

111th CONGRESS
1st Session
H. R. ____

To provide for a future land imaging program and establish a geospatial data collection system for observation, measurement, verification and validation of phenomena resulting from global climate change, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

April __, 2009

M_. ____ introduced the following bill; which was referred to the Committee on ____ .

A BILL

To provide for a future land imaging program and establish a geospatial data collection system for observation, measurement, verification and validation of phenomena resulting from global climate change, 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 ‘Land Remote Sensing and Global Climate Change Data Collection Act of 2009’.

SEC. 2. PURPOSES.

The purposes of this Act are the following:

- (1) To gain a better understanding of the changes in the global climate and its affects on the environment, natural resource management, coastal operations, environmental prediction, and other appropriate activities;
- (2) To authorize the establishment of an observation system to collect data on environmental variables in the United States to meet regional, national and international information requirements and support an integrated global climate change observing system;
- (3) To more effectively predict and mitigate impacts of natural hazards such as tsunamis, hurricanes, coastal erosion, and fluctuating water levels on the coastline of the United States and the environment of the Nation;
- (4) To more effectively monitor and mitigate the impacts of anthropogenic events and phenomena on the environment of the United States;
- (5) To enable the sustainable use of ocean and coastal and natural resources;
- (6) To establish a program management office for land imaging, geospatial, and remote sensing activities; and

(7) To assure continued United States leadership in the development, application, and use of commercial space and airborne remote sensing and other geospatial information.

SEC. 3. DEFINITIONS.

In this Act:

(1) ADMINISTRATION- The term 'Administration' means the Land Imaging Administration established in the Department of the Interior pursuant to section 4.

(2) GEOSPATIAL AND REMOTE SENSING- The term 'Geospatial and Remote Sensing' means graphical or digital data depicting natural or manmade physical features, phenomena, or boundaries of the earth and any information related thereto, including surveys, maps, charts, and satellite and airborne remote sensing data and images utilized by analysts, specialists, scientists, surveyors, photogrammetrists, hydrographers, geodesists, cartographers, remote sensing scientists or engineers for the collection, storage, retrieval, or dissemination of geospatial information.

(3) GLOBAL CLIMATE CHANGE - the term 'Global Climate Change' means anthropogenic or human-induced or natural changes in the global environment (including alterations in climate, land productivity, oceans or other water resources, atmospheric chemistry, biodiversity, and ecological systems) that may alter the capacity of the Earth to sustain life.

(4)) FIRM – The term 'firm' means any individual, firm, partnership, corporation, association, or other legal entity in the United States organized and permitted by law to engage in the business of practicing in the profession of geospatial and remote sensing through the devotion of time, attention, and labor to providing remote sensing data, products, technology, or services as a regular course of trade or business with the principal objective of livelihood and profit through the sale or distribution thereof.

(5) SECRETARY- The term 'Secretary' means the Secretary of Interior, acting through the Administration established under section 4.

(6) SYSTEM- The term 'System' means the Global Climate Change Geospatial Data Collection System established by the Secretary under section 5.

SEC. 4. ESTABLISHMENT OF LAND IMAGING ADMINISTRATION.

(A) Establishment

The Secretary of the Interior shall establish a Land Imaging Administration within the Department of the Interior.

(B) Land Imaging and Geospatial Information Officer

(i) Appointment

The Land Imaging Administration shall be administered by the Land Imaging and Geospatial Information Officer, who shall be appointed by the Secretary and serve under the direction of the Chief Information Officer.

(ii) Functions

The Land Imaging and Geospatial Information Officer shall assist the Chief Information Officer in carrying out all functions under this Act and in coordinating the geospatial and remote sensing needs of the Department.

(C) Coordination of geospatial information

The Land Imaging and Geospatial Information Officer shall establish and carry out a program to provide for the efficient use of geospatial and remote sensing information, which shall include -

(i) providing such geospatial information as may be necessary to implement the mission and programs of the Department of the Interior;

(ii) providing leadership and coordination in meeting the geospatial and remote sensing requirements of those responsible for planning, management, mitigation, and assessment of resources of the Department of the Interior, and other functions of the Department; and

(iii) coordinating with users of geospatial and remote sensing within the Department to assure interoperability and prevent unnecessary duplication.

(D) Responsibilities

In carrying out this subsection, the responsibilities of the Land Imaging and Geospatial Information Officer shall include -

(i) coordinating the geospatial and remote sensing needs and activities of the Department;

(ii) implementing standards, as adopted by the Director of the Office of Management and Budget under the processes established under section 216 of the E-Government Act of 2002 (44 U.S.C. 3501 note), to facilitate the interoperability of geospatial and remote sensing information pertaining to the mission of the Department of the Interior among all users of such information within -

(a) the Department;

(b) State and local government; and

(c) the private sector;

(iii) coordinating with the Federal Geographic Data Committee and carrying out the responsibilities of the Department pursuant to Office of Management and Budget Circular A-16 and Executive Order 12906; and

(iv) making recommendations to the Secretary and the Director of the Office of Management and Budget policies on awarding grants to -

(a) fund the creation of geospatial and remote sensing data; and

(b) execute information sharing agreements regarding geospatial and remote sensing data with State, local, and tribal governments.

(v) developing and implementing a plan, in consultation with the Administrator of the Office of Federal Procurement Policy, and the Director of the Office of Personnel Management, to ensure that the Administration maintains the necessary capability with respect to the acquisition of geospatial and remote sensing services to -

(a) ensure that Administration employees have the expertise to determine agency requirements for such services;

(b) establish priorities and programs (including acquisition plans);

(c) establish professional standards;

(d) develop scopes of work;

(e) award and administer contracts for such services; and

(f) make such contracts and the administration of such contracts available to other Federal agencies, and state and local government agencies, by request.

(E) Application of Law

“Geospatial and remote sensing” shall be considered “surveying and mapping” as such term is used in section 1102 of title 40, United States Code, for contracts, subcontracts and grants awarded by the Administration.

(F) BUDGET COORDINATION.

(i) IN GENERAL- The Administrator, in consultation with the Director of the Office of Management and Budget, and the heads of each Federal department or agency carrying out activities under this Act shall work together to ensure that geospatial and remote sensing activities and data are shared among Federal agencies in order to coordinate the efforts of the Nation and eliminate duplication.

(ii) REPORT- Not later than 30 days after the submission of the budget of the United States Government by the President to Congress, the Director of the Office of Management and Budget, in coordination with the Administrator and the head of other Federal agencies, as appropriate, shall submit to the appropriate authorizing and appropriating committees of the Senate and the House of Representatives a financial report, certified by the Director of the Office of Management and Budget, or head of each such agency, an interagency budget crosscut report that displays the budget proposed for each of the Federal agencies working on geospatial and remote sensing activities, including any planned interagency or intraagency transfers.

(a) Such report shall include a funding strategy to leverage and coordinate budgets and expenditures, and to establish joint funding mechanisms between Federal agencies and with units of State and local government to share the collection and utilization of geospatial data among all governmental users, and to maximize the utilization of the private sector to prevent government duplication of or competition with such private entities.

SEC. 5. GLOBAL CLIMATE CHANGE GEOSPATIAL DATA SYSTEM.

(a) Requirement- The Secretary, shall establish within the Administration, a Global Climate Change Geospatial Data Collection System to support observation, measurement, verification and validation of phenomena resulting from global climate change.

(b) Components and Functions- The System shall consist of components, to include, but not be limited to --

- a series of mid-resolution land remote sensing satellite images;
- a series of high resolution satellite and aerial photographic images;
- a national elevation data set utilizing Light Detecting and Ranging (LIDAR) technology to quantify change vegetative canopy structure and coincident field measurements of aboveground biomass;
- a network of geodetic benchmarks, coastal tide and sea level gauging and shoreline delineation maps for measurement and observation of long and short term change;
- a series of historic and current land use and land cover classification data;
- _____;
- _____;

(c) Functions and Coordination- The Secretary shall assure that the components of the Global Climate Change Geospatial Data Collection System are —

(1) transmitted to users including, as appropriate, in real time or near real time data;

(2) utilized to produce forecasts and other appropriate products representing conditions and phenomena; and

(3) managed in accordance with best practices for archiving and future use.

(4) coordinated and disseminated among--

(i) users of geospatial information within the Department to assure interoperability and prevent unnecessary duplication;

(ii) users of geospatial information and officials responsible for global climate change policy and programs in other Federal agencies pursuant to section 216 of the E-Government Act of 2002 (44 U.S.C. 3501 note), Office of Management and Budget Circular A-16 and Executive Order 12906; and

(iii) users of geospatial information and officials responsible for global climate change policy and programs instate and local government, as well as interested parties in the private sector and the university research community.

SEC. 6. UNITED STATES COMMERCIAL GEOSPATIAL AND REMOTE SENSING LEADERSHIP.

(A) The functions of the Administration shall be to promote growth and advancement in United States space and airborne geospatial and remote sensing technologies, activities, data and value-added services related thereto, by carrying out the following responsibilities:

(1) Examine the role of commercial geospatial and remote sensing firms, including small business, in the United States economy and the contribution which such firms can make in--

(A) improving competition in the marketplace;

(B) enhancing the role of commercial geospatial and remote sensing firms in the economy of the United States;

(C) ensuring that United States firms continue to lead in the global marketplace;

(D) applying commercial geospatial and remote sensing data, products, and services to national priorities;

(E) expanding employment opportunities;

(F) increasing productivity;

(G) stimulating innovation and entrepreneurship; and

(H) providing an avenue through which new and untested products and services can be brought to the marketplace.

(2) Assess the effectiveness of existing Federal agency use of geospatial and remote sensing data, products, and services, including grant, subsidy, and assistance programs to non-Federal entities, and facilitate a reduction in the use of such governmental geospatial and remote sensing data, products, and services and increase the use of commercial geospatial and remote sensing firms.

(3) Promote the objectives of the U.S. Commercial Remote Sensing Space Policy, issued by the President on May 13, 2003, particularly its provisions on relying to the maximum practical extent on United States commercial remote sensing capabilities and developing a long term, sustainable relationship between

the Federal Government and the United States commercial remote sensing community.

`(4) Advocate and implement appropriate measures for creating an environment in which all commercial geospatial and remote sensing firms will have the opportunity to compete effectively and expand to their full potential.

`(5) Evaluate the efforts of each Federal agency, and of the private sector, to assist commercial geospatial and remote sensing firms, provide statistical information on the utilization of such firms by the Federal Government, and make appropriate recommendations to the Administrator of the National Oceanic and Atmospheric Administration, the President, and the Congress in order to promote the establishment and growth of commercial geospatial and remote sensing firms.

`(6) Serve as a focal point for the receipt of complaints, criticisms, and suggestions concerning the policies and activities of any Federal agency which affects commercial geospatial and remote sensing firms.

`(7) Counsel commercial geospatial and remote sensing firms on how to resolve questions and problems concerning the relationship of such firms to the Federal Government.

`(8) Develop proposals for changes in the policies and activities of any agency of the Federal Government which will better fulfill the purposes of this section and communicate such proposals to the appropriate Federal agencies.

`(9) Represent the views and interests of commercial geospatial and remote sensing firms before other Federal agencies whose policies and activities may affect such firms.

`(10) Enlist the cooperation and assistance of commercial geospatial and remote sensing firms, and any association of such firms, in the development of procurement strategies, policies, and methodologies that enhance the utilization of commercial geospatial and remote sensing firms by Federal agencies (including Federal, State, and local government agencies, universities, nonprofit organizations, and foreign governments that expend Federal funds), and strengthen the selection of such firms based on demonstrated competence and qualifications.

`(11) Cooperate with public and private agencies, businesses, and other organizations in disseminating information about the use and application of remote sensing, the capabilities of commercial geospatial and remote sensing firms, and how such firms can participate in or assist such entities, programs.

`(12) Make such other recommendations as may be appropriate to assist the development and strengthening of commercial geospatial and remote sensing firms.

SEC. 7. MID-RESOLUTION LAND REMOTE SENSING SATELLITE.

(a) Authorization of LANDSAT free flyer

The Administration shall establish the Landsat Data Continuity Mission to design, develop, fabricate and launch a spaceborne system to capture images in the visible, near-infrared spectra and multi-spectral images of the global land surface.

SEC. 8. AUTHORIZATION OF APPROPRIATIONS.

To carry out this Act there are authorized to be appropriated to the Secretary--

- (1) \$250,000,000 for fiscal year 2008;
- (2) \$300,000,000 for fiscal year 2009;
- (3) \$350,000,000 for fiscal year 2010; and
- (4) \$400,000,000 for fiscal year 2011.