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108-348 }

PROVIDING FOR ADDITIONAL RESPONSIBILITIES FOR THE CHIEF INFORMATION OFFICER OF THE DEPARTMENT OF HOMELAND SECURITY RELATING TO GEOSPATIAL INFORMATION

R E P O R T

OF THE

COMMITTEE ON GOVERNMENTAL AFFAIRS
UNITED STATES SENATE

TO ACCOMPANY

S. 1230

PROVIDING FOR ADDITIONAL RESPONSIBILITIES FOR THE CHIEF INFORMATION OFFICER OF THE DEPARTMENT OF HOMELAND SECURITY RELATING TO GEOSPATIAL INFORMATION



SEPTEMBER 20, 2004.—Ordered to be printed

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SEPTEMBER 20, 2004.—Ordered to be printed

Ms. COLLINS, from the Committee on Governmental Affairs,
submitted the following

R E P O R T

[To accompany S. 1230]

The Committee on Governmental Affairs, to whom was referred the bill (S. 1230) to provide for additional responsibilities for the Chief Information Officer of the Department of Homeland Security relating to geospatial information, having considered the same reports favorably thereon with an amendment and recommends that the bill, as amended, do pass.

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I. PURPOSE AND SUMMARY

The Senate Governmental Affairs Committee (the “Committee”) approved S. 1230, the Homeland Security Geographic Information Act, on July 21, 2004. This legislation would create an Office of Geospatial Management under the Chief Information Officer in the Department of Homeland Security (the “Department” or “DHS”) to coordinate the geospatial information needs of the Department.

II. BACKGROUND

Geospatial information, which includes maps, charts, remote sensing data and images, and aerial photographic images, is an integral tool used by most government agencies. According to the Government Accountability Office (“GAO”), approximately 80 per-

cent of all government information has a geospatial data component.¹ Despite the prevalence of geospatial information, there is little planning or coordination of geospatial activities or procurement at the Federal level. According to a 2003 study by Cary and Associates, a geotechnology consulting firm, the Federal Government procures \$5 billion worth of geospatial goods and technologies per year.² This figure does not include the amount being spent by State and local agencies, which some experts estimate is two to three times that of the Federal Government.

In recent testimony before the House Committee on Government Reform, Linda Koontz, Director, Information Management Issues, GAO, stated that while the Office of Management and Budget has issued requirements regarding geospatial coordination, Federal agencies have not consistently complied with them.³ Ms. Koontz also testified that approximately 50 percent of the Federal government's geospatial data investment is duplicative.⁴ For example, the Federal Emergency Management Agency, which is part of the Department of Homeland Security, the United States Geological Survey, and the Department of Defense all collect and maintain separate elevation data sets.⁵

Geospatial information is a crucial component of the Department's many missions. According to DHS, geospatial information is used for intelligence, law enforcement, first response, disaster recovery, and agency management. Geospatial technologies provide data that create the maps and charts that can help prevent a disaster from occurring or lessen the impact of an unforeseeable event by equipping first responders with up-to-date information. In the event of a terrorist chemical attack or accidental chemical release, knowing which way a contaminated plume will travel can save lives. Similarly, the damage of a natural disaster, such as a wildfire, can be lessened by maps that help predict which areas will be in the path of the blaze. Geospatial information also aids everyday homeland security activities such as border control by enabling Border and Transportation Security officials to monitor border activity in remote areas through aerial photography.

When the Department was created in 2003 it brought together components from 22 separate agencies, each of which managed its geospatial needs independently. In the past year, the Department has encountered significant difficulties integrating personnel, financial systems, and computer systems from the legacy agencies. Geospatial information has been no different.

In June 2003, the DHS Chief Information Officer ("CIO") created the position of Geospatial Information Officer ("GIO") to coordinate geospatial policy within the office of the CIO. The GIO was tasked with monitoring geospatial policy and providing recommendations to the five directorates and the Office of the Secretary, but does not have the statutory authority to coordinate the Department's geospatial policy and activities.

¹ Geographic Information Systems: Challenges to Effective Data Sharing, Government Accountability Office, GAO-03-874T, June 10, 2003.

² U.S. Federal Procurement of Geotechnology 2000-2002, Cary and Associates, October 2003.

³ Geospatial Information: Better Coordination and Oversight Could Help Reduce Duplicative Investments, Government Accountability Office, GAO-04-824T, June 23, 2004

⁴ Ibid.

⁵ Ibid.

To empower the Office of the CIO with the necessary authority to coordinate the geospatial activities of the Department, S. 1230 would create an Office of Geospatial Management (“GMO”) in the Office of the CIO to be run by the GIO. S. 1230 gives the GIO the responsibility for ensuring that the geospatial needs of the Department are met and is intended to elicit cooperation from all the directorates of the Department to achieve this goal. The GMO can only have its intended effect if its authority is respected by the entire Department.

III. LEGISLATIVE HISTORY

S. 1230 was introduced on June 11, 2003, by Senator Allard and was referred to the Committee on Governmental Affairs. On July 21, 2004, the Committee considered S. 1230 and ordered the bill as amended favorably reported by voice vote. Members present were Collins, Lieberman, Voinovich, Specter, Fitzgerald, Akaka, Durbin, Carper, and Lautenberg.

On May 6, 2004, Senator Akaka introduced S. 2390, the Homeland Security Geospatial Information Act of 2004, to create a DHS Office of Geospatial Management in the Office of the Chief Information Officer and for other purposes. Senator Akaka offered an amendment to S. 1230 that made the following changes: (1) created the Office of Geospatial Management; (2) removed language encouraging the use of private sector data; (3) replaced the term “geospatial information” with “geographic information” to be consistent with the E-Government Act; and (4) made other technical changes to be consistent with the E-Government Act of 2002 and the President’s E-Government Initiative relating to geospatial information. The amendment was cosponsored by Senators Collins and Lieberman.

H.R. 3367, a companion bill to S. 1230, was introduced in the House on October 21, 2003, by Representative Sessions and was referred to the Committee on Government Reform and the Committee on Science.

IV. SECTION-BY-SECTION ANALYSIS

Section 1. Short title

This Act may be cited as the “Homeland Security Geographic Information Act of 2004.”

Section 2. Findings

This section explains the importance of geospatial information to homeland security activities and the inadequacies of the current state of geospatial information preparedness in the Department and the country as a whole.

Section 3. Homeland security geographic information

This section creates an Office of Geospatial Management in the Office of the Chief Information Officer to be administered by the Geospatial Information Officer. The Geospatial Information Officer is instructed to assist the Chief Information Officer with the following geospatial coordination functions: (1) ensuring that the Department has the necessary geospatial information for critical infrastructure protection; (2) coordinating and leading the geospatial

activities of the Department; (3) ensuring coordination and interoperability among users of geospatial information within the Department to prevent unnecessary duplication.

This section tasks the Chief Information Officer, with assistance from the Geospatial Information Officer, with the following responsibilities: (1) coordinating the geographic information needs and activities of the Department; (2) implementing interoperability standards established by the Federal Geographic Data Committee ("FGDC") pertaining to homeland security geospatial information, (3) coordinating with the FGDC including providing counsel to the FGDC on homeland security related issues; and (4) making recommendations to the Secretary and the Office of State and Local Coordination and Preparedness on grants to fund the creation of geospatial data and executing information sharing agreements between the Department and other levels of government.

V. ESTIMATED COST OF LEGISLATION

SEPTEMBER 3, 2004.

Hon. SUSAN M. COLLINS,
Chairman, Committee on Governmental Affairs,
U.S. Senate, Washington, DC.

DEAR MADAM CHAIRMAN: The Congressional Budget Office has prepared the enclosed cost estimate for S. 1230, the Homeland Security Geographic Information Act of 2004.

If you wish further details on this estimate, we will be pleased to provide them. The CBO staff contact is Matthew Pickford.

Sincerely,

DOUGLAS HOLTZ-EAKIN,
Director.

Enclosure.

S. 1230—Homeland Security Geographic Information Act of 2004

S. 1230 would amend the Homeland Security Act to require the Chief Information Officer (CIO) at the Department of Homeland Security (DHS) to establish an Office of Geospatial Management to oversee the efficient use and coordination of the department's geographic information. In addition, the CIO's office would be responsible for leading and coordinating the geographic needs of the department's emergency planning and critical infrastructure protection efforts.

CBO estimates that implementing S. 1230 would cost \$4 million in 2005 and \$70 million over the 2005–2009 periods, assuming appropriation of the necessary amounts. Enacting the legislation would not affect direct spending or revenues. S. 1230 contains no intergovernmental or private-sector mandates as defined in the Unfunded Mandates Reform Act (UMRA) and would impose no costs on state, local, or tribal governments.

Estimated cost to the Federal Government: The estimated budgetary impact of S. 1230 is shown in the following table. The cost of this legislation falls within budget function 800 (general government).

	By fiscal year in millions of dollars—				
	2005	2006	2007	2008	2009
CHANGES IN SPENDING SUBJECT TO APPROPRIATION					
Estimated authorization level	5	10	15	20	25
Estimated outlays	4	9	14	19	24

Basis of estimate: For this estimate, CBO assumes that the bill will be enacted near the start of fiscal year 2005 and that spending will follow historical patterns for similar programs.

DHS currently has a Geospatial Management Office within the CIO's office. According to that office, it is working with limited authority to coordinate the agency's geospatial activities. This work includes surveying the existing geospatial capabilities of DHS agencies and emergency management needs. Since its inception, the office has spent about \$1 million to perform its current responsibilities.

S. 1230 would codify and expand the current duties of the CIO's office to provide geographic information and technology. This includes all information systems within DHS that involve location data including maps. That office would ensure that geographic information to plan, prevent, and respond to emergencies is available to all DHS agencies, including the Federal Emergency Management Agency and the National Infrastructure Protection Center. The office also would assure the interoperability of the department's geographic information systems.

Based on information from DHS, CBO estimates that the new office would eventually need about \$25 million a year to carry out its responsibilities under S. 1230. CBO expects that the office would steadily expand its budget and staff over three to four years before it reached that level of effort. We estimate that implementing the bill would cost \$70 million over the 2005–2009 period, assuming appropriation of the necessary funds.

Intergovernmental and private-sector impact: S. 1230 contains no intergovernmental or private-sector mandates as defined in UMRA and would impose no costs on state, local, or tribal governments.

Estimate prepared by: Federal Cost: Matthew Pickford; Impact on State, Local, and Tribal Governments: Melissa Merrell; and Impact on the Private Sector: Paige Piper/Bach.

Estimate approved by: Peter H. Fontaine, Deputy Assistant Director for Budget Analysis.

VI. EVALUATION OF REGULATORY IMPACT

Pursuant to the requirements of paragraph 11(b) of rule XXVI of the Standing Rules of the Senate, the Committee has considered the regulatory impact of this bill. CBO states that there are no intergovernmental or private-sector mandates as defined in the Unfunded Mandates Reform Act and no costs on state, local, or tribal governments. The legislation contains no other regulatory impact.

VII. CHANGES IN EXISTING LAW

In compliance with paragraph 12 of rule XXVI of the Standing Rules of the Senate, S. 1230 adds entirely new language and, therefore does not change existing law.

