Calendar No. 577

113TH CONGRESS
2d Session

SENATE

REPORT
113–262

FEDERAL INFORMATION TECHNOLOGY ACQUISITION REFORM ACT

REPORT

OF THE

COMMITTEE ON HOMELAND SECURITY AND GOVERNMENTAL AFFAIRS
UNITED STATES SENATE

TO ACCOMPANY

H.R. 1232

TO AMEND TITLES 40, 41, AND 44, UNITED STATES CODE, TO ELIMINATE DUPLICATION AND WASTE IN INFORMATION TECHNOLOGY ACQUISITION AND MANAGEMENT

SEPTEMBER 18, 2014.—Ordered to be printed

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Mr. CARPER, from the Committee on Homeland Security and Governmental Affairs, submitted the following

R E P O R T

[To accompany H.R. 1232]

The Committee on Homeland Security and Governmental Affairs, to which was referred the bill (H.R. 1232), to amend titles 40, 41, and 44, United States Code, to eliminate duplication and waste in information technology acquisition and management, having considered the same, reports favorably thereon with an amendment in the nature of a substitute and an amendment to the title, and recommends that the bill, as amended, do pass.

I. PURPOSE AND SUMMARY

The Federal Information Technology Acquisition Reform Act (H.R. 1232) seeks to improve how the federal government acquires, implements, and manages its information technology ("IT") investments. First, the bill would give agency Chief Information Officers more authority over the budget, governance, and personnel processes for agency IT investments. Second, the bill would make agency IT investments more transparent to the public and require agencies to review troubled investments. Third, to eliminate duplication and waste, the bill would require agencies to annually review all of their IT investments. Fourth, the bill builds on the Administration's efforts to consolidate and streamline data centers—the facilities in which federal agencies house computer systems and related components.

II. BACKGROUND AND NEED FOR LEGISLATION

Information technology has transformed how the private sector operates and has revolutionized the way in which businesses serve

their customers. Likewise, IT has the potential to enable federal agencies to accomplish their missions more efficiently, effectively, and economically.

Over the last twenty years, IT has become firmly interwoven into the mission of every federal agency, offering new ways of doing business and creating both opportunities and challenges for government agencies. Fully exploiting this potential, though, has presented longstanding challenges to federal agencies. Too many federal IT projects run over budget, fall behind schedule, or fail to deliver on their promises, hampering agency missions and wasting taxpayer dollars. Despite spending billions of dollars annually on IT,[1] the federal government has had a decidedly mixed record in acquiring, developing, and managing federal IT investments.[2]

To improve the ability of federal agencies to manage IT investments, H.R. 1232 would strengthen and reinforce the authorities and responsibilities of agency Chief Information Officers (CIOs) to be key leaders for IT at their organizations.[3] In addition to empowering agency CIOs, the bill focuses on four other areas which the Committee believes will help achieve better outcomes in IT investments across the federal government. Specifically, H.R. 1232 seeks to (1) improve the accuracy of investment performance information on the Office of Management and Budget's IT Dashboard, a publically accessible online tool that presents cost and schedule information along with an evaluation from agency CIOs on major IT investments, (2) require agencies to hold investment review sessions on at-risk investments, (3) continue the Administration's Federal Data Center Consolidation Initiative to consolidate and optimize data centers—the facilities in which federal agencies house computer systems and related components, and (4) use portfolio review processes to identify and eliminate duplicative IT investments in agencies.[4]

THE ROLE OF THE CHIEF INFORMATION OFFICER

Poor management of IT systems is a problem that has plagued the federal government for years. Nearly two decades ago, Senator William Cohen of Maine led a Governmental Affairs Committee subcommittee investigation into the federal government's ability to manage its IT investments.[5] The resulting 1995 report, entitled "Computer Chaos," could just as easily have been written today. In his report, Senator Cohen found many of the same problems that

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[1] In Fiscal Year 2014, the Federal government will spend over $80 billion in developing, modernizing and maintaining IT projects and systems. OMB, Analytical Perspectives, Budget of the U.S. Government, Fiscal Year 2014, at 349 (2013), available at http://www.whitehouse.gov/sites/default/files/omb/budget/fy2014/assets/spec.pdf.

[2] *See* GAO–13–796T, *Information Technology: OMB and Agencies Need to More Effectively Implement Major Initiatives to Save Billions of Dollars, Appendix 1,* for an extensive list of IT projects that have failed and been cancelled as well as other IT projects that faced significant challenges.

[3] This report describes the Committee's substitute amendment to H.R. 1232. Although the underlying bill and the substitute amendment address many of the same problems, they take substantially different approaches. The House report (H.R. Rep. No. 113–359) on H.R. 1232 explains the underlying bill's provisions, while this report confines itself to describing the substitute amendment considered and passed by the Committee.

[4] These four areas are aligned with the General Accountability Office's top recommendations to this Committee on how to best improve outcomes in federal IT investments. *See Management Matters: Creating a 21st Century Government: Hearing before the Senate Homeland Security and Governmental Affairs Committee*, 113th Congress (March 12, 2014) (Gene Dodaro, Comptroller General, response to questions for the record).

[5] Prior to the creation of the Department of Homeland Security, this Committee was known simply as the Governmental Affairs Committee.

our agencies face today—poor management of IT systems, wasted and duplicative investments, and billions of dollars spent on older, outdated, and expensive "legacy" systems.[6]

To address these problems, Congress passed the Clinger-Cohen Act in 1996. That law, among other things, established the position of agency CIO to serve as a focal point for IT within an agency.[7] The Clinger-Cohen Act set forth detailed requirements for IT capital planning, investment control, performance, and results-based management.[8] Several years later, the E-Government Act of 2002 reiterated the CIO's responsibility for agency IT management and information security at their respective agencies.[9]

Together, these statutes require CIOs to be key leaders in managing IT and other information functions at an agency. Specifically, they make the CIO responsible for:

- providing advice and other assistance to the head of an agency to ensure that IT is acquired and information resources are managed in accordance with the law and the priorities of the head of the agency; [10]
- developing, maintaining, and facilitating the implementation of a sound, secure, and integrated IT architecture; [11]
- promoting the effective and efficient design and operation of all major information resources management processes for an agency, including improvements to an agency's work processes; [12]
- ensuring that information resources,[13] management operations, and decisions are integrated with an organization's planning, budget, financial management, human resources management, and program decisions; [14]
- monitoring the performance of IT programs and advising the agency head whether to continue, modify, or terminate such programs; [15] and
- managing agency information security, including compliance with the Federal Information Security Management Act ("FISMA").[16]

In creating the position of Chief Information Officer, Congress intended for an agency CIO to serve as a senior decision maker, providing leadership and direction for information resource development, procurement, and management. A primary goal of the Clinger-Cohen Act was to shift agencies' approach on IT investments away from one focused only on technical issues towards one that focused on truly managing IT investments, and the CIO of an

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[6] *Computer Chaos: Billions Wasted Buying Federal Computer Systems*. Investigative Report of Senator William S. Cohen, Ranking Minority Member, Subcommittee on Oversight of Government Management, Senate Governmental Affairs Committee (October 12, 1994). Available at https://acc.dau.mil/adl/en-US/22163/file/2121/Cohen%20Computer%20Chaos%201994.pdf.

[7] The Clinger-Cohen Act of 1996 was originally enacted as the Information Technology Management Reform Act of 1996 (Divisions D and E of P.L. 104–106). The law was renamed the Clinger-Cohen Act by Pub. L. 104–208,110 Stat. 3009–393 (1996).

[8] 40 U.S.C. §§ 11312 and 11313.

[9] E-Gov Act of 2002, P.L. 107–347 (Dec. 17, 2002). Many of the Act's provisions were incorporated into Title 44, U.S. Code.

[10] 40 U.S.C. § 11315(b)(1).

[11] 40 U.S.C. § 11315(b)(2).

[12] 40 U.S.C. § 11315(b)(3).

[13] 44 U.S.C. § 3502(6) defines "information resources" as "information and related resources, such as personnel, equipment, funds, and information technology."

[14] 44 U.S.C. § 3506(b)(3)(A).

[15] 40 U.S.C. § 11315(c)(2).

[16] 44 U.S.C. §§ 3541, et seq.

agency was seen as a key figure in accomplishing that objective.[17] The CIO was envisioned as the person responsible and accountable for an agency's IT investments, a key leader who would implement and enforce applicable government-wide and agency IT management policies.

The Committee recognizes that there are many factors that must be in place for an agency to successfully acquire, implement, and manage its IT investments. In a May 2014 hearing focused on identifying the key factors that make for successful IT investments, the Committee heard testimony regarding the importance of senior executive support of the program, active end-user involvement in developing requirements and testing, having skilled program managers and teams, and having consistent and stable government and contractor staff.[18] Likewise, witnesses discussed the importance of utilizing an "incremental" approach to deliver on IT investments, where investments are divided into smaller pieces in order to reduce investment risk and deliver capabilities in shorter time frames. This approach differs from the more traditional "big bang" approach often used by agencies, which relies on delivering all of the capabilities of a large-scale IT system at one time, often resulting in failure.[19] Ultimately, the successful acquisition and implementation of IT systems requires the involvement of a variety of stakeholders across many disciplines including acquisition, human capital, and financial management.

However, the CIO of an agency plays a very important role in providing technical expertise and objective, knowledge-based assessments on the wisdom of every key decision made over the lifespan of an IT investment. Thus, it is extremely important that a CIO, and the staff who reports to the CIO, be fully integrated into all the elements of the agency's process for developing and delivering IT investments as an independent stakeholder. It is not enough for a CIO and his or her team to "have a seat at the table"—they must also be an integral part of any decision processes at the agency. Unfortunately, despite statutory requirements and policy guidance from the Office of Management and Budget ("OMB"), many CIOs do not have the necessary authority and are frequently not recognized as the key leaders in managing IT at an agency. For example, in a 2011 survey of agency CIOs, the Government Accountability Office ("GAO") found that many CIOs faced limitations in their ability to influence agency decisions on IT investments because a significant portion of an agency's IT funding is allocated and spent at the component, or bureau level, of an agency.[20]

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[17] Opening statement of Senator William Cohen, Subcommittee on Oversight of Government Management and the District of Columbia of the Committee on Governmental Affairs, *S. 946, the Information Technology Management Reform Act of 1995* at 3 (July 25, 1996). *See also Id.* at 12, (Testimony of Gene Dodaro, Assistant Comptroller General, Accounting and Information Management Division, U.S. General Accounting Office).

[18] Senate Committee on Homeland Security and Governmental Affairs Hearing, *Identifying Critical Factors for Success in Information Technology Acquisitions* (May 8, 2014). *See also* GAO–12–7, *Information Technology: Critical Factors Underlying Successful Major Acquisitions* (October 2011); *Key Success Factors for Major Programs that Leverage IT: 7–S for Success available at* https://actiac.org/sites/default/files/7-S__for__Success__0.pdf.

[19] *Id. See also* GAO–14–361, *Information Technology: Agencies Need to Establish and Implement Incremental Development Policies* (May 2014).

[20] *See* GAO–11–634 at 29–30, *Federal Chief Information Officers: Opportunities Exist to Improve Role in Information Technology Management. See also* GAO–04–823, *Federal Chief Information Officers: Responsibilities, Reporting Relationships, Tenure, and Challenges* (July 2004).

In recognition of the challenges that many agency CIOs face, in August 2011, OMB issued a memorandum designed to move the role of the CIO "away from just policymaking and infrastructure maintenance, to encompass true portfolio management for all IT."[21] By updating its policies, OMB sought to hold agency CIOs "accountable for lowering operational costs, terminating and turning around troubled projects, and delivering meaningful functionality at a faster rate while enhancing the security of information systems."[22]

The memorandum laid out what OMB envisioned as the CIO's responsibilities in four primary areas:

- *Governance*—CIOs are to drive the IT investment review process by assuming "responsibility over the entire IT portfolio for an Agency" and by working to "ensure IT portfolio analysis is an integral part of the yearly budget process of an agency."[23]
- *Commodity IT*—CIOs are to "focus on eliminating duplication and rationalize . . . IT investments." The services to be examined are: data centers, networks, desktop computers, mobile devices, e-mail, collaboration tools, web infrastructure, human resources systems, and finance systems. CIOs are also directed to "pool their agency's purchasing power across the entire organization to drive down costs and improve service" and are required to "show a preference for using shared services . . . instead of standing up separate independent services."[24]
- *Program Management*—CIOs are charged with "identifying, recruiting, and hiring top IT program management talent" and are required to "train and provide annual performance reviews" for employees in charge of major programs as well as lower-level CIOs. CIOs will also be held accountable for the performance of IT program managers based on their governance process and the IT Dashboard, an online tool that presents the cost and schedule information of an agency's major IT investments, as well as an evaluation of that investment by an agency CIO.[25]
- *Information Security*—CIOs, or designated agency officials who report to the CIO, are required "to implement an agency-wide information security program and to provide information security for both the information collected and maintained by the agency, or on behalf of the agency, and for the information systems that support the operations, assets, and mission of the agency."[26]

Building off existing statutory requirements and OMB policy, the Committee substitute to H.R. 1232 seeks to further empower the agency CIO by ensuring that the CIO has a significant role in the annual and multi-year planning, programming, budgeting, and execution processes as well as the management, governance, and oversight processes related to IT. The bill directs the Director of OMB

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[21] Memorandum from Jacob J. Lew, U.S. Office of Management and Budget, Chief Information Officer Authorities, at 1 (Aug. 8, 2011), *available at* http://www.whitehouse.gov/sites/default/files/omb/memoranda/2011/m11-29.pdf.

[22] *Id*.

[23] *Id*.

[24] *Id*. at 2.

[25] *Id*. at 2. The IT Dashboard is "a website enabling federal agencies, industry, the general public, and other stakeholders to view details of federal information technology investments." *See* "IT Dashboard FY2015 Edition," http://www.itdashboard.gov/.

[26] *Id*. at 2.

to require in its annual IT capital planning guidance that the CIO of the agency: (1) approve the agency's information technology budget request; (2) certify that IT investments are implementing incremental development as defined by OMB; and (3) work with the Chief Human Capital Officer to review all IT positions requested in the budget to ensure the needs of the agency are being met.

The Committee substitute to H.R. 1232 would also require approval by the CIO of contracts for IT or IT services, the reprogramming of funds for IT programs, and the hiring of key agency IT personnel. Ultimately, the bill would do more than just create a seat at the "CEO-level" table for the Chief Information Officer—it would also make the CIO a key part of the agency's decision-making processes, a position with both the authority to help make decisions and the responsibility to ensure that programs are well managed and produce good outcomes.

INFORMATION TECHNOLOGY DASHBOARD AND TECHSTAT ACCOUNTABILITY SESSIONS

In June 2009, the Obama Administration and OMB launched an Information Technology Dashboard ("IT Dashboard" or "Dashboard") to quickly and easily illustrate IT investments that were on-track, having trouble, or calling out for cancellation. The IT Dashboard is a publically accessible online tool that presents cost and schedule information, as well as an evaluation from agency CIOs on the performance of major IT investments.

Less than a year after the IT Dashboard debuted, the Administration started holding TechStat Accountability Sessions ("TechStats") in January 2010. A TechStat is a "face-to-face, evidence-based review of an IT investment" with OMB and agency leadership.[27] TechStat sessions seek to focus management attention on troubled IT investments and help terminate or turnaround IT investments that are failing or not producing results. When used in concert, the IT Dashboard and TechStat sessions have helped agencies, OMB, and Congress identify at-risk IT projects and implement corrective measures.[28]

While the IT Dashboard and TechStat sessions have been widely recognized as valuable oversight tools, concerns remain with the accuracy and usefulness of some of the information on the IT Dashboard and a decrease in the number of TechStat sessions led by OMB.

The GAO has issued a series of reports highlighting deficiencies with the accuracy and reliability of the cost and schedule data reported on the Dashboard.[29] While the accuracy of the Dashboard ratings appears to have improved over time, GAO has raised con-

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[27] *See* https://cio.gov/what-is-techstat/.

[28] By March 2011, OMB estimated that use of the IT Dashboard and corresponding TechStat sessions had led to over $3 billion in cost reductions. See http://www.whitehouse.gov/blog/2011/03/31/open-sourcing-it-dashboard-techstat-process.

[29] *See IT Dashboard: Agencies are Managing Investment Risk, but Related Ratings Need to Be More Accurate and Available,* GAO–14–64 (Dec. 12, 2013); *Information Technology Dashboard: Opportunities Exist to Improve Transparency and Oversight of Investment Risk at Select Agencies,* GAO–13–98 (Oct. 16, 2012); *IT Dashboard: Accuracy Has Improved, and Additional Efforts Are Under Way to Better Inform Decision Making,* GAO–12–210 (Nov. 7, 2011); *Information Technology: OMB Has Made Improvements to Its Dashboard, but Further Work Is Needed by Agencies and OMB to Ensure Data Accuracy,* GAO–11–262 (Mar. 15, 2011); and *Information Technology: OMB's Dashboard Has Increased Transparency and Oversight, but Improvements Needed,* GAO–10–701 (July 16, 2010).

cerns about how some agencies have removed investments from the Dashboard by reclassifying their investments.[30] For example, the Department of Energy reclassified supercomputer investments as facilities, rather than as IT, and removed them from public reporting on the Dashboard.[31] Furthermore, the public version of the Dashboard is frequently not updated because OMB chooses not to update the Dashboard while the President's budget request is being created. For example, in a December 2013 review of the IT Dashboard, GAO noted that the Department of Justice downgraded an investment in July 2012, but the information on the Dashboard was not updated to reflect this downgrade until April 2013.[32]

In 2013, GAO also reviewed agency implementation of TechStat sessions and reported that although OMB and selected agencies had held multiple TechStats, additional oversight was needed to ensure that these sessions were having the appropriate impact on underperforming projects.[33] Additionally, GAO found that the number of TechStats held was relatively small compared to the current number of at-risk IT investments. Specifically, as of May 2013, of the 162 at-risk IT investments, only 30 (18.5 percent) had undergone an OMB-led TechStat. Further, of the 69 at-risk investments at four selected agencies as of May 2013, only 23 (33.3 percent) had undergone an OMB or agency TechStat.[34]

Despite the above-mentioned problems, the IT Dashboard and TechStat sessions have proven to be very valuable tools that have increased the transparency and performance of major federal IT investments. Building off the promise of these initiatives, the Committee substitute to H.R. 1232 requires a government-wide IT Dashboard and improves upon the quality of the data displayed on the Dashboard by requiring the agency CIO to certify on a quarterly basis that the cost, schedule, and performance information is accurate. In addition, the substitute improves upon the accuracy of the CIO's evaluation by requiring that an IT investment's overall risk rating align more closely to the cost and schedule risks identified for the investment, and by requiring that IT investments that do not employ an incremental approach be automatically rated at a medium-risk level to ensure they receive adequate management attention. The substitute also requires that agencies use the Dashboard as a foundation for a TechStat-like process to help agencies and OMB manage the riskiest IT projects. If an investment continues to be rated as high-risk for more than a year following completion of the required review, the Director of OMB is required to deny requests for future development funding until the agency CIO can certify that risks have been sufficiently addressed. Collectively, the requirements in the Committee substitute to H.R. 1232 will allow Congress, OMB, and the general public to use the Dashboard to hold agencies accountable for results and performance.

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[30] *IT Dashboard: Agencies are Managing Investment Risk, but Related Ratings Need to Be More Accurate and Available,* GAO–14–64 (Dec. 12, 2013).

[31] *Id.* at 18.

[32] *See IT Dashboard: Agencies are Managing Investment Risk, but Related Ratings Need to Be More Accurate and Available,* GAO–14–64 at 22 (Dec. 12, 2013).

[33] GAO, *Information Technology: Additional Executive Review Sessions Needed to Address Troubled Projects,* GAO–13–524 (Washington, D.C.: June 13, 2013).

[34] GAO–13–524 at 27. The selected agencies were the Departments of Agriculture, Commerce, Homeland Security, and Health and Human Services.

PORTFOLIO REVIEW

In addition to the challenges that agencies face in acquiring and developing specific IT investments, the stove-piped nature of many Federal agencies has led to a proliferation of duplicative IT investments. Many agencies manage their IT systems in a decentralized manner with authorities and responsibilities spread throughout the agency.[35] As a result, departments are unable to take an enterprise-wide view of their IT investments which frequently results in duplication, waste, and poor outcomes. Too often, agencies, or components of agencies, seek to develop new solutions first, before assessing existing options, or identifying ways to achieve shared agency-wide IT solutions. For example, in 2012, OMB reviewed over 7,000 Federal agency IT investments that had been reported to OMB and found many potential redundancies and billions of dollars in potential savings that could be achieved through either consolidation or a shared approach to IT service delivery.[36]

To address this problem, in March 2012, the Administration implemented the PortfolioStat process, which requires agency Chief Operating Officers (or their designees), on an annual basis, to lead an agency-wide review of the IT systems operating within an organization.[37] Through the PortfolioStat process, an agency must take a holistic view of its IT investments to identify potential duplication within the agency, investments that do not appear to be well-aligned with agency missions, and other key considerations regarding an agency's IT portfolio. In comparison to the TechStat reviews discussed above (which examine IT performance at the specific project or investment-level), PortfolioStat examines an agency's IT portfolio as a whole to help identify and eliminate areas of duplication and waste.

In June 2013, the Committee held a hearing on IT management issues focused in large part on the Administration's PortfolioStat process. In the first round of PortfolioStat reviews, agencies identified more than $2.5 billion in spending reductions that could be achieved from FY 2013 through FY 2015.[38] However, in November 2013 GAO reported that OMB's PortfolioStat initiative has the potential to save between $5.8 and $7.9 billion by fiscal year 2015.[39] GAO also found that many agencies were not fully implementing the requirements of the initiative. For example, only one agency fully addressed the key requirements of OMB's initiative, and twelve agencies were not able to ensure that their commodity IT baseline was complete.[40]

The PortfolioStat process is a promising initiative that can both save money and improve the management of IT systems throughout the federal government. Accordingly, the Committee substitute

[35] *See* GAO–11–634 at 29–30.
[36] *See* Federal Information Technology Shared Services Strategy at 4, May 2, 2012.
[37] *See* M–12–10, Implementing PortfolioStat, Office of Management and Budget, (March 30, 2012).
[38] *See* statement of Steven VanRoekel, Senate Committee on Homeland Security and Governmental Affairs Hearing, *Reducing Duplication and Improving Outcomes in Federal Information Technology* (June 11, 2013).
[39] GAO, *Information Technology: Additional OMB and Agency Actions are Needed to Achieve Portfolio Savings,* GAO–14–65 (Washington, D.C.: Nov. 6, 2013). GAO found that the potential savings from the first round of agency PortfolioStats are likely understated because several large agencies, including the Departments of Defense and Justice were not included in the estimates.
[40] *Id.* at 15.

to H.R. 1232 requires the Director of OMB and agency CIOs to annually review the IT investments of an agency to identify, among other things, ways to increase the efficiency and effectiveness of an agency's IT investments, opportunities to increase the use of shared services, potential duplication, waste and cost-savings, and a multi-year strategy to reduce duplication within an agency's IT portfolio. The Committee expects that agencies will review the *entire* portfolio of an agency's IT investments, including hardware, software, and IT services. The Director of OMB would also be required to develop metrics and performance indicators for agencies to use in their annual portfolio review.

DATA CENTER CONSOLIDATION

A data center is a room or building that houses computer systems and associated components that are used for the storage, management, and dissemination of data and information.[41] Over the years, the federal government's demand for IT has led to a dramatic rise in the number of federal data centers and an increase in operation costs. The number of data centers operated by the federal government has grown from several hundred in the 1990s to more than six thousand as of July 2013.[42]

Operating these data centers imposes significant costs on the federal government. The government has to purchase hardware, software, and the facilities in which to place them, and it has to pay people to run the machines in the centers. Moreover, the Environmental Protection Agency reported that in 2006 (the most recent year for which the information is available), federal servers and data centers accounted for approximately six billion kilowatts of electricity use, for a total annual electricity cost of about $450 million.[43] These data centers typically run 24 hours a day, seven days a week, and require significant electricity to power the "always-on" equipment. In addition, data centers produce significant heat, requiring a substantial expenditure for energy to cool them.[44] Furthermore, GAO has cited "the growth in the number of federal data centers, many offering similar services and resources" as a source

[41] OMB's definition of a "data center" has evolved over the years. It most recently has settled on defining "data center" as "a closet, room, floor or building for the storage, management, and dissemination of data and information." OMB's guidance further explains that "such a repository houses computer systems and associated components, such as database, application, and storage systems and data stores. A data center generally includes redundant or backup power supplies, redundant data communications connections, environmental controls (air conditioning, fire suppression, etc.) and special security devices housed in leased (including by cloud providers), owned, collocated, or stand-alone facilities. This definition excludes facilities exclusively devoted to communications and network equipment (e.g., telephone exchanges and telecommunications rooms)." Office of Management and Budget Memorandum for Chief Information Officers, *Implementation Guidance for the Federal Data Center Consolidation Initiative* (March 19, 2012).

[42] In July 2013, the Government Accountability Office reported that the number of agency-reported federal data centers stood at 6,836. Government Accountability Office, *Information Technology: OMB and Agencies Need to More Effectively Implement Major Initiatives to Save Billions of Dollars,* GAO–13–796T (July 2013). That is more than triple the number reported in 2010, when OMB first started counting, an increase resulting not so much from an actual growth in data centers, as from agencies' growing familiarity with OMB's requirements and OMB's expansion of the definition of "data center."

[43] U.S. Environmental Protection Agency, ENERGY STAR Program, Report to Congress on Server and Data Center Energy Efficiency at 25 (pursuant to Public Law 109–431) (August 2, 2007).

[44] *See* Time Magazine, *The Surprisingly Large Energy Footprint of the Digital Economy,* April 14, 2013 at http://science.time.com/2013/08/14/power-drain-the-digital-cloud-is-using-more-energy-than-you-think/.

of overlap and duplication (and therefore unnecessary expenditures) in the federal government.[45]

In 2010, OMB, through the Federal CIO, launched the Federal Data Center Consolidation Initiative ("Consolidation Initiative" or "Initiative") to consolidate redundant federal data centers and achieve cost-savings. The goals of the initiative were to: promote the use of green IT by reducing the overall energy and real estate footprint of government data centers; reduce the cost of data center hardware, software, and operations; increase the overall IT security posture of the government; and shift IT investments to more efficient computing platforms and technologies.[46]

Under the Consolidation Initiative, OMB required the 24 departments and agencies on the CIO Council[47] to submit an inventory of each agency's data centers and a plan for consolidating them. Agencies were then required to annually update their asset inventory and report on the progress made toward implementing the agency consolidation plan. OMB set a target goal of closing 40 percent of the federal data centers agencies had identified, and it estimated saving between $3 and $5 billion—both by the end of 2015.[48]

At the request of this Committee, GAO conducted several reviews of the progress that OMB and agencies have made under the Initiative.[49] GAO's ongoing work on the Consolidation Initiative has confirmed two things. First, data center consolidation is an economical way to achieve more efficient IT operations, as well as cost-savings or cost avoidance.[50] Second, significant work must still be done before agencies realize the full benefits of consolidation.

For example, in July 2011, GAO assessed the completeness of each agency's first submission of data center consolidation documents and found that, at that time, only one agency out of 24 had submitted a complete data center asset inventory and no agency had submitted a complete consolidation plan.[51] A year later, in July 2012, GAO reported on agencies' second submission of data center consolidation documents. These submissions demonstrated

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[45] Government Accountability Office, *Opportunities to Reduce Potential Duplication in Government Programs, Save Tax Dollars, and Enhance Revenue,* 26–29, GAO–11–318SP (March 2011).

[46] Office of Management and Budget Memorandum for Chief Information Officers, *Federal Data Center Consolidation Initiative* (February 26, 2010).

[47] The 24 agencies on the CIO Council are: Department of Agriculture; Department of Commerce; Department of Defense; Department of Education; Department of Energy; Department of Health and Human Services; Department of Homeland Security; Department of Housing and Urban Development; Department of the Interior; Department of Justice; Department of Labor; Department of State; Department of Transportation; Department of the Treasury; Department of Veterans Affairs; Environmental Protection Agency; General Services Administration; National Aeronautics and Space Administration; National Science Foundation; Nuclear Regulatory Commission; Office of Personnel Management; Small Business Administration; Social Security Administration; and United States Agency for International Development.

[48] *See* Fiscal Year 2012 Budget of the U.S. Government, page 29 (http://www.whitehouse.gov/sites/default/files/omb/budget/fy2012/assets/budget.pdf) and Fiscal Year 2013 Budget of the U.S. Government, page 43 (http://www.whitehouse.gov/sites/default/files/omb/budget/fy2013/assets/budget.pdf).

[49] *See* Government Accountability Office, *Data Center Consolidation: Agencies Need to Complete Inventories and Plans to Achieve Expected Savings,* 8–19, GAO–11–565 (July 2011); Government Accountability Office, *Data Center Consolidation: Agencies Making Progress on Efforts, but Inventories and Plans Need to be Completed,* 12, GAO–12–742 (July 2012); and Government Accountability Office, *Data Center Consolidation: Strengthened Oversight Needed to Achieve Cost Savings Goal* 14, GAO–13–378 (April 2013).

[50] *See* Government Accountability Office, *Opportunities to Reduce Potential Duplication in Government Programs, Save Tax Dollars, and Enhance Revenue,* 26–29, GAO–11–318SP (March 2011).

[51] Government Accountability Office, *Data Center Consolidation: Agencies Need to Complete Inventories and Plans to Achieve Expected Savings,* 8–19, GAO–11–565 (July 2011).

that the Consolidation Initiative could potentially save the government billions of dollars.[52] However, GAO's review also found that there were still large gaps in agency inventories and plans.[53]

GAO's next report on the Consolidation Initiative, issued in April 2013, once again evaluated agency progress in consolidating data centers. GAO expressed frustration over the failure to track cost-savings associated with the Consolidation Initiative, stating, "the lack of initiative-wide cost-savings data makes it unclear whether agencies will be able to achieve OMB's projected savings of $3 billion by the end of 2015."[54] GAO also found that OMB had not measured agencies' progress toward OMB's cost-savings goal of $3 billion, because OMB had not determined a consistent and repeatable method for tracking cost-savings. GAO further stated that until OMB begins tracking and reporting on performance measures such as cost-savings, OMB would be limited in its ability to oversee agencies' progress towards key initiative goals.[55]

The Committee substitute to H.R. 1232 builds on the Administration's efforts to consolidate and streamline data centers. The bill does so by requiring agencies, among other things, to devise and implement plans to inventory and consolidate existing data centers and to report to OMB on the extent to which they are implementing those plans. To assist agency consolidation efforts, the Committee substitute to H.R. 1232 requires OMB to implement government-wide data center consolidation and optimization metrics. These metrics include cost-savings metrics that ensure accurate calculation of cost-savings and cost avoidances, as well as server efficiency (i.e. server utilization) metrics.

Finally, the Committee substitute to H.R. 1232 requires OMB to develop a cost-savings goal for the FDCCI and regularly report to Congress on cost-savings realized, and the completeness of each agency's data center inventories and consolidation strategies. It also directs the GAO to review and verify agencies' data center consolidation efforts.

III. Legislative History

H.R. 1232 was introduced on March 18, 2013, by Representatives Darrell Issa and Gerald Connolly. On February 25, 2014, the bill was agreed to in the House by voice vote on a motion to suspend the rules and pass the bill. The bill was received in the Senate on February 26, 2014 and referred to the Homeland Security and Governmental Affairs Committee.

The Committee considered the bill at a business meeting on June 25, 2014. Senator Carper offered two amendments to the bill. The first was a substitute amendment that Senator Carper and Senator Coburn offered that would strengthen the authorities of agency CIOs, improve upon the public transparency and review processes

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[52] Government Accountability Office, *Data Center Consolidation: Agencies Making Progress on Efforts, but Inventories and Plans Need to be Completed,* 12, GAO–12–742 (July 2012). GAO found that nineteen agencies reported anticipating a combined total of more than $2.4 billion in cost-savings and more than $820 million in cost avoidances between 2011 and 2015. GAO noted that actual savings could reach even higher, because fourteen of the agencies provided incomplete projections, one agency does not expect to accrue net savings until 2017, and three agencies did not provide any estimated cost-savings at all.

[53] *Id.*

[54] Government Accountability Office, *Data Center Consolidation: Strengthened Oversight Needed to Achieve Cost Savings Goal* 14, GAO–13–378 (April 2013).

[55] *Id.* at 10.

required of agency IT investments, require agencies to conduct annual reviews of the IT investments of the entire agency, and build on the Administration's efforts to consolidate and streamline data centers. The second amendment was a technical amendment to the title of the bill.

The Committee adopted both amendments, and ordered the underlying bill reported favorably, all by voice vote (with Senator Levin asking to be recorded as "present" for the voice vote on the underlying bill). Members present for the vote on the amendments and on the bill were Senators Carper, Levin, McCaskill, Tester, Heitkamp, Coburn, McCain, Johnson, and Portman.

The Carper-Coburn substitute is based on the Committee's extensive work on the subject. The Committee and its subcommittees have held six hearings over the last three years on IT management and related issues:

- On April 12, 2011, the Subcommittee on Federal Financial Management, Government Information, Federal Services, and International Security held a hearing entitled "Examining the President's Plan for Eliminating Wasteful Spending in Information Technology." The hearing explored efforts by the Obama administration to rein in the federal government's IT budget and the President's 25-point plan to reform federal IT management.
- On May 25, 2011, the full Committee held a hearing entitled "How to Save Taxpayer Dollars: Case Studies of Duplication in the Federal Government." One of the case studies examined at the hearing was the Consolidation Initiative's effort to reduce unnecessary federal data centers.
- On May 24, 2012, the Subcommittee on Federal Financial Management, Government Information, Federal Services, and International Security held a hearing entitled "Innovating with Less: Examining Efforts to Reform Information Technology Spending." The hearing examined the Obama administration's progress in implementing its plan to transform the management of federal IT systems.
- On June 11, 2013, the full Committee held a hearing entitled "Reducing Duplication and Improving Outcomes in Federal Information Technology." During the hearing, several critical IT areas were identified as offering potential opportunities to reduce duplication and the cost of government operations, including reducing the number of underutilized federal data centers.
- On May 8, 2014, the full Committee held a hearing entitled "Identifying Critical Factors for Success in Information Technology Acquisitions." The hearing examined the critical factors that lead to the successful acquisition of information technology investments, what challenges organizations (both government and industry) face in implementing IT systems, and ongoing efforts to consolidate data centers, empower agency CIOs, and strengthen management of IT projects.
- On June 10, 2014, the Subcommittee on the Efficiency and Effectiveness of Federal Programs and the Federal Workforce, held a hearing entitled "A More Efficient and Effective Government: Examining Federal IT Initiatives and the IT Workforce." The hearing examined the state of major federal IT projects, as

well as the process through which they are solicited and coordinated government-wide.

IV. Section-by-Section Analysis of the Bill, as Reported

Section 1. Short title

Section 1 gives the bill the short title of the Federal Information Technology Acquisition Reform Act.

Sec. 2. Table of contents

Section 2 provides a table of contents for the bill.

TITLE I—Management of Information Technology within Federal Government

Sec. 101. CIO authority enhancements

Section 101(a) adds a new section 11319 to chapter 113 of title 40, United States Code, entitled "Resources, planning and portfolio management."

New section 11319(a) defines the following terms:

- "Covered agency" means each agency listed in sections 901(B)(1) and 901(b)(2) of title 31, which includes the following agencies: The Department of Agriculture, the Department of Commerce, the Department of Defense, the Department of Education, the Department of Energy, the Department of Health and Human Services, the Department of Homeland Security, the Department of Housing and Urban Development, the Department of the Interior, the Department of Justice, the Department of Labor, the Department of State, the Department of Transportation, the Department of the Treasury, the Department of Veterans Affairs, the Environmental Protection Agency, the National Aeronautics and Space Administration, The Agency for International Development, the General Services Administration, the National Science Foundation, the Nuclear Regulatory Commission, the Office of Personnel Management, the Small Business Administration, the Social Security Administration; and
- The bill delegates to OMB the responsibility to provide a precise definition of the term "Information Technology" through OMB's capital planning guidance. The current definition of "Information Technology" in OMB's Fiscal Year 2015 guidance is "any equipment or interconnected system or subsystem of equipment that is used in the automatic acquisition, storage, manipulation, management, movement, control, display, switching, interchange, transmission, or reception of data or information by an executive agency. IT is related to the terms capital asset, IT investment, program, project, subproject, service, and system." [56]

New section 11319(b) gives new authorities for CIOs. New subsection (b)(1)(A) first requires the head of each covered agency and each military department to ensure that the CIO of the agency has a significant role in the annual and multi-year planning, programming, budgeting, and execution processes, as well as the manage-

[56] http://www.whitehouse.gov/sites/default/files/omb/assets/egov_docs/fy2015_e53_and_300_guidance_final_july2013.pdf.

ment, governance, and oversight processes related to information technology (IT).

Next, new subsection (b)(1)(B) requires the OMB Director to require in OMB's annual IT capital planning guidance that the CIO of the agency (1) approve the agency's information technology budget request; (2) certify that IT investments are implementing incremental development as defined by OMB; and (3) work with the Chief Human Capital Officer to review all IT positions requested in the budget to ensure the needs of the agency are being met.

Finally, new subsection (b)(1)(C) requires the CIO of covered agencies and the military departments to review and approve IT contracts or other agreements for information technology or information technology services. An agency CIO would also review and approve any request to reprogram funds for IT programs, prior to such funds being reprogrammed. The agency may utilize existing governance processes to obtain approval provided that the CIO of the agency is a full participant in those governance processes. This subsection also allows the CIO to delegate the approval of a contract or agreement to an individual who reports directly to the Chief Information Officer for contracts or agreements for non-major IT investments, as that term is defined by OMB. However, the CIO may not delegate the approval for major IT investments.

New subsection (b)(2) provides that the agency CIO shall approve the appointment of any other employee with the title of Chief Information Officer at the agency, or who functions in the capacity of Chief Information Offer, for any component organization within the agency.

Sec. 102. Enhanced transparency and improved risk management in information technology investments

Section 102(a) amends 40 U.S.C. § 11302(c) to codify OMB's IT Dashboard program, requiring OMB to make publicly available the cost, schedule, and performance data for each major IT investment at an agency. This section also sets forth a review process that must take place for major IT investments that receive a high or moderately high risk for four consecutive quarters.

Section 102(a) first adds two definitions: (1) "Covered agency" once again means each agency listed in sections 901(B)(1) and 901(b)(2) of title 31 and (2) "Major information technology investment" means an agency IT investment that is designated by the executive agency as "major" in accordance with capital planning guidance issued by OMB.

Section 102(a) then creates a new subsection 40 U.S.C. § 11302(c)(3)(A), which requires the Director of OMB to make publicly available the cost, schedule, and performance data for each major IT investment for both new acquisitions and for operations and maintenance of existing IT. This information is required to be continuously available to the public, but the Director of OMB may waive or limit the information that is made publicly available if the Director determines that such a waiver or limitation is in the national security interests of the United States.

New subsection 11302(c)(3)(B) further requires the agency CIO to certify each quarter that the information is current, accurate, and reflects the risks associated with each investment and also to iden-

tify significant data quality issues. The OMB Director must publicly identify executive agencies with an incomplete certification.

Under new subsection 11302(c)(3)(C) the agency CIO is required to categorize each investment according to its risk level. The CIO cannot categorize the level of risk as not lower than medium risk for any investment that is not using incremental development. Incremental, or modular, development involves "dividing investments into smaller parts in order to reduce investment risk, deliver capabilities more rapidly, and permit easier adoption of newer and emerging technologies."[57]

New subsection 11302(c)(4) then sets forth a review process that applies to major IT investments that receive a high or moderately high risk rating for four consecutive quarters. First, the Administrator of the Office of E-Government and Information Technology at OMB ("E-Gov Administrator"), in conjunction with the CIO of the agency and the program manager of the investment, must review the investment to identify: (1) the root causes of the high level of risk of the investment; (2) the extent to which these causes can be addressed; and (3) the probability of future success. The E-Gov Administrator then sends the results of the review to the Senate Committee on Homeland Security and Governmental Affairs, the House Committee on Oversight and Government Reform, the Senate and House Appropriations Committees, and to any other Congressional committee upon request. If within one year of the date of completion of the above-mentioned review, the investment is still evaluated as high risk, the OMB Director shall deny any request for all future development, modernization, and enhancement funding until such time as the agency CIO certifies that the root causes have been addressed and there exists sufficient capability to deliver on the investment within the planned cost and schedule.

Finally, new subsection 11302(c)(5) requires that the Director of OMB send a report to Congress, analyzing the trends of "covered agencies" reflected in the performance risk information required in paragraph (3).

Sec. 103. Governmentwide software purchasing program

Section 103(a) requires the Administrator of the General Services Administration ("GSA"), in collaboration with the Secretary of Defense, to identify and develop a strategic sourcing initiative to enhance Governmentwide acquisition, shared use, and dissemination of software.

Section 103(b) requires the GSA Administrator, in developing the initiative under subsection (a), to allow for the purchase of a license agreement that is available for use by all executive agencies as one user to the maximum extent practicable and as appropriate.

[57] *See* Office of Management and Budget, *Contracting Guidance to Support Modular Development* (June 14, 2012), available at http://www.whitehouse.gov/sites/default/files/omb/procurement/guidance/modular-approaches-for-information-technology.pdf.

TITLE II—Portfolio Review and Federal Data Center Consolidation Initiative

Sec. 201. Portfolio review

Section 201(a) adds a new subsection 11319(c) to chapter 113 of title 40, United States Code, that requires the Director of OMB and agency CIOs to annually review each agency's IT investments.

New subsection 11319(c)(1) requires OMB to first set forth the process by which agencies should identify, among other things, ways to increase the efficiency and effectiveness of an agency's IT investments, opportunities to increase the use of shared services, potential duplication, waste and cost-savings, and a multi-year strategy to reduce duplication within an agency's IT portfolio.

New subsection 11319(c)(2) requires the Director of OMB to develop metrics and performance indicators that agencies shall use in their annual portfolio review.

New subsection 11319(c)(3) requires the CIO of a covered agency to work with the agency's Chief Operating Officer and the E-Gov Administrator to conduct an annual review of the IT portfolio of the agency.

New subsection 11319(c)(4) requires the E-Gov Administrator to submit quarterly reports on the cost-savings and reductions in duplicative IT investments that were identified through the portfolio review process.

Sec. 202. Federal Data Center consolidation initiative

Subsection 202(a): Definitions

The section defines the terms: "Administrator," "Covered Agency," "FDCCI," and "Government-Wide Data Center Consolidation and Optimization Metrics."

Subsection 202(b): Federal Data Center consolidation inventories and strategies

Subsection 202(b)(1) establishes annual data center consolidation reporting requirements for 24 key agencies. Each year, agencies are required to submit to OMB a data center inventory and a multi-year strategy to consolidate and optimize their data centers. The strategy shall include performance metrics, a consolidation timeline, and cost-saving estimates. Each agency is then required to implement the consolidation strategies submitted to OMB and provide quarterly updates to OMB on the implementation process.

Subsection 202(b)(1) also makes clear that OMB may allow agencies to submit information through existing reporting structures and that each agency CIO must annually state that their agency has complied with the requirements of this Act. Finally, this subsection contains a Rule of Construction to make it clear that nothing in this Act limits the reporting of information by agencies to OMB or Congress.

Subsection 202(b)(2) lays out the responsibilities of the E-Gov Administrator under this Section. These responsibilities include: establishing deadlines for annual reporting by agencies and requirements that agencies must meet to be considered in compliance with the Act, ensuring that agency progress is made available to the public, reviewing the inventories and strategies submitted pur-

suant to this Act, monitoring the implementation of agency strategies, updating the cost-savings realized through data center consolidation, and creating government-wide data center consolidation and optimization metrics.

Subsection 202(b)(3) requires the E-Gov Administrator to develop a cost-savings goal for data center consolidation, with a year-by-year break-down of anticipated savings. This subsection requires OMB to submit regular updates to Congress on cost-savings realized, and the completeness or incompleteness of each agency's data center inventories and consolidation strategies.

Subsection 202(b)(4) requires GAO to review the quality and completeness of each agency's asset inventory and consolidation strategy.

Subsection 202(c): Ensuring cybersecurity standards for data center consolidation and cloud computing

This subsection establishes that data center consolidation must be done in accordance with federal guidelines on cloud computing security, including guidance published by the National Institute of Standards and Technology and the Federal Risk and Authorization Management Program, a government-wide program that aims to provide a standardized approach to security assessments and authorizations for cloud computing products and services.

Subsection 202(d): Waiver of disclosure requirements

This subsection provides the Director of National Intelligence ("DNI") the ability to waive the requirements of the Act if the DNI determines that such disclosure is in the interest of national security. Within 30 days after making such a determination, the DNI would need to file a statement describing the waiver and the reasons for the waiver to the Senate Homeland Security and Governmental Affairs Committee, the House Committee on Oversight and Government Reform, and the Senate and House Intelligence Committees.

Subsection 202(e): Sunset

This subsection repeals the Federal Data Center Consolidation Initiative on October 1, 2018.

V. CONGRESSIONAL BUDGET OFFICE (CBO) COST ESTIMATE

JULY 25, 2014.

Hon. TOM CARPER,
Chairman, Committee on Homeland Security and Governmental Affairs, U.S. Senate, Washington, DC.

DEAR MR. CHAIRMAN: The Congressional Budget Office has prepared the enclosed cost estimate for H.R. 1232, the Federal Information Technology Acquisition Reform Act.

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

Sincerely,

DOUGLAS W. ELMENDORF.

Enclosure.

H.R. 1232—Federal Information Technology Acquisition Reform Act

Summary: H.R. 1232 would amend the laws governing the procurement and management of information technology (IT) systems throughout the federal government. Specifically, the legislation would expand the existing Federal Data Center Consolidation Initiative to require agencies to inventory their data centers (facilities used to house computer systems and associated components) and to submit plans for optimizing their use. In addition, the bill would increase the authority of federal Chief Information Officers (CIOs), and require reports and analysis by government agencies concerning their IT investments.

CBO estimates that implementing H.R. 1232 would cost $30 million over the 2015–2019 period, assuming appropriation of the necessary amounts. Although improving the procurement and management of IT systems, including optimizing the use of federal data centers, ultimately could reduce spending, CBO does not expect that there would be any significant savings from implementing this legislation for the next few years.

Enacting the bill could affect direct spending by agencies not funded through annual appropriations; therefore, pay-as-you-go procedures apply. CBO estimates, however, that any net change in spending by those agencies would not be significant. Enacting the bill would not affect revenues.

H.R. 1232 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 H.R. 1232 is shown in the following table. The costs of this legislation fall within all budget functions that include funding to purchase information technology.

	By fiscal year, in millions of dollars—					
	2015	2016	2017	2018	2019	2015–2019
CHANGES IN SPENDING SUBJECT TO APPROPRIATION						
Estimated Authorization Level	2	7	7	7	7	30
Estimated Outlays	2	7	7	7	7	30

Basis of estimate: For this estimate, CBO assumes that H.R. 1232 will be enacted in late 2014 and that the necessary amounts for implementing the bill will be appropriated for each year.

Administration of Information Management and Procurement

The federal government spends about $80 billion annually on IT investments. Many provisions of H.R. 1232 would codify and expand upon the government's current practices concerning IT management and procurement. Office of Management and Budget (OMB) memoranda, Presidential directives, Administration initiatives, and other plans have directed federal agencies to improve the oversight of underperforming IT systems, more effectively manage IT costs, address duplicative investments through the IT Dashboard (a system with detailed information on major IT investments by the federal government), hold TechStat reviews (meetings to terminate or turnaround poorly performing federal IT investments), and implement plans to consolidate federal data centers.

H.R. 1232 would require 24 major agencies to submit comprehensive inventories of their IT facilities to OMB as well as plans for phasing out some data centers and optimizing performance at the remaining facilities. Under the bill, agencies also would be required to submit estimates of cost savings from consolidating those facilities. The Government Accountability Office (GAO) would be required to annually review and verify agency efforts in this area and report to the Congress on its findings. In addition, the legislation would expand the role and responsibilities of agency CIOs and expand the analysis needed to justify and report on government-wide IT procurements.

Based on information from selected agencies, OMB, and GAO studies and reports on similar efforts to improve the cost effectiveness of IT spending, CBO expects that the administrative workload of most agencies would increase under H.R. 1232, mostly to prepare additional reports and to conduct more thorough reviews of IT spending. CBO estimates that implementing H.R. 1232 would cost $7 million a year, assuming appropriation of the necessary amounts.

Savings

The President's Budget for Fiscal Year 2015 reported that agencies have saved about $1.6 billion through IT reform initiatives in recent years. Some of those savings come from the current Federal Data Center Consolidation Initiative to close up to 40 percent of the 1,200 consolidated data centers by the end of 2015 and from using tools like PortfolioStat reviews to reduce inefficiency, duplication, and unnecessary spending. Because most of the requirements of H.R. 1232 would make incremental changes to the current policies and practices, CBO expects that any additional savings from implementing this bill over the next five years would be small.

Previous CBO estimates: On December 6, 2013, CBO transmitted a cost estimate for S. 1611, the Federal Data Center Consolidation Act of 2013, as ordered reported by the Senate Committee on Homeland Security and Governmental Affairs on November 6, 2013. On November 12, 2013, CBO transmitted a cost estimate for H.R. 1232, as ordered reported by the House Committee on Oversight and Government Reform on March 20, 2013. Both S. 1611 and the Senate version of H.R. 1232 contain identical provisions on data center consolidation. Although the House and Senate versions of H.R. 1232 both address the management and procurement of federal IT systems, CBO estimates that the House bill would have a greater cost because it has a larger scope.

Pay-As-You-Go considerations: The Statutory Pay-As-You-Go Act establishes budget-reporting and enforcement procedures for legislation affecting direct spending or revenues. Enacting the bill could affect direct spending by agencies not funded through annual appropriations; therefore, pay-as-you-go procedures apply. CBO estimates, however, that any net increase in spending by those agencies would not be significant. Enacting the bill would not affect revenues.

Intergovernmental and private-sector impact: H.R. 1232 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 costs: Matthew Pickford; Impact on state, local, and tribal governments: Michael Hirsch and Leo Lex; Impact on the private sector: Tristan Hanon.

Estimate approved by: Theresa Gullo, 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. The Committee agrees with the Congressional Budget Office that the bill contains no intergovernmental or private-sector mandates as defined in the Unfunded Mandates Reform Act and would impose no costs on state, local, or tribal governments, or private entities.

VII. Changes in Existing Statute Made by the Bill, as Reported

In compliance with paragraph 12 of rule XXVI of the Standing Rules of the Senate, the following changes in existing law made by the bill, as reported, are shown as follows: (existing law proposed to be omitted is enclosed in black brackets, new matter is printed in italic, existing law in which no change is proposed is shown in roman):

UNITED STATES CODE

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TITLE 40—PUBLIC BUILDINGS, PROPERTY, AND WORKS

* * * * * * *

CHAPTER 113—RESPONSIBILITY FOR ACQUISITIONS OF INFORMATION TECHNOLOGY

§ 11302. Capital planning and investment control

(a) * * *

(b) * * *

(c) Use of Budget Process.—

(1) Definitions.—In this subsection—

(A) the term "covered agency" means an agency listed in section 901(b)(1) or 901(b)(2) of title 31; and

(B) the term "major information technology investment" means an investment within a covered agency information technology investment portfolio that is designated by the covered agency as major, in accordance with capital planning guidance issued by the Director.

(**[**1**]***2*) Analyzing, tracking, and evaluating capital investments. As part of the budget process, the Director shall develop a process for analyzing, tracking, and evaluating the

risks, including information security risks, and results of all major capital investments made by an executive agency for information systems. The process shall cover the life of each system and shall include explicit criteria for analyzing the projected and actual costs, benefits, and risks, including information security risks, associated with the investments.

(3) PUBLIC AVAILABILITY.—

(A) IN GENERAL.—The Director shall make available to the public the cost, schedule, and performance data for each major information technology investment, without regard to whether the investments are for new information technology acquisitions or for operations and maintenance of existing information technology.

(B) QUARTERLY REVIEW AND CERTIFICATION.—

(i) IN GENERAL.—For each major information technology investment listed under subparagraph (A), the Chief Information Officer of the covered agency and the program manager of the investment within the covered agency shall, at least once every quarter—

(I) certify that the information is current, accurate, and reflects the risks associated with each listed investment; and

(II) identify significant data quality issues that affect the quality of data made available under subparagraph (A).

(ii) INCOMPLETE CERTIFICATIONS.—The Director shall publicly identify covered agencies with an incomplete certification under clause (i)(I).

(C) INVESTMENT EVALUATION BY AGENCY CIO.—For each major information technology investment listed under subparagraph (A), the Chief Information Officer of the covered agency shall—

(i) categorize the investment according to level of risk;

(ii) categorize the level of risk of the investment at a risk rating that is not lower than the higher of the cost rating and schedule risk rating of the investment, as determined in accordance with guidance issued by the Director; and

(iii) categorize the level of risk as not lower than medium risk for any investment determined by the Chief Information Officer and program manager to not employ incremental development, as determined in accordance with capital planning guidance issued by the Director.

(D) CONTINUOUS AVAILABILITY.—The information required under subparagraph (A), in its most updated form, shall be publicly available at all times.

(E) WAIVER OR LIMITATION AUTHORITY.—The applicability of subparagraph (A) may be waived or the extent of the information may be limited by the Director, if the Director determines that such a waiver or limitation is in the national security interests of the United States.

(4) RISK MANAGEMENT.—For each major information technology investment listed under paragraph (3)(A) that receives a

high risk rating, as described in paragraph (3)(C), for 4 consecutive quarters—

(A) the Administrator of the Office of Electronic Government, in conjunction with the Chief Information Officer of the covered agency and the program manager of the investment within the covered agency, shall conduct a review of the investment that shall identify—

(i) the root causes of the high level of risk of the investment;

(ii) the extent to which these causes can be addressed; and

(iii) the probability of future success;

(B) the Administrator of the Office of Electronic Government shall communicate the results of the review under subparagraph (A) to—

(i) the Committee on Homeland Security and Governmental Affairs and the Committee on Appropriations of the Senate;

(ii) the Committee on Oversight and Government Reform and the Committee on Appropriations of the House of Representatives; and

(iii) upon a request by any committee of Congress, to that committee; and

(C) if, on the date that is 1 year after the date of completion of the review required under subparagraph (A), the investment is rated as high risk under paragraph (3)(C), the Director shall deny any request for additional development, modernization, or enhancement funding for the investment until the date on which the Chief Information Officer of the covered agency certifies that—

(i) the root causes of the high level of risk of the investment have been addressed; and

(ii) there is sufficient capability to deliver the remaining planned increments within the planned cost and schedule.".

(**[**2**]***5*) REPORT TO CONGRESS.—At the same time that the President submits the budget for a fiscal year to Congress under section 1105(a) of title 31, the Director shall submit to Congress a report on the net program performance benefits achieved as a result of major capital investments made by executive agencies for information systems and how the benefits relate to the accomplishment of the goals of the executive agencies. *The report shall include an analysis of covered agency trends reflected in the performance risk information required in paragraph (3).*

* * * * * * *

§ 11319. Resources, planning, and portfolio management

(a) DEFINITIONS.—In this section—

(1) the term "covered agency" means each agency listed in section 901(b)(1) or 901(b)(2) of title 31; and

(2) the term "information technology" has the meaning given that term under capital planning guidance issued by the Office of Management and Budget.

(b) ADDITIONAL AUTHORITIES FOR CIOS.—

(1) PLANNING, PROGRAMMING, BUDGETING, AND EXECUTION AUTHORITIES FOR CIOS.—

(A) IN GENERAL.—The head of each covered agency and each agency listed in section 102 of title 5 shall ensure that the Chief Information Officer of the agency has a significant role in—

(i) the decision processes for all annual and multi-year planning, programming, budgeting, and execution decisions, related reporting requirements, and reports related to information technology; and

(ii) the management, governance, and oversight processes related to information technology.

(B) BUDGET FORMULATION.—

(i) IN GENERAL.—The Director of the Office of Management and Budget shall require in the annual information technology capital planning guidance of the Office of Management and Budget that the Chief Information Officer of each covered agency—

(I) approve the information technology budget request of the covered agency;

(II) as part of an approval under subclause (I), certify that information technology investments are adequately implementing incremental development, as defined in capital planning guidance issued by the Office of Management and Budget; and

(III) acting in conjunction with the Chief Human Capital Officer of the covered agency, review all positions with information technology responsibilities requested in the budget request of the covered agency to ensure the positions meet the ongoing requirements of the covered agency.

(C) REVIEW.—

(i) IN GENERAL.—A covered agency and an agency listed in section 102 of title 5—

(I) may not enter into a contract or other agreement for information technology or information technology services, unless the contract or other agreement has been reviewed and approved by the Chief Information Officer of the agency;

(II) may not request the reprogramming of any funds made available for information technology programs, unless the request has been reviewed and approved by the Chief Information Officer of the agency; and

(III) may use the governance processes of the agency to approve such a contract or other agreement if the Chief Information Officer of the agency is included as a full participant in the governance processes.

(ii) DELEGATION.—

(I) IN GENERAL.—Except as provided in subclause (II), the duties of a Chief Information Officer under clause (i) are not delegable.

(II) NON-MAJOR INFORMATION TECHNOLOGY INVESTMENTS.—For a contract or agreement for a non-major information technology investment, as defined in the annual information technology capital planning guidance of the Office of Management and Budget, the Chief Information Officer of a covered agency or an agency listed in section 102 of title 5 may delegate the approval of the contract or agreement under clause (i) to an individual who reports directly to the Chief Information Officer.

(2) PERSONNEL-RELATED AUTHORITY.—Notwithstanding any other provision of law, for each covered agency, the Chief Information Officer of the covered agency shall approve the appointment of any other employee with the title of Chief Information Officer, or who functions in the capacity of a Chief Information Officer, for any component organization within the covered agency.

(c) INFORMATION TECHNOLOGY PORTFOLIO, PROGRAM, AND RESOURCE REVIEWS.—

(1) PROCESS.—The Director of the Office of Management and Budget shall implement a process to assist covered agencies in reviewing their portfolio of information technology investments to identify or develop—

(A) ways to increase the efficiency and effectiveness of the information technology investments of the covered agency;

(B) opportunities to consolidate the acquisition and management of information technology services, and increase the use of shared-service delivery models;

(C) potential duplication and waste, including unnecessary or duplicative software licenses;

(D) potential cost-savings, including cost-savings and cost avoidance opportunities related to software licenses of the covered agency;

(E) plans for actions to optimize the information technology portfolio, programs, and resources of the covered agency;

(F) ways to better align the information technology portfolio, programs, and financial resources of the covered agency to the multi-year funding profiles and strategic plans, when such plans are required by Congress;

(G) a multi-year strategy to identify and reduce duplication and waste within the information technology portfolio of the covered agency, including component-level investments, and projected cost-savings and avoidances resulting therefrom; and

(H) any other goals that the Director may establish.

(2) METRICS AND PERFORMANCE INDICATORS.—The Director of the Office of Management and Budget shall develop standardized cost-savings and cost avoidance metrics and performance indicators, which shall be used by agencies for the purposes of paragraph (1).

(3) ANNUAL REVIEW.—In accordance with the process implemented under paragraph (1), the Chief Information Officer of each covered agency, in conjunction with the Chief Operating Officer or Deputy Secretary (or equivalent) of the covered agency

and Administrator of the Office of Electronic Government, shall conduct an annual review of the information technology portfolio of the covered agency.

(4) QUARTERLY REPORTS.—

(A) IN GENERAL.—The Administrator of the Office of Electronic Government shall submit a quarterly report on the cost-savings and reductions in duplicative information technology investments identified through the review required by paragraph (3) to—

(i) the Committee on Homeland Security and Governmental Affairs and the Committee on Appropriations of the Senate;

(ii) the Committee on Oversight and Government Reform and the Committee on Appropriations of the House of Representatives; and

(iii) upon a request by any committee of Congress, to that committee.

(B) INCLUSION IN OTHER REPORTS.—The reports required under subparagraph (A) may be included as part of another report submitted to the committees of Congress described in clauses (i), (ii), and (iii) of subparagraph (A).

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