; and*

14 (B) *any other institution that provides an*
 15 *educational program.*

16 (5) *GEOSPATIAL IMAGERY.*—*The term*
 17 *“geospatial imagery” means all information acquired*
 18 *from above the surface of the Earth by satellite or air-*
 19 *plane.*

20 (6) *NATIONAL SPATIAL DATA INFRASTRUC-*
 21 *TURE.*—*The term “national spatial data infrastruc-*
 22 *ture” means the technology, policies, standards, and*
 23 *human resources necessary to acquire, process, store,*
 24 *distribute, and improve use of geospatial data for the*

1 *United States established by Executive Order 12906*
 2 *(59 Fed. Reg. 17671 (April 13, 1994)).*

3 (7) *SECRETARY.*—*The term “Secretary” means*
 4 *the Secretary of the Interior, acting through the Di-*
 5 *rector of the USGS.*

6 (8) *STATE.*—*The term “State” means—*

7 (A) *each of the several States of the United*
 8 *States;*

9 (B) *the District of Columbia;*

10 (C) *the Commonwealth of Puerto Rico;*

11 (D) *Guam;*

12 (E) *American Samoa;*

13 (F) *the Commonwealth of the Northern*
 14 *Mariana Islands; and*

15 (G) *the United States Virgin Islands.*

16 (9) *STATEVIEW PROGRAM.*—*The term “StateView*
 17 *program” means the AmericaView program of an in-*
 18 *dividual State, comprised of educational institutions*
 19 *and State and local governments.*

20 **SEC. 4. AMERICAVIEW PROGRAM.**

21 (a) *IN GENERAL.*—*The Secretary shall establish and*
 22 *maintain a national remote sensing education, outreach,*
 23 *and research program within the USGS to advance the*
 24 *availability, timely distribution, and widespread use of*
 25 *geospatial imagery for education, research, assessment, and*

1 *monitoring purposes in each State, consistent with the Au-*
 2 *gust 2007 recommendations of the Future of Land Imaging*
 3 *Interagency Working Group of the National Science and*
 4 *Technology Council.*

5 (b) *PURPOSES.—The purposes of the AmericaView*
 6 *program are—*

7 (1) *to increase accessibility to, and expand the*
 8 *use of, remote sensing data in a standard, easy-to-use*
 9 *format by Federal, State, local, and tribal govern-*
 10 *ments, communities, educational institutions, and the*
 11 *commercial sector; and*

12 (2) *to assist each StateView program in estab-*
 13 *lishing the cooperative infrastructure necessary to in-*
 14 *crease access to geospatial imagery for research and*
 15 *educational purposes.*

16 (c) *ACTIVITIES.—*

17 (1) *AMERICAVIEW PROJECT.—The Secretary, act-*
 18 *ing through the AmericaView project, shall support*
 19 *the geospatial imagery mapping research and edu-*
 20 *cational programs of each State by cooperating with*
 21 *States—*

22 (A) *to identify new geospatial imagery*
 23 *mapping needs and infrastructure and to define,*
 24 *consolidate; and*

1 (B) to maintain the data requirements of
2 the AmericaView project.

3 (2) AMERICAVIEW PROGRAM.—The Secretary,
4 acting through the AmericaView program, shall
5 maintain AmericaView in each State—

6 (A) to share and cooperate in the develop-
7 ment of geospatial imagery mapping applica-
8 tions, education, and training infrastructure in
9 each State;

10 (B) to cooperate with the AmericaView
11 project to develop nationally consistent standards
12 for geospatial imagery mapping in each State;

13 (C) to expand the number of geospatial im-
14 agery mapping courses taught at educational in-
15 stitutions and provide training, remote sensing
16 data, and teaching tools to educators;

17 (D) to expand geospatial imagery mapping
18 research at research educational institutions;

19 (E) to expand the knowledge and use of
20 geospatial imagery and map products in the cur-
21 rent workforce through outreach programs, work-
22 shops, and other training opportunities;

23 (F) to build partnerships with local govern-
24 ments to identify unique research and develop-

1 *ment needs and geospatial imagery mapping*
 2 *pilot projects;*

3 *(G) to promote cooperation and sharing of*
 4 *expertise regarding geospatial imagery among*
 5 *participating States and within each partici-*
 6 *pating State; and*

7 *(H) to enable the States to provide*
 8 *geospatial imagery to the USGS.*

9 *(3) GRANTS.—The Secretary annually shall pro-*
 10 *vide grants to sustain and develop StateView pro-*
 11 *grams.*

12 *(4) FEDERAL PARTNER ADVISORY COMMITTEE.—*

13 *(A) IN GENERAL.—The Secretary shall*
 14 *maintain an advisory committee to advise the*
 15 *Director of the USGS regarding the*
 16 *AmericaView program.*

17 *(B) MEMBERSHIP AND APPOINTMENT.—The*
 18 *advisory committee under subparagraph (A)*
 19 *shall be composed of—*

20 *(i) at least 1 representative of each*
 21 *of—*

22 *(I) AmericaView;*

23 *(II) the USGS; and*

24 *(III) the Department of Agri-*
 25 *culture; and*

1 (ii) representatives of such other agen-
2 cies as the Secretary may designate.

3 **SEC. 5. AUTHORIZATION OF APPROPRIATIONS.**

4 There are authorized to be appropriated to the Sec-
5 retary such sums as are necessary to carry out this Act for
6 each of fiscal years 2010 through 2014.

Calendar No. 695

11TH CONGRESS
2^D Session

S. 1078

A BILL

To authorize a comprehensive national cooperative geospatial imagery mapping program through the United States Geological Survey, to promote use of the program for education, workforce training and development, and applied research, and to support Federal, State, tribal, and local government programs.

DECEMBER 14, 2010

Reported with an amendment