108TH CONGRESS
2D SESSION

S. 2151

To encourage the development and integrated use by the public and private sectors of remote sensing and other geospatial information, and for other purposes.

IN THE SENATE OF THE UNITED STATES

MARCH 1, 2004

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

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A BILL

To encourage the development and integrated use by the public and private sectors of remote sensing and other geospatial information, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the ''Remote Sensing Applications Act of 2004''.

SEC. 2. FINDINGS.

The Congress finds that—

(1) although urban land use planning, growth management, and other functions of State, local, re-

gional, and tribal agencies are rightfully within their jurisdiction, the Federal Government can and should play an important role in the development and demonstration of innovative techniques to improve comprehensive land use planning and growth management;

(2) the United States is making a major investment in acquiring remote sensing and other geospatial information from both governmental and commercial sources;

(3) while much of the data is being acquired for scientific and national security purposes, it also can have important applications to help meet societal goals;

(4) it has already been demonstrated that Landsat data and other earth observation data can be of enormous assistance to Federal, State, local, regional, and tribal agencies for urban land use planning, coastal zone management, natural and cultural resource management, and disaster monitoring;

(5) remote sensing, coupled with the emergence of geographic information systems and satellite-based positioning information, offers the capability of developing important new applications of inte-

grated sets of geospatial information to address societal needs;

(6) the full range of applications of remote sensing and other forms of geospatial information to meeting public sector requirements has not been adequately explored or exploited;

(7) the Land Remote Sensing Policy Act of 1992, Presidential Decision Directive 23 of 1994, and the Commercial Space Act of 1998 all support and promote the development of United States commercial remote sensing capabilities;

(8) many State, local, regional, tribal, and Federal agencies are unaware of the utility of remote sensing and other geospatial information for meeting their needs, even when research has demonstrated the potential applications of that information;

(9) even when aware of the utility of remote sensing and geospatial technologies in the area of wildland fire management to detect and monitor a wildland fire in real-time from the early stages of fire growth, many State, local, regional, and tribal agencies are hampered by a lack of overall strategy guiding interagency management of resources and technology, according to a September 2003 Government Accounting Office report;

(10) remote sensing and other geospatial information, especially when used in a coordinated approach, can be particularly useful to State, local, regional, and tribal agencies in the area of urban planning, especially in their efforts to plan for and manage the impacts of growth, development, and sprawl, as well as in wildland fire management and environmental impact and disaster relief planning and management;

(11) the United States Geological Survey, in coordination with other agencies, can play a unique role in demonstrating how data acquired for scientific purposes, when combined with other data sources and processing capabilities, can be applied to assist State, local, regional, and tribal agencies and the private sector in decisionmaking in such areas as agriculture, weather forecasting, and forest management; and

(12) in addition, the United States Geological Survey, in conjunction with other agencies, can play a unique role in stimulating the development of the remote sensing and other geospatial information sector through pilot projects to demonstrate the value of integrating governmental and commercial remote sensing data with geographic information systems

and satellite-based positioning data to provide useful applications products.

SEC. 3. DEFINITIONS.

In this Act—

(1) the term ''Director'' means the Director of the United States Geological Survey;

(2) the term ''geospatial information'' means knowledge of the nature and distribution of physical and cultural features on the landscape based on analysis of data from airborne or spaceborne platforms or other types and sources of data; and

(3) the term ''institution of higher education'' has the meaning given that term in section 101(a) of the Higher Education Act of 1965 (20 U.S.C. 1001(a)).

SEC. 4. PILOT PROJECTS TO ENCOURAGE PUBLIC SECTOR APPLICATIONS.

(a) IN GENERAL.—The Director shall establish a program of grants for competitively awarded pilot projects to explore the integrated use of sources of remote sensing and other geospatial information to address State, local, regional, and tribal agency needs.

(b) PREFERRED PROJECTS.—In awarding grants under this section, the Director shall give preference to projects that—

(1) make use of existing public or commercial data sets;

(2) integrate multiple sources of geospatial information, such as geographic information system data, satellite-provided positioning data, and remotely sensed data, in innovative ways;

(3) include funds or in-kind contributions from non-Federal sources;

(4) involve the participation of commercial entities that process raw or lightly processed data, often merging that data with other geospatial information, to create data products that have significant value added to the original data; and

(5) taken together demonstrate as diverse a set of public sector applications as possible.

(c) OPPORTUNITIES.—In carrying out this section, the Director shall seek opportunities to assist—

(1) in the development of commercial applications potentially available from the remote sensing industry;

(2) State, local, regional, and tribal agencies in applying remote sensing and other geospatial information technologies for growth management; and

(3) State, local, regional, and tribal agencies in obtaining and utilizing satellite, aviation, and sensor

capabilities for wildland fire detection, analysis, and observation.

(d) DURATION.—Assistance for a pilot project under subsection (a) shall be provided for a period not to exceed 3 years.

(e) REPORT.—Each recipient of a grant under subsection (a) shall transmit a report to the Director on the results of the pilot project within 180 days of the completion of that project.

(f) WORKSHOP.—Each recipient of a grant under subsection (a) shall, not later than 180 days after the completion of the pilot project, conduct at least one workshop for potential users to disseminate the lessons learned from the pilot project as widely as feasible.

(g) REGULATIONS.—The Director shall issue regulations establishing application, selection, and implementation procedures for pilot projects, and guidelines for reports and workshops required by this section.

SEC. 5. PROGRAM EVALUATION.

(a) ADVISORY COMMITTEE.—The Director shall establish an advisory committee, consisting of individuals with appropriate expertise in State, local, regional, and tribal agencies, the university research community, and the remote sensing and other geospatial information industry, to monitor the program established under section

4. The advisory committee shall consult with the Federal Geographic Data Committee and other appropriate industry representatives and organizations. Notwithstanding section 14 of the Federal Advisory Committee Act, the advisory committee established under this subsection shall remain in effect until the termination of the program under section 4.

(b) EFFECTIVENESS EVALUATION.—Not later than December 31, 2008, the Director shall transmit to the Congress an evaluation of the effectiveness of the program established under section 4 in exploring and promoting the integrated use of sources of remote sensing and other geospatial information to address State, local, regional, and tribal agency needs. Such evaluation shall have been conducted by an independent entity.

SEC. 6. DATA AVAILABILITY.

The Director shall ensure that the results of each of the pilot projects completed under section 4 shall be retrievable through an electronic, Internet-accessible database.

SEC. 7. EDUCATION.

The Director shall establish an educational outreach program to increase awareness at institutions of higher education and State, local, regional, and tribal agencies

of the potential applications of remote sensing and other geospatial information.

SEC. 8. COST SENSITIVITY STUDY.

The Director shall conduct a study of the effect of remote sensing imagery costs on potential State, local, regional, and tribal agency applications. The study shall identify applications that are likely to be most affected by reductions in the cost of remote sensing imagery. Not later than 2 years after the date of the enactment of this Act, the Director shall transmit to the Congress the results of the study conducted under this section.

SEC. 9. REPORT.

Not later than 6 months after the date of enactment of this Act, the Director shall submit to the Congress a report on how agencies are implementing the recommendations contained in the September 2003 General Accounting Office report entitled ''Geospatial Information: Technologies Hold Promise for Wildland Fire Management, but Challenges Remain''.

SEC. 10. AUTHORIZATION OF APPROPRIATIONS.

There are authorized to be appropriated to the United States Geological Survey, $15,000,000 for each of the fiscal years 2005 through 2009 to carry out this Act.

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