GAO

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INFORMATION TECHNOLOGY

Agencies Need to Strengthen Oversight of Billions of Dollars in Operations and Maintenance Investments

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Why GAO Did This Study

Of the $79 billion federal agencies budgeted for IT in 2011, $54 billion (about 69 percent) was reported to have been spent on the operations and maintenance of existing legacy IT systems—commonly referred to as steady state investments. Given the size and magnitude of these investments, it is essential that agencies effectively manage them to ensure they continue to meet agency needs. As such, OMB directs agencies to periodically examine the performance of such investments against, among other things, established cost, schedule, and performance goals by performing annual OAs.

GAO was asked to determine the extent to which federal agencies analyze the performance of steady state investments in accordance with OMB guidance. To do so, GAO (1) selected five agencies, DOD, HHS, DHS, Treasury, and VA, which reported spending $4.6 billion annually on major steady state investments; and (2) and compared their fiscal year 2011 OAs to OMB criteria. GAO also analyzed documents and interviewed agency officials regarding any variances as well as their causes.

What GAO Recommends

GAO is recommending that DOD, Treasury, and VA develop an OA policy and conduct annual OAs; and that DHS and HHS ensure OAs are being performed for all investments and that all factors are fully assessed. GAO is also recommending that OMB revise its guidance to incorporate mechanisms to ensure OAs are completed and provide for increased transparency. In commenting on a draft of this report, OMB and the five agencies GAO reviewed agreed with its content and recommendations.

View GAO-13-87. For more information, contact David A. Powner at (202) 512-9286 or pownerd@gao.gov.

What GAO Found

Federal agency assessments of the performance of information technology (IT) investments in operations and maintenance (O&M)—commonly referred to as operational analyses (OAs)—vary significantly. Office of Management and Budget (OMB) guidance calls for agencies to develop an OA policy and perform such analyses annually to ensure steady state investments continue to meet agency needs. The guidance also includes 17 key factors (addressing areas such as cost, schedule, customer satisfaction, and innovation) that are to be assessed. The five agencies GAO reviewed varied in the extent to which they carried out these tasks.

The Departments of Homeland Security (DHS) and Health and Human Services (HHS) developed a policy which included all OMB assessment factors and performed OAs. However, they did not include all investments and key factors. In particular, DHS analyzed 16 of its 44 steady state investments, meaning 28 investments with annual budgets totaling $1 billion were not analyzed; HHS analyzed 7 of its 8 steady state investments. For OAs performed by DHS and HHS, both fully addressed approximately half of the key factors. With regard to the DHS and HHS investments that did not undergo an analysis or were not fully assessed against key factors, agency officials said this was due in part to program officials inconsistently applying OMB and agency guidance in conducting OAs and that OAs were not a priority. DHS and HHS have recently begun to take action to make OAs a priority and improve consistency. For example, DHS's chief information officer recently issued a directive requiring all steady state IT investments to conduct analyses annually and plans to assign staff in the office of the chief information officer to review them to ensure they are complete.

The Departments of Defense (DOD), the Treasury (Treasury), and Veterans Affairs (VA) did not develop a policy and did not perform analyses on their 23 major steady state investments with annual budgets totaling $2.1 billion. DOD and VA officials said that they did not have a policy or perform analyses because they measure the performance of steady state investments via development of plans and business cases submitted to OMB (called exhibit 300s) as part of the budget process. While these can be helpful in managing performance and do address aspects of the 17 key factors, they do not address 11 of the key factors. For example, the exhibit 300 does not address reviewing strategic business results and making recommendations to modify or terminate an investment. Treasury officials stated that they did not to perform OAs in 2011 and instead decided to use the time to develop a policy. However, the officials stated that they did not anticipate the policy to be completed until the end of this calendar year.

Overall, these five agencies have steady state investments with a fiscal year 2011 budget of over $3 billion which have not undergone needed analyses. While OMB requires agencies to perform OAs, its existing guidance does not provide mechanisms that ensure the OAs are completed and allow public transparency into the results of the assessments. Until agencies address these shortcomings, there is increased risk that these agencies will not know whether the multibillion dollar investments fully meet their intended objectives.

_____ **United States Government Accountability Office**

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Abbreviations

CIO	chief information officer
DOD	Department of Defense
DHS	Department of Homeland Security
HHS	Department of Health and Human Services
IT	information technology
NASA	National Aeronautics and Space Administration
OA	operational analysis
O&M	operations and maintenance
OMB	Office of Management and Budget
Treasury	Department of the Treasury
VA	Department of Veterans Affairs

United States Government Accountability Office
Washington, DC 20548

October 16, 2012

The Honorable Thomas R. Carper
Chairman
The Honorable Scott P. Brown
Ranking Member
Subcommittee on Federal Financial Management, Government
Information, Federal Services, and International Security
Committee on Homeland Security and Governmental Affairs
United States Senate

In fiscal year 2011, 26 key federal agencies reported spending
approximately $79 billion on information technology (IT) systems to the
Office of Management and Budget (OMB).[1] Of the $79 billion, $54 billion
was reported by the agencies to be spent on operations and maintenance
(O&M), which consists of existing legacy systems (i.e., steady state) and
systems that are in both development and O&M (known as mixed life
cycle). Given the size and magnitude of these investments, it is important
that agencies effectively manage the operations and maintenance of
existing investments to ensure they (1) continue to meet agency needs,
(2) deliver value, and (3) do not unnecessarily duplicate or overlap with
other investments.

OMB directs agencies to periodically examine the performance of these
investments against, among other things, established cost, schedule, and
performance goals. Specifically, OMB calls for agencies to perform
annual operational analyses (OA), which is a key method for examining
the performance of such investments in O&M.

As requested, our objective was to determine the extent to which federal
agencies assess the performance of steady state IT investments in

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[1]The 26 federal departments and agencies that report to OMB on their IT investments are
the Departments of Agriculture, Commerce, Defense, Education, Energy, Health and
Human Services, Homeland Security, Housing and Urban Development, Interior, Justice,
Labor, State, Transportation, the Treasury, and Veterans Affairs; Environmental Protection
Agency, General Services Administration, National Aeronautics and Space Administration,
National Archives and Records Administration, National Science Foundation, Nuclear
Regulatory Commission, Office of Personnel Management, Small Business
Administration, Smithsonian Institution, Social Security Administration, and U.S. Agency
for International Development.

accordance with this OMB guidance. To do so, we selected five agencies, the Departments of Defense (DOD), Health and Human Services (HHS), Homeland Security (DHS), the Treasury (Treasury), and Veterans Affairs (VA), which have the largest budgets for major steady state IT investments, accounting for approximately $37 billion annually or about 70 percent of all reported O&M spending in fiscal year 2011. In doing this we focused on these agencies' 75 major IT investments valued at $4.6 billion annually that were strictly in the O&M phase (i.e., excluded mixed cycle investments). We determined whether the agencies developed OA policies in accordance with OMB guidance. We also determined whether these agencies were conducting OAs to manage these investments. More specifically, we reviewed all of these agencies' OAs performed during fiscal year 2011 and compared them to OMB and related criteria.

We conducted this performance audit from October 2011 to September 2012 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objective. Details on our objective, scope, and methodology are contained in appendix I.

Background

In fiscal year 2011, the 26 key federal agencies that report to OMB on their IT investments reported spending approximately $79 billion on a wide variety of IT systems. Of this amount, agencies reported spending $54 billion on O&M for existing steady state investments; they plan on spending about $53 billion in fiscal year 2012. As shown in figure 1, these amounts represent a significant majority (i.e., 69 and 71 percent) of the overall reported IT spending in 2011 ($79 billion) and that planned for 2012 ($75 billion), respectively.

Figure 1: Percentages of Total IT Spending for Fiscal Years 2011 and 2012 for the 26 Key Federal Agencies
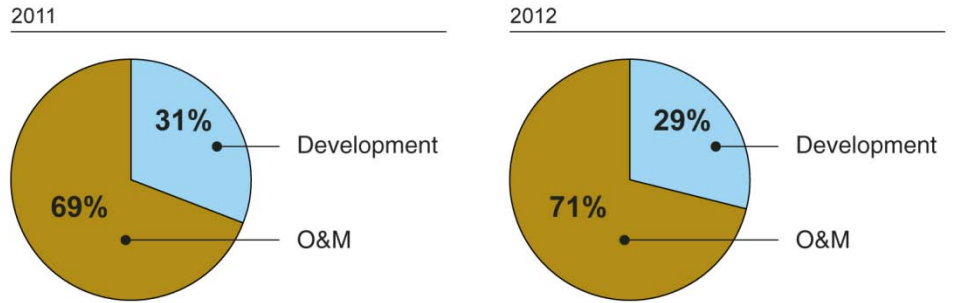
Source: GAO based on OMB data.

Although O&M spending governmentwide is about 70 percent of total IT spending, the amount spent by each agency varies from a high of 98 percent to a low of 45 percent (as shown in the table below).

Table 1: Total Reported Federal IT Spending by the 26 Key Agencies for Fiscal Year 2011 (in millions), in Descending Order of O&M Spending

Agency	Total	Development	O&M	O&M percentage of total spending
Department of Defense[a]	$37,120	$13,896	$23,224	62.6
Department of Health and Human Services	7,030	1,721	5,309	75.5
Department of Homeland Security	5,987	1,631	4,356	72.8
Department of the Treasury	3,419	553	2,866	83.8
Department of Veterans Affairs	3,193	980	2,213	69.3
Department of Agriculture	2,504	409	2,095	83.7
Department of Justice	2,991	978	2,013	67.3
Department of Energy	1,998	266	1,732	86.7
National Aeronautics and Space Administration	1,777	173	1,604	90.2
Department of Commerce	2,337	840	1,496	64.0
Department of Transportation	2,926	1,613	1,313	44.9
Department of State	1,400	94	1,306	93.3
Department of the Interior	1,028	132	896	87.2
Social Security Administration	1,471	727	743	50.5
Department of Labor	607	113	495	81.5
General Services Administration	599	106	493	82.4
Department of Education	580	97	483	83.3
Environmental Protection Agency	467	76	391	83.7

Agency	Total	Development	O&M	O&M percentage of total spending
Department of Housing and Urban Development	546	210	336	61.6
Nuclear Regulatory Commission	153	18	136	88.5
U.S. Agency for International Development	145	31	115	78.9
Small Business Administration	122	19	103	84.2
National Science Foundation	95	12	82	86.9
National Archives and Records Administration	143	70	73	51.1
Office of Personnel Management	79	10	69	86.8
Smithsonian Institution	66	4	62	94.1
Total	**$78,784**	**$24,779**	**$54,005**	**68.5%**

Source: GAO analysis based on OMB data.

[a] While the Army Corps of Engineers submits information on its IT investments to OMB separate from the Department of Defense's submission, we have included it here as part of the Department of Defense.

The National Aeronautics and Space Administration (NASA) reported spending approximately 90 percent of its total IT spending on O&M with the remaining 10 percent going to new investments. The reason for this mix of spending, according to NASA officials, is due to NASA's mission (i.e., the space shuttle mission) which relies heavily on legacy systems. By contrast, the Department of Transportation reported spending approximately 45 percent of its total IT costs on O&M with the other 55 percent going to new investments. According to department officials, this mix of spending is largely due to the fact that the department has a number of IT development investments underway that involve large financial commitments relative to O&M investments.

OMB's Roles and Responsibilities for Overseeing IT Investments, Including Operations and Maintenance

To assist agencies in managing their investments, Congress enacted the Clinger-Cohen Act of 1996, which requires OMB to establish processes to analyze, track, and evaluate the risks and results of major capital investments in information systems made by federal agencies and report to Congress on the net program performance benefits achieved as a result of these investments.[2] Further, the act places responsibility for managing investments with the heads of agencies and establishes chief information officers to advise and assist agency heads in carrying out this responsibility.

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[2] 40 U.S.C. § 11302(c).

In carrying out its responsibilities, OMB uses several data collection mechanisms to oversee federal IT spending during the annual budget formulation process. Specifically, OMB requires 26 key federal departments and agencies to provide information to it related to their IT investments (called exhibit 53s) and capital asset plans and business cases (called exhibit 300s).[3]

- *Exhibit 53*. The purpose of the exhibit 53 is to identify all IT investments—both major and nonmajor[4]—and their associated costs within a federal organization. Information included on agency exhibit 53s is designed, in part, to help OMB better understand what agencies are spending on IT investments. The information also supports cost analyses prescribed by the Clinger-Cohen Act. As part of the annual budget, OMB publishes a report on IT spending for the federal government representing a compilation of exhibit 53 data submitted by the 26 agencies.
- *Exhibit 300*. The purpose of the exhibit 300 is to provide a business case for each major IT investment and to allow OMB to monitor IT investments once they are funded. Agencies are required to provide information on each major investment's cost, schedule, and performance.

In addition, in June 2009, to further improve the transparency into and oversight of agencies' IT investments, OMB publicly deployed a website, known as the IT Dashboard (Dashboard), which replaced its Management Watch List and High-Risk List. As part of this effort, OMB issued guidance directing federal agencies to report, via the Dashboard, the performance of their IT investments. Currently, the Dashboard publicly displays information on the cost, schedule, and performance of over 700 major federal IT investments at 26 federal agencies. In addition, the Dashboard allows users to download exhibit 53 data, which include information on both major and nonmajor investments. According to OMB, these data are intended to provide a near real-time perspective of the performance of these investments, as well as a historical perspective. Further, the public

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[3] OMB Circular No. A-11, Preparation, Submission, and Execution of the Budget (August 2012).

[4] According to OMB guidance, a major investment is a system or acquisition requiring special management attention because of its importance to the mission or function of the agency, a component of the agency, or another organization; is for financial management and obligates more than $500,000 annually; has significant program or policy implications; has high executive visibility; has high development, operating, or maintenance costs; is funded through other than direct appropriations; or is defined as major by the agency's capital planning and investment control process.

display of these data is intended to allow OMB, other oversight bodies, and the general public to hold the government agencies accountable for results and progress. Since the Dashboard has been implemented, we have reported and made recommendations to improve the data accuracy and reliability. In 2010 and 2011, we reported on the progress of the Dashboard and made recommendations to further improve how it rates investments relative to current performance.[5]

Further, OMB has developed guidance that calls for agencies to develop an OA policy for examining the ongoing performance of existing IT investments to measure, among other things, that the investment is continuing to meet business and customer needs and is contributing to meeting the agency's strategic goals.[6] This guidance calls for the policy to provide for an annual OA of each investment that addresses the following: cost, schedule, customer satisfaction, strategic and business results, financial goals, and innovation. To address these areas, the guidance specifies the following 17 key factors that are to be addressed:

- assessment of current costs against life-cycle costs;
- a structured schedule assessment (i.e., measuring the performance of the investment against its established schedule);
- a structured assessment of performance goals (i.e., measuring the performance of the investment against established goals);
- identification of whether the investment supports customer processes as designed and is delivering goods and services it was designed to deliver;
- a measure of the effect the investment has on the performing organization itself;
- a measure of how well the investment contributes to achieving the organization's business needs and strategic goals;

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[5]GAO, *IT Dashboard: Accuracy Has Improved and Additional Efforts Are Under Way to Better Inform Decision Making,* GAO-12-210 (Washington, D.C.: 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 (Washington, D.C.: Mar. 15, 2011); and *Information Technology: OMB's Dashboard Has Increased Transparency and Oversight, but Improvements Needed,* GAO-10-701 (Washington, D.C.: July 16, 2010).

[6]*Capital Programming Guide*, Supplement to OMB Circular A-11, Part 7 (July 2012); OMB Memorandum M-10-27 (June 2010), requires agencies to establish a policy for performing OAs on steady state investments as a part of managing and monitoring investment baselines.

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- a comparison of current performance with a pre-established cost baseline and estimates;
- areas for innovation in the areas of customer satisfaction, strategic and business results, and financial performance;
- indication if the agency revisited alternative methods for achieving the same mission needs and strategic goals;
- consideration of issues, such as greater utilization of technology or consolidation of investments to better meet organizational goals;
- an ongoing review of the status of the risks identified in the investment's planning and acquisition phases;
- identification of whether there is a need to redesign, modify, or terminate the investment;
- an analysis on the need for improved methodology (i.e., better ways for the investment to meet cost and performance goals);
- lessons learned;
- cost or schedule variances;
- recommendations to redesign or modify an asset in advance of potential problems; and
- overlap with other investments.

With regard to overseeing the agencies' development of policies and annual performance, OMB officials responsible for governmentwide OA policy stated that they expect agencies to perform all the steps specified in the guidance and to be prepared to show documentation as evidence of compliance with the guidance should OMB decide to check.

Federal Agencies' Assessments of Major IT Steady State Investments Vary Significantly

Although OMB guidance calls for agencies to develop an OA policy and perform such analyses annually, the extent to which the five federal agencies we reviewed carried out these tasks varied significantly. Specifically, DHS and HHS developed a policy and conducted OAs, but in doing so, they excluded key investments and assessment factors. DOD, Treasury, and VA did not develop a policy or conduct OAs. The following table shows the total number of steady state investments for each agency, and provides the number and budgeted amount for those investments that underwent an assessment and those that did not.

Table 2: Total Steady State IT Investments, and Number of Investments for Five Agencies That Had OAs and Did Not Have OAs with Cost (in millions)

Agency (total investments in steady state)	Total investments with an OA	Fiscal year 2011 cost	Total investments without an OA	Fiscal year 2011 cost
DOD (4)	0	--	4	$381
DHS (44)	16	1,175	28	1,011
HHS (8)	7	207	1	77
Treasury (16)	0	--	16	152
VA (3)	0	--	3	1,600
Total (75)	**23**	**$1,400**	**52**	**$3,200**

Source: GAO analysis based on OMB data.

Until agencies more completely address their policy and performance shortcomings, there is increased risk that existing multibillion dollar investments will continue to be funded although it is not fully known whether they meet their intended objectives.

DHS and HHS Developed an OA Policy and Performed OAs, but Did Not Address All Investments and Key Factors

DHS and HHS had developed policies, which contained all performance factors identified in OMB's guidance. Specifically,

- In 2008, DHS issued its policy called "Operational Analysis Guidance."[7] The guidance states that OAs should be performed on an annual basis to evaluate the operational results of agency steady state investments. In addition, the guidance provides a report template which includes sections that should be contained and reported on in it. DHS's policy addressed all of the key factors in the OMB guidance, including, for example, assessing current costs against life-cycle costs and a detailed schedule assessment.
- In 2008, HHS issued its policy called "Practices Guide: Annual Operational Analysis."[8] The guide states OAs are required to be performed on an annual basis. Further, the guide includes a template and a checklist for conducting them. In addition, agencies within the department have issued their own policy. For example, in 2011, The

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[7]DHS, *Operational Analysis Guidance,* Version 1.1, May 2008.

[8]HHS, *Enterprise Performance Life Cycle Framework, Practices Guide, Annual Operational Analysis*, September 2008.

Centers for Disease Control and Prevention issued its "Operational Analysis Guide" and in 2010, the National Institutes of Health issued its framework, "A How-to Guide."[9] These policies contained all of the key factors identified in the OMB policy, such as measuring the effect the investment has on the performing organization itself and identifying any areas for innovation.

Further, DHS and HHS performed OAs on some of their steady state investments, but not for all. Specifically, of their 52 total steady state investments, DHS and HHS conducted analyses on 23 with total budgets of $1.4 billion and did not conduct analyses on 29 investments with total budgets of $1.1 billion. More specifically,

- Of DHS's 44 steady state investments, the department conducted OAs on 16 of them, which have an annual budget of $1.2 billion; it did not perform analyses on the other 28, which have an annual budget of almost $1 billion.
- Of HHS's 8 steady state investments, the department conducted analyses on 7 of them, which have an annual budget of $207 million; it did not perform an OA on the remaining investment, which has an annual budget of $77 million.

Tables 3 and 4 show DHS's and HHS's steady state investments by component agency and whether OAs were performed on these investments in fiscal year 2011. (Details of our analysis of all the analyses and a brief description of the investments are included in app. II.)

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[9]HHS, *Centers for Disease Control and Prevention: Operational Analysis Guide*, Version 9.0, January 2011 and HHS, *National Institutes of Health: NIG Operational Analysis Management Framework: A How-to Guide*, Version 1.2, August 2010.

Table 3: Extent to Which DHS Steady State IT Investments Underwent OAs in Fiscal Year 2011 (by Component and Cost in Millions)

Component	Investment	Yes	No	Cost for fiscal year 2011
U.S. Customs and Border Protection	1. Advance Passenger Information System		X	$4.78
	2. Automated Targeting System Maintenance		X	33.89
	3. SBInet Block 1		X	27.65
	4. Infrastructure	X		556.69
	5. Land Border Integration		X	75.78
	6. Non-Intrusive Inspection Systems Program		X	110.49
	7. Systems, Applications, and Products		X	18.21
DHS, Office of the Chief Information Officer	8. Homeland Secure Data Network	X		47.66
Federal Emergency Management Agency	9. Disaster Management E-Government Initiative	X		12.27
	10. Infrastructure		X	56.14
	11. Integrated Financial Management Information System	X		4.30
	12. National Flood Insurance Program Technology Systems and Services		X	10.83
U.S. Immigration and Customs Enforcement	13. Federal Financial Management System		X	24.69
	14. Intelligence Fusion System	X		7.36
National Protection and Programs Directorate	15. Information Systems Security Line of Business		X	3.02
	16. National Security and Emergency Preparedness Priority Telecommunication Services	X		46.05
	17. Visitor and Immigrant Status Indicator Technology Arrival and Departure Information System		X	20.65
	18. Visitor and Immigrant Status Indicator Technology Automated Biometric Identification System		X	104.36
Office of Health Affairs	19. BioSurveillance Common Operating Network		X	1.49
Transportation Security Administration	20. Crew Vetting		X	11.60
	21. Federal Air Marshal Service Mission Scheduling and Notification System	X		14.13
	22. Federal Air Marshal Service Network	X		41.79
	23. Hazardous Materials Endorsement Threat Assessment Program	X		12.00
	24. Information Technology Infrastructure Program	X		284.20
	25. Performance Management Information System		X	10.64
	26. Secure Flight	X		84.19
	27. Transportation Worker Identification Credential		X	9.20
	28. Transportation Security Administration Operating Platform		X	121.80

Component	Investment	Yes	No	Cost for fiscal year 2011
U.S. Coast Guard	29. Asset Logistics Management Information System		X	8.15
	30. Coast Guard Business Intelligence	X		6.29
	31. Core Accounting System Suite	X		32.13
	32. Direct Access	X		9.64
	33. Infrastructure Standard Workstation Infrastructure Recapitalization and Sustainment		X	62.93
	34. Infrastructure Coast Guard One		X	25.00
	35. Marine Information for Safety and Law Enforcement	X		10.39
	36. Ports and Waterways Safety System IT		X	38.40
	37. Vessel Logistics System		X	4.85
U.S. Citizenship and Immigration Services	38. Customer Service Web Portal		X	20.89
	39. Immigration Computer Linked Application Information Management System 3	X		5.99
	40. Infrastructure (End User Support)		X	111.42
	41. Integrated Document Production		X	48.14
	42. Naturalization Computer Linked Application Information Management System 4		X	2.42
U.S. Secret Service	43. Enterprise Financial Management System		X	5.67
	44. Information Technology Infrastructure		X	38.03
Total	**44**	**16**	**28**	**$2,186.20**

Source: GAO analysis based on OMB data.

Table 4: Extent to Which HHS Steady State IT Investments Underwent OAs in Fiscal Year 2011 (by Component and Cost in Millions)

Component	Investment	Yes	No	Cost for fiscal year 2011
Centers for Disease Control and Prevention	1. Information Technology Infrastructure		X	$77.09
	2. National Select Agency Registry	X		5.05
Centers for Medicare and Medicaid Services	3. Beneficiary e-Services	X		60.82
	4. Health Care Quality Improvement and Evaluation System	X		21.20
Health Resources and Services Administration	5. Electronic Handbooks Program Management Office	X		23.69
	6. National Practitioner Data Bank	X		23.51
Indian Health Service	7. Infrastructure, Office Automation, and Telecommunications	X		55.31
National Institutes of Health	8. Business Intelligence System	X		17.60
Total	**8**	**7**	**1**	**$284.27**

Source: GAO analysis based on OMB data.

In addition, although DHS and HHS performed analyses, the agencies did not address all key factors in conducting them. Specifically,

- of DHS's 16 OAs, which were to include a total 272 key factors, DHS:
  - addressed 145 (or 53 percent),
  - partially addressed 20 (or 7 percent), and
  - did not address 107 (or 39 percent); and

- of HHS's 7 OAs, which were to include a total of 119 key factors, HHS:
  - addressed 66 (or 55 percent),
  - partially addressed 6 (or 5 percent), and
  - did not address 47 (or 39 percent) factors.

The following provides key examples by component agency to illustrate how factors were fully addressed, partially addressed, or not addressed at all.

- In its operational analysis of its U.S. Coast Guard Business Intelligence investment, the U.S. Coast Guard fully addressed five key factors (see table 16 in app. II). For example, on the factor regarding whether the investment supports customer processes as designed and is delivering

the goods and services it was designed to deliver, the component measured (via surveys) customer satisfaction, usage trends, system trends, and feedback, and used this information to implement system improvements. U.S. Coast Guard partially addressed three factors. For example, in assessing performance goals, the component identified two major goals of the investment, but did not include how or when these goals were to be achieved. U.S. Coast Guard did not address nine key factors, including those on identifying lessons learned and reviewing the status of risk versus cost, schedule, and performance. These factors are important because they provide management with key information on why problems occurred and how they can be avoided in the future, as well as whether the investment is worth pursing given anticipated costs, benefits, and associated risks.

- In assessing the Information Technology Infrastructure Program, Transportation Security Administration addressed eight key factors (see table 14 in app. II). For example, on the factor calling for performance of a structured schedule assessment, the component analyzed a detailed list of task descriptions, start and end dates, and planned versus actual costs to ensure the investment is performing against an established schedule which can minimize costs over the life cycle of an investment. The component partially addressed one key factor; specifically, the factor calling for identifying whether the investment supports customer processes and is delivering the goods and services intended. In assessing this factor, Transportation Security Administration conducted surveys to measure customer satisfaction, but in doing so did not include measures to assess whether the investment was delivering the goods and services it was designed to deliver. The component did not address eight key factors. For example, it did not identify any areas for innovation or whether the investment overlapped with other systems. These latter steps are essential to identifying investment improvements, increasing value and reducing costs, and eliminating duplicate systems and the costs associated with them.

- For the U.S. Immigration and Customs Enforcement's Intelligence Fusion System, the component fully addressed nine key factors (see table 9 in app. II). These factors included analyzing current costs against life-cycle costs and whether the investment supports customer processes as designed and is delivering the goods and services it was designed to deliver, through measures such as customer surveys and help desk metrics. The component partially addressed the factor on identifying areas (e.g., business results and customer satisfaction, financial performance) for innovation. Specifically, it identified two areas for innovation, namely strategic and business results and customer satisfaction, but did not address financial performance. U.S. Immigration and Customs Enforcement did not address seven key factors; for

example, it did not identify lessons learned or assess whether to modify or terminate the investment. Fully addressing these factors is crucial to agencies in determining whether to continue an investment that is not performing as required.

- For its Infrastructure, Office Automation, and Telecommunications investment, Indian Health Service fully addressed 14 key factors (see table 26 in app. II). For example, in addressing the factor on assessing performance goals, it analyzed the investment's performance goals against the results to date for each goal. The component partially addressed the factor on the status of risks versus cost, schedule, and performance. Specifically, it analyzed cost and schedule progress, but did not include an assessment of risks. Indian Health Service did not address two key factors. For example, it did not identify lessons learned and whether the investment overlapped with other systems. Addressing these factors is important because they help agencies to, among other things, identify where cost-effective improvements can be made.
- HHS's Health Resources and Services Administration fully addressed 15 key factors in its operational analysis of its Electronic Handbooks Program Management Office (see table 24 in app. II). For example, it conducted a structured assessment of performance goals, including a detailed list of goals, and how and when they were addressed. Health Resources and Services Administration only partially addressed the key factor on providing a structured schedule assessment. Specifically, the component identified certain parts of the investment schedule, such as standard and unscheduled maintenance efforts, but other schedule elements, such as completion dates and goals, were not identified. Health Resources and Services Administration did not address one factor. For example, it did not assess current costs against life-cycle costs. This factor is important because it can, among other things, provide information to agency decision makers with answers to whether annual operating and maintenance costs are comparable to the estimated costs developed during the development phase.
- In its analysis of the Business Intelligence System, National Institutes of Health fully assessed six key factors (see table 27 in app. II). For example, on the factor calling for identifying whether the investment supports customer processes as designed and is delivering the goods and services it was designed to deliver, the component analyzed user and customer assessments that showed improvement in this area. The component partially addressed the key factor on measuring the effect an investment has on the performing organization itself. For example, National Institutes of Health identified that the investment was in line with the appropriate component enterprise architecture, but did not identify the effect the investment had on other aspects of the department such as its mission and business processes. National Institutes of Health did not

address 10 factors, including lessons learned and determining whether to modify or terminate the investment. These factors are critical to whether to continue an investment that is not performing as required.

With regard to why analyses were not performed on all investments and why those that were conducted did not fully address all factors, DHS and HHS attributed these shortfalls to the following:

- Officials from DHS's Office of the CIO who are responsible for overseeing the performance of OAs department-wide told us the components only performed 16 of the 44 analyses and did not address all key factors (in the 16 OAs that were performed) because they were not consistently implementing department and OMB policy as they should have because it was not a priority. To illustrate their point, the officials told us that while most components strive to perform annual analyses, other components do not require them to be conducted on an annual basis citing other tasks as taking precedence. To address these shortfalls, the department recently took steps to make OAs a priority and to ensure consistent application of department and OMB policy. Specifically, in May 2012, DHS's CIO issued a memorandum stating that all steady state IT investments are required to have an annual OA completed no later than June of each fiscal year and that component CIOs are to work with program managers to implement and ensure compliance with DHS OA requirements. Further, as part of this initiative, DHS's CIO plans to assign resources and responsibility to CIO office staff to review and ensure compliance with DHS's policy. These are steps in the right direction; however, the DHS CIO officials told us that these initiatives will not be fully implemented until sometime in fiscal year 2013.
- HHS officials from the Office of the CIO said their shortfalls (i.e., one component did not perform an OA and those that were performed did not address all factors) were due, in part, to inconsistent implementation of department and OMB policy across the components due to analyses not being a priority. As an example of this, officials from the office of the HHS CIO who are responsible for overseeing the department OA program cited how they had planned to implement an initiative to annually review all analyses performed by the components to ensure consistency and quality but have not been able to do so due to limited CIO staff being assigned to other initiatives.

Although DHS and HHS had 23 investments—with collective annual budgets of $1.4 billion—that underwent OAs, these investments were not thoroughly assessed against all key factors. Until these agencies assess all steady state investments and ensure that they are fully assessed against factors, there is increased risk that these agencies will not know

whether the multibillion dollar investments fully meet their intended objectives.

DOD, Treasury, and VA Did Not Develop Policies or Perform OAs

DOD, Treasury, and VA had not developed a policy for performing OAs and did not conduct OAs for their 23 steady state investments that have combined annual budgets of $2.1 billion. Specifically,

- DOD did not conduct analyses for its 4 major investments that have annual budgets totaling $381 million,
- Treasury did not conduct such analyses for its16 major investments that have annual budgets totaling $152 million, and
- VA did not conduct OAs for its 3 major investments that have annual budgets totaling $1.6 billion.

Regarding why DOD and VA had not developed policies and are not performing analyses, officials from those agencies stated that in lieu of conducting OAs, they assess the performance of steady state investments as part of developing their annual exhibit 300 submissions to OMB. While we have previously reported that using the exhibit 300 process can be a tool to manage investment performance,[10] our analysis shows that the process does not fully address 11 of the 17 factors. For example, the exhibit 300 process does not fully provide for addressing the following factors:

- identifying alternative methods for achieving the same mission needs and strategic goals. Doing this is important because it helps agencies assess whether they are using the most cost effective solution to achieving agency goals;
- addressing greater utilization of technology or consolidation of investments will better meet organizational goals. It is also critical to helping agencies ensure that their investments are meeting performance goals in the most cost-effective manner;
- identifying lessons learned, why problems occurred, or how savings were realized, which is essential to avoid repeating the same mistakes, which helps saving resources; and
- identifying where the agency needs to redesign, modify, or terminate the investment, which is a means to achieving solutions that return the greatest benefit for funds invested.

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[10]GAO, *Information Technology: Agencies Need to Improve the Accuracy and Reliability of Investment Information,* GAO-06-250 (Washington, D.C: Jan.12, 2006).

Further, OMB officials told us that the exhibit 300 process is not a substitute for conducting OAs. Although OMB requires OAs for all steady state systems, its guidance does not provide a mechanism for ensuring they are completed and submitted to OMB for review. In particular, it does not have a reporting mechanism that provides for public transparency into the results of these assessments, which the IT Dashboard could provide. Having such a mechanism for the performance of steady state systems is consistent with Clinger-Cohen Act requirements that call for OMB to analyze and report on the performance of IT capital investments. Moreover, such public disclosure promotes increased transparency which is one of OMB's goals in establishing the IT Dashboard.

Treasury officials from the department's office of the CIO told us they decided not to perform OAs in 2011 and instead decided to use the time to develop a policy. However, the officials stated that they did not anticipate the policy to be completed until the end of this calendar year.

Until these agencies establish policies and begin performing OA assessments for their steady state investments, there is increased risk that these agencies will not know whether the multibillion dollar investments fully meet their intended objectives, therefore increasing the potential for waste and duplication.

Conclusions

The federal government has made a multibillion dollar commitment to operating and maintaining its IT investments. OMB has established guidance for federal agencies to use to evaluate the performance of such investments, including whether a sound basis exists for agencies to continue funding them. DHS and HHS had developed policies in accordance with OMB guidance and performed analyses, but did not do so for all of their investments and their analyses did not address all key factors. During the course of this review, DHS reiterated the importance of performing OAs and issued a memorandum with initiatives to address the department's shortcomings. Further, DOD, Treasury, and VA had not developed a policy nor had they performed OAs. Taken together, these five agencies continue to invest billions of dollars each year on IT steady state investments without ensuring that they are continuing to meet agency needs and are delivering value. These shortcomings are due in part to a number of factors, including agencies relying on budget submission processes through their annual exhibit 300 submissions, which are not intended as a substitute for OAs, and not viewing performance of these assessments as a priority. Although OMB's current guidance does not require agencies to report on OAs to OMB, using

existing oversight and transparency tools like the IT Dashboard could help ensure that these important performance assessments are completed and available for public viewing. Nonetheless, until the agencies address these shortcomings and ensure all their steady state investments are fully assessed, there is increased potential for these multibillion dollar investments to result in unnecessary waste and duplication.

Recommendations for Executive Action

To ensure that major steady state IT investments are being adequately analyzed, we recommend that the Secretaries of Defense, Veterans Affairs, and the Treasury direct appropriate officials to develop an OA policy, annually perform OAs on all investments, and ensure the assessments include all key factors.

In addition, we recommend that the Secretaries of Homeland Security and Health and Human Services direct their Chief Information Officers to ensure OAs are performed annually on all major steady state investments and the assessments include all key factors.

Further, to ensure that OA policies are developed and that annual analyses are conducted and to promote transparency into the results of these analyses, we recommend that the Director of OMB revise existing guidance to include directing agencies to report on the IT Dashboard the results from the OAs of their steady state investments.

Agency Comments and Our Evaluation

In commenting on a draft of this report, OMB and the five agencies agreed with our findings and recommendations. Their comments are discussed in more detail below.

- In oral comments, staff from OMB's Office of E-Government and Information Technology concurred with our recommendations and stated that OMB had recently initiated an effort to address the specific recommendation directed to it. Specifically, the staff stated that OMB's fiscal year 2014 budget guidance (dated August 3, 2012) directs agencies to include OAs as part of their exhibit 300 submissions to OMB.
- In written comments—signed by DOD's Deputy Chief Information Officer for Information Enterprise and reprinted in appendix III—DOD concurred with our recommendation and said it plans to establish an OA policy in coordination with OMB.

- In written comments—signed by the Director of the Departmental GAO-OIG Liaison Office and reprinted in appendix IV—DHS concurred with our recommendation. The department, after receiving our draft report, identified and provided to us OAs that it had performed for 3 additional investments in fiscal year 2011. DHS also provided technical comments which we incorporated in the report as appropriate.
- In comments provided via e-mail from its GAO Intake Coordinator within the Office of the Assistant Secretary for Legislation, HHS stated that it did not have any general comments on the report. The department did provide technical comments which we incorporated in the report as appropriate.
- In written comments—signed by the Deputy Assistant Secretary for Information Systems and Chief Information Officer and reprinted in appendix V—Treasury agreed with the report's recommendations. In addition, after receiving our draft report, the department identified and provided to us OAs that it had performed on 9 of its 17 investments in fiscal year 2011.
- In written comments—signed by its Chief of Staff and reprinted in appendix VI—VA generally agreed with our conclusions and concurred with the recommendation to it.

As agreed with your offices, unless you publicly announce the contents of this report earlier, we plan no further distribution until 30 days from the report date. At that time, we will send copies to interested congressional committees; the Secretaries of Defense, Homeland Security, Health and Human Services, the Treasury, Veterans Affairs; and other interested parties. In addition, the report will be available at no charge on the GAO website at http://www.gao.gov.

If you or your staff have any questions on the matters discussed in this report, please contact me at (202) 512-9286 or pownerd@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. GAO staff who made major contributions to this report are listed in appendix VII.

David A. Powner
Director, Information Technology
 Management Issues

Appendix I: Objective, Scope, and Methodology

Our objective was to determine the extent to which selected federal agencies assess the performance of steady state information technology (IT) investments in accordance with Office of Management and Budget (OMB) guidance. To accomplish our objective, we selected the five agencies (Departments of Defense (DOD), Health and Human Services (HHS), Homeland Security (DHS), the Treasury (Treasury), and Veterans Affairs (VA)) that have the largest budgets for major steady state IT investments; collectively, these investments accounted for approximately $37 billion annually or about 70 percent of all reported IT operations and maintenance (O&M) spending. In particular, we focused on these agencies' 75 major IT investments valued at $4.6 billion annually that were strictly in the steady state phase as opposed to the agencies' other O&M investments—called mixed life-cycle investments by the agencies and OMB—which are not solely in O&M; these mixed life-cycle investments have projects under development as well as projects being placed into O&M.

We analyzed OMB's guidance and identified a key practice called operational analysis (OA) that agencies are to use to assess the performance of existing O&M investments. We also interviewed OMB officials to corroborate our understanding of the key practice.

We then determined whether the five agencies developed OA policies as called for by the OMB guidance. Specifically, we compared each agency's policy, if they had one, to the OMB criteria to determine the extent of compliance and where there were variances. We further determined whether the agencies were conducting analyses. Specifically, for the 75 major investments, we determined whether the agencies had performed an OA on each of them. In those cases where one had been performed, we analyzed the agencies' efforts to address the OMB criteria in the analysis and categorized the extent to which the OMB key factors had been addressed using the following criteria:

- *Yes:* if all aspects of the key factor specified in the OMB criteria were fully addressed.
- *No:* if none of the aspects of the key factor were addressed.
- *Partial:* if some, but not the entire key factor was addressed.

In cases where agencies did not fully address factors (i.e., partially or not all), we analyzed documentation and interviewed agency officials, including staff from the offices of the chief information officers responsible for overseeing these investments, to assist in identifying causes for shortfalls and any actions planned or underway to address the causes.

We conducted this performance audit from October 2011 to September
2012 in accordance with generally accepted government auditing
standards. Those standards require that we plan and perform the audit to
obtain sufficient, appropriate evidence to provide a reasonable basis for
our findings and conclusions based on our audit objectives. We believe
that the evidence obtained provides a reasonable basis for our findings
and conclusions based on our audit objective.

Tables 5-20 show our analysis for DHS's investments with OAs in fiscal year 2011.

Table 5: U.S. Customs and Border Protection: Analysis of Extent to Which Infrastructure's Fiscal Year 2011 OA Addressed OMB Key Factors

Key factor	Yes, no, or partial	Summary of partial rating
1. Assesses current costs against life-cycle cost	N	
2. Includes a structured schedule assessment	N	
3. Includes a structured assessment of performance goals	Y	
4. Identifies whether the investment supports customer processes as designed and is delivering the goods and services it was designed to deliver	Y	
5. Measures the effect the investment has on the performing organization itself	Y	
6. Includes a measure of how well the investment contributes to achieving the organization's business needs and strategic goals	Y	
7. Compares current performance with a pre-established cost baseline and estimates	P	U.S. Customs and Border Protection included an analysis of performance measures against a performance baseline for, among other things, software and hardware maintenance and network availability; however, a measure of cost against its baseline was not included.
8. Identifies any areas for innovation in the areas of customer satisfaction, strategic and business results, and financial performance	Y	
9. Identifies if the agency revisited alternative methods for achieving the same mission needs and strategic goals	N	
10. Addresses issues such as greater utilization of technology or consolidation of investments to better meet organizational goals	Y	
11. Includes an ongoing review of the status of the risks identified in the investment's planning and acquisition phases	Y	
12. Identifies a need to redesign, modify, or terminate the investment	P	U.S. Customs and Border Protection found that the investment was currently meeting established performance goals. The assessment did not include an analysis on whether opportunities to improve the system's efficiency had been identified.
13. Includes an analysis on the need for improved methodology (i.e., better ways for the investment to meet cost and performance goals)	N	
14. Identifies any lessons learned	N	
15. Identifies if the investment had a cost or schedule variance	N	
16. Identifies recommendations to redesign or modify an asset before it becomes a problem	Y	
17. Includes information on the overlap of the investment with other systems	N	

Key: Y= fully addressed the key factor

P= partially addressed the key factor

N= did not address the key factor

Source: GAO analysis of DHS data.

Table 6: Office of the Chief Information Officer: Analysis of Extent to Which Homeland Secure Data Network's Fiscal Year 2011 OA Addressed OMB Key Factors

Key factor	Yes, no, or partial	Summary of partial rating
1. Assesses current costs against life-cycle cost	N	
2. Includes a structured schedule assessment	N	
3. Includes a structured assessment of performance goals	Y	
4. Identifies whether the investment supports customer processes as designed and is delivering the goods and services it was designed to deliver	Y	
5. Measures the effect the investment has on the performing organization itself	Y	
6. Includes a measure of how well the investment contributes to achieving the organization's business needs and strategic goals	P	The Office of the Chief Information Officer identified which strategic goal the investment supports, namely to "Strengthen and Unify DHS Operations and Management," but it did not include measures of how well the investment contributes to achieving the goal.
7. Compares current performance with a pre-established cost baseline and estimates	P	The Office of the Chief Information Officer assessed current performance with pre-established performance measures, but it did not analyze current cost performance against a cost baseline.
8. Identifies any areas for innovation in the areas of customer satisfaction, strategic and business results, and financial performance	Y	
9. Identifies if the agency revisited alternative methods for achieving the same mission needs and strategic goals	N	
10. Addresses issues such as greater utilization of technology or consolidation of investments to better meet organizational goals	Y	
11. Includes an ongoing review of the status of the risks identified in the investment's planning and acquisition phases	P	The Office of the Chief Information Officer identified the investment's risk management plan, as containing current risks, their status, and associated mitigation efforts. It also identified that current risks are reported at monthly meetings; however, it did not address specific risks in its assessment and the impact of these risks.
12. Identifies a need to redesign, modify, or terminate the investment	Y	
13. Includes an analysis on the need for improved methodology (i.e., better ways for the investment to meet cost and performance goals)	N	
14. Identifies any lessons learned	N	
15. Identifies if the investment had a cost or schedule variance	N	

16. Identifies recommendations to redesign or modify an asset before it becomes a problem	N	
17. Includes information on the overlap of the investment with other systems	N	

Key: Y= fully addressed the key factor

P= partially addressed the key factor

N= did not address the key factor

Source: GAO analysis of DHS data.

Table 7: Federal Emergency Management Agency: Analysis of Extent to Which Disaster Management E-Government Initiative's Fiscal Year 2011 OA Addressed OMB Key Factors

Key factor	Yes, no, or partial	Summary of partial rating
1. Assesses current costs against life-cycle cost	N	
2. Includes a structured schedule assessment	N	
3. Includes a structured assessment of performance goals	N	
4. Identifies whether the investment supports customer processes as designed and is delivering the goods and services it was designed to deliver	N	
5. Measures the effect the investment has on the performing organization itself	P	Federal Emergency Management Agency identified the strategic mission, goals, and objectives that this investment supports, but it did not measure the effect the investment is having on the department and its mission.
6. Includes a measure of how well the investment contributes to achieving the organization's business needs and strategic goals	P	Federal Emergency Management Agency identified the strategic mission, goals, and objectives that this investment supports, but it did not provide any analysis on metrics showing the extent to which the investment is contributing to achieving the department's business needs and strategic goals.
7. Compares current performance with a pre-established cost baseline and estimates	N	
8. Identifies any areas for innovation in the areas of customer satisfaction, strategic and business results, and financial performance	Y	
9. Identifies if the agency revisited alternative methods for achieving the same mission needs and strategic goals	N	
10. Addresses issues such as greater utilization of technology or consolidation of investments to better meet organizational goals	Y	

11. Includes an ongoing review of the status of the risks identified in the investment's planning and acquisition phases	P	Federal Emergency Management Agency identified how the investment's project management office monitored risks through a risk management plan and risk register, which is to be updated biweekly, but it did not assess risks against investment cost, schedule, and performance.
12. Identifies a need to redesign, modify, or terminate the investment	N	
13. Includes an analysis on the need for improved methodology (i.e., better ways for the investment to meet cost and performance goals)	N	
14. Identifies any lessons learned	N	
15. Identifies if the investment had a cost or schedule variance	N	
16. Identifies recommendations to redesign or modify an asset before it becomes a problem	Y	
17. Includes information on the overlap of the investment with other systems	N	

Key: Y= fully addressed the key factor

P= partially addressed the key factor

N= did not address the key factor

Source: GAO analysis of DHS data.

Table 8: Federal Emergency Management Agency: Analysis of Extent to Which Integrated Financial Management Information System's Fiscal Year 2011 OA Addressed OMB Key Factors

Key factor	Yes, no, or partial	Summary of partial rating
1. Assesses current costs against life cycle cost	N	
2. Includes a structured schedule assessment	N	
3. Includes a structured assessment of performance goals	Y	
4. Identifies whether the investment supports customer processes as designed and is delivering the goods and services it was designed to deliver	Y	
5. Measures the effect the investment has on the performing organization itself	Y	
6. Includes a measure of how well the investment contributes to achieving the organization's business needs and strategic goals	Y	
7. Compares current performance with a pre-established cost baseline and estimates	N	
8. Identifies any areas for innovation in the areas of customer satisfaction, strategic and business results, and financial performance	Y	
9. Identifies if the agency revisited alternative methods for achieving the same mission needs and strategic goals	Y	

10. Addresses issues such as greater utilization of technology or consolidation of investments to better meet organizational goals	Y	
11. Includes an ongoing review of the status of the risks identified in the investment's planning and acquisition phases	P	Federal Emergency Management Agency used the investment's risk management plan to identify risks and potential impact on schedule milestones, but this assessment did not identify the risk and potential impact on cost.
12. Identifies a need to redesign, modify, or terminate the investment	Y	
13. Includes an analysis on the need for improved methodology (i.e., better ways for the investment to meet cost and performance goals)	Y	
14. Identifies any lessons learned	N	
15. Identifies if the investment had a cost or schedule variance	N	
16. Identifies recommendations to redesign or modify an asset before it becomes a problem	Y	
17. Includes information on the overlap of the investment with other systems	N	

Key: Y= fully addressed the key factor

P= partially addressed the key factor

N= did not address the key factor

Source: GAO analysis of DHS data.

Table 9: U.S. Immigration and Customs Enforcement: Analysis of Extent to Which Intelligence Fusion System's Fiscal Year 2011 OA Addressed OMB Key Factors

Key factor	Yes, no, or partial	Summary of partial rating
1. Assesses current costs against life-cycle cost	Y	
2. Includes a structured schedule assessment	Y	
3. Includes a structured assessment of performance goals	Y	
4. Identifies whether the investment supports customer processes as designed and is delivering the goods and services it was designed to deliver	Y	
5. Measures the effect the investment has on the performing organization itself	Y	
6. Includes a measure of how well the investment contributes to achieving the organization's business needs and strategic goals	Y	
7. Compares current performance with a pre-established cost baseline and estimates	Y	

8. Identifies any areas for innovation in the areas of customer satisfaction, strategic and business results, and financial performance	P	U.S. Immigration and Customs Enforcement identified opportunities for innovation in the areas of strategic and business results and customer satisfaction; it did not address whether there were any innovation opportunities in the area of financial performance.
9. Identifies if the agency revisited alternative methods for achieving the same mission needs and strategic goals	N	
10. Addresses issues such as greater utilization of technology or consolidation of investments to better meet organizational goals	Y	
11. Includes an ongoing review of the status of the risks identified in the investment's planning and acquisition phases	Y	
12. Identifies a need to redesign, modify, or terminate the investment	N	
13. Includes an analysis on the need for improved methodology (i.e., better ways for the investment to meet cost and performance goals)	N	
14. Identifies any lessons learned	N	
15. Identifies if the investment had a cost or schedule variance	N	
16. Identifies recommendations to redesign or modify an asset before it becomes a problem	N	
17. Includes information on the overlap of the investment with other systems	N	

Key: Y= fully addressed the key factor

P= partially addressed the key factor

N= did not address the key factor

Source: GAO analysis of DHS data.

Table 10: National Protection and Programs Directorate: Analysis of Extent to Which National Security and Emergency Preparedness Priority Telecommunication Services's Fiscal Year 2011 OA Addressed OMB Key Factors

Key factor	Yes, no, or partial	Summary of partial rating
1. Assesses current costs against life-cycle cost	N	
2. Includes a structured schedule assessment	N	
3. Includes a structured assessment of performance goals	Y	
4. Identifies whether the investment supports customer processes as designed and is delivering the goods and services it was designed to deliver	Y	
5. Measures the effect the investment has on the performing organization itself	Y	
6. Includes a measure of how well the investment contributes to achieving the organization's business needs and strategic goals	Y	
7. Compares current performance with a pre-established cost baseline and estimates	N	

8. Identifies any areas for innovation in the areas of customer satisfaction, strategic and business results, and financial performance	Y
9. Identifies if the agency revisited alternative methods for achieving the same mission needs and strategic goals	Y
10. Addresses issues such as greater utilization of technology or consolidation of investments to better meet organizational goals	Y
11. Includes an ongoing review of the status of the risks identified in the investment's planning and acquisition phases	N
12. Identifies a need to redesign, modify, or terminate the investment	Y
13. Includes an analysis on the need for improved methodology (i.e., better ways for the investment to meet cost and performance goals)	N
14. Identifies any lessons learned	N
15. Identifies if the investment had a cost or schedule variance	Y
16. Identifies recommendations to redesign or modify an asset before it becomes a problem	Y
17. Includes information on the overlap of the investment with other systems	N

Key: Y= fully addressed the key factor

P= partially addressed the key factor

N= did not address the key factor

Source: GAO analysis of DHS data.

Table 11: Transportation Security Administration: Analysis of Extent to Which Federal Air Marshal Service Mission Scheduling and Notification System's Fiscal Year 2011 OA Addressed OMB Key Factors

Key factor	Yes, no, or partial	Summary of partial rating
1. Assesses current costs against life-cycle cost	Y	
2. Includes a structured schedule assessment	P	Transportation Security Administration developed a schedule performance table and a framework to analyze results, but the schedule assessment omitted analysis of key schedule aspects, including actual start dates and percent completed.
3. Includes a structured assessment of performance goals	Y	
4. Identifies whether the investment supports customer processes as designed and is delivering the goods and services it was designed to deliver	Y	
5. Measures the effect the investment has on the performing organization itself	Y	
6. Includes a measure of how well the investment contributes to achieving the organization's business needs and strategic goals	Y	
7. Compares current performance with a pre-established cost baseline and estimates	Y	

8. Identifies any areas for innovation in the areas of customer satisfaction, strategic and business results, and financial performance	Y	
9. Identifies if the agency revisited alternative methods for achieving the same mission needs and strategic goals	N	
10. Addresses issues such as greater utilization of technology or consolidation of investments to better meet organizational goals	Y	
11. Includes an ongoing review of the status of the risks identified in the investment's planning and acquisition phases	Y	
12. Identifies a need to redesign, modify, or terminate the investment	Y	
13. Includes an analysis on the need for improved methodology (i.e., better ways for the investment to meet cost and performance goals)	N	
14. Identifies any lessons learned	N	
15. Identifies if the investment had a cost or schedule variance	N	
16. Identifies recommendations to redesign or modify an asset before it becomes a problem	Y	
17. Includes information on the overlap of the investment with other systems	N	

Key: Y= fully addressed the key factor

P= partially addressed the key factor

N= did not address the key factor

Source: GAO analysis of DHS data.

Table 12: Transportation Security Administration: Analysis of Extent to Which Federal Air Marshal Service Network's Fiscal Year 2011 OA Addressed OMB Key Factors

Key factor	Yes, no, or partial	Summary of partial rating
1. Assesses current costs against life-cycle cost	Y	
2. Includes a structured schedule assessment	Y	
3. Includes a structured assessment of performance goals	Y	
4. Identifies whether the investment supports customer processes as designed and is delivering the goods and services it was designed to deliver	Y	
5. Measures the effect the investment has on the performing organization itself	Y	
6. Includes a measure of how well the investment contributes to achieving the organization's business needs and strategic goals	Y	
7. Compares current performance with a pre-established cost baseline and estimates	Y	
8. Identifies any areas for innovation in the areas of customer satisfaction, strategic and business results, and financial performance	Y	

9. Identifies if the agency revisited alternative methods for achieving the same mission needs and strategic goals	Y	
10. Addresses issues such as greater utilization of technology or consolidation of investments to better meet organizational goals	Y	
11. Includes an ongoing review of the status of the risks identified in the investment's planning and acquisition phases	N	
12. Identifies a need to redesign, modify, or terminate the investment	N	
13. Includes an analysis on the need for improved methodology (i.e., better ways for the investment to meet cost and performance goals)	N	
14. Identifies any lessons learned	N	
15. Identifies if the investment had a cost or schedule variance	N	
16. Identifies recommendations to redesign or modify an asset before it becomes a problem	N	
17. Includes information on the overlap of the investment with other systems	N	

Key: Y= fully addressed the key factor

P= partially addressed the key factor

N= did not address the key factor

Source: GAO analysis of DHS data.

Table 13: Transportation Security Administration: Analysis of Extent to Which Hazardous Materials Endorsement Threat Assessment Program's Fiscal Year 2011 OA Addressed OMB Key Factors

Key factor	Yes, no, or partial	Summary of partial rating
1. Assesses current costs against life-cycle cost	Y	
2. Includes a structured schedule assessment	Y	
3. Includes a structured assessment of performance goals	Y	
4. Identifies whether the investment supports customer processes as designed and is delivering the goods and services it was designed to deliver	Y	
5. Measures the effect the investment has on the performing organization itself	Y	
6. Includes a measure of how well the investment contributes to achieving the organization's business needs and strategic goals	Y	
7. Compares current performance with a pre-established cost baseline and estimates	Y	
8. Identifies any areas for innovation in the areas of customer satisfaction, strategic and business results, and financial performance	Y	
9. Identifies if the agency revisited alternative methods for achieving the same mission needs and strategic goals	Y	
10. Addresses issues such as greater utilization of technology or consolidation of investments to better meet organizational goals	Y	

	Yes, no, or partial	
11. Includes an ongoing review of the status of the risks identified in the investment's planning and acquisition phases	Y	
12. Identifies a need to redesign, modify, or terminate the investment	Y	
13. Includes an analysis on the need for improved methodology (i.e., better ways for the investment to meet cost and performance goals)	Y	
14. Identifies any lessons learned	Y	
15. Identifies if the investment had a cost or schedule variance	N	
16. Identifies recommendations to redesign or modify an asset before it becomes a problem	N	
17. Includes information on the overlap of the investment with other systems	N	

Key: Y= fully addressed the key factor

P= partially addressed the key factor

N= did not address the key factor

Source: GAO analysis of DHS data.

Table 14: Transportation Security Administration: Analysis of Extent to Which Information Technology Infrastructure Program's Fiscal Year 2011 OA Addressed OMB Key Factors

Key factor	Yes, no, or partial	Summary of partial rating
1. Assesses current costs against life-cycle cost	Y	
2. Includes a structured schedule assessment	Y	
3. Includes a structured assessment of performance goals	Y	
4. Identifies whether the investment supports customer processes as designed and is delivering the goods and services it was designed to deliver	P	Transportation Security Administration stated that customer satisfaction is to be measured using surveys, service legal agreements, and key performance measures. However, the assessment did not include results of these efforts, and thus did not identify if the investment was meeting customer needs.
5. Measures the effect the investment has on the performing organization itself	Y	
6. Includes a measure of how well the investment contributes to achieving the organization's business needs and strategic goals	Y	
7. Compares current performance with a pre-established cost baseline and estimates	Y	
8. Identifies any areas for innovation in the areas of customer satisfaction, strategic and business results, and financial performance	N	
9. Identifies if the agency revisited alternative methods for achieving the same mission needs and strategic goals	N	
10. Addresses issues such as greater utilization of technology or consolidation of investments to better meet organizational goals	Y	

Key factor	Yes, no, or partial	Summary of partial rating
11. Includes an ongoing review of the status of the risks identified in the investment's planning and acquisition phases	N	
12. Identifies a need to redesign, modify, or terminate the investment	Y	
13. Includes an analysis on the need for improved methodology (i.e., better ways for the investment to meet cost and performance goals)	N	
14. Identifies any lessons learned	N	
15. Identifies if the investment had a cost or schedule variance	N	
16. Identifies recommendations to redesign or modify an asset before it becomes a problem	N	
17. Includes information on the overlap of the investment with other systems	N	

Key: Y= fully addressed the key factor

P= partially addressed the key factor

N= did not address the key factor

Source: GAO analysis of DHS data.

Table 15: Transportation Security Administration: Analysis of Extent to Which Secure Flight's Fiscal Year 2011 OA Addressed OMB Key Factors

Key factor	Yes, no, or partial	Summary of partial rating
1. Assesses current costs against life cycle cost	Y	
2. Includes a structured schedule assessment	Y	
3. Includes a structured assessment of performance goals	Y	
4. Identifies whether the investment supports customer processes as designed and is delivering the goods and services it was designed to deliver	Y	
5. Measures the effect the investment has on the performing organization itself	Y	
6. Includes a measure of how well the investment contributes to achieving the organization's business needs and strategic goals	Y	
7. Compares current performance with a pre-established cost baseline and estimates	Y	
8. Identifies any areas for innovation in the areas of customer satisfaction, strategic and business results, and financial performance	Y	
9. Identifies if the agency revisited alternative methods for achieving the same mission needs and strategic goals	N	
10. Addresses issues such as greater utilization of technology or consolidation of investments to better meet organizational goals	Y	
11. Includes an ongoing review of the status of the risks identified in the investment's planning and acquisition phases	Y	
12. Identifies a need to redesign, modify, or terminate the investment	Y	

13. Includes an analysis on the need for improved methodology (i.e., better ways for the investment to meet cost and performance goals	N	
14. Identifies any lessons learned	N	
15. Identifies if the investment had a cost or schedule variance	N	
16. Identifies recommendations to redesign or modify an asset before it becomes a problem	Y	
17. Includes information on the overlap of the investment with other systems	N	

Key: Y= fully addressed the key factor

P= partially addressed the key factor

N= did not address the key factor

Source: GAO analysis of DHS data.

Table 16: U.S. Coast Guard: Analysis of Extent to Which Coast Guard Business Intelligence's Fiscal Year 2011 OA Addressed OMB Key Factors

Key factor	Yes, no, or partial	Summary of partial rating
1. Assesses current costs against life-cycle cost	N	
2. Includes a structured schedule assessment	N	
3. Includes a structured assessment of performance goals	P	In its assessment, U.S. Coast Guard described how it has established two major goals for the investment, namely, to provide products and services which leverage standardized Enterprise Measures while ensuring repeatable answers, and to provide Enterprise Solutions for lower level reporting requirements; but the department did not analyze the performance to date against these established investment goals.
4. Identifies whether the investment supports customer processes as designed and is delivering the goods and services it was designed to deliver	Y	
5. Measures the effect the investment has on the performing organization itself	P	U.S. Coast Guard described the investment as organizational knowledge that is directly relevant to decision making towards organizational goals, but it did not measure the effect the investment had on the component in performing its mission.
6. Includes a measure of how well the investment contributes to achieving the organization's business needs and strategic goals	Y	
7. Compares current performance with a pre-established cost baseline and estimates	N	
8. Identifies any areas for innovation in the areas of customer satisfaction, strategic and business results, and financial performance	Y	
9. Identifies if the agency revisited alternative methods for achieving the same mission needs and strategic goals	N	

	Yes, no, or partial	Summary of partial rating
10. Addresses issues such as greater utilization of technology or consolidation of investments to better meet organizational goals	Y	
11. Includes an ongoing review of the status of the risks identified in the investment's planning and acquisition phases	N	
12. Identifies a need to redesign, modify, or terminate the investment	Y	
13. Includes an analysis on the need for improved methodology (i.e., better ways for the investment to meet cost and performance goals)	N	
14. Identifies any lessons learned	N	
15. Identifies if the investment had a cost or schedule variance	N	
16. Identifies recommendations to redesign or modify an asset before it becomes a problem	N	
17. Includes information on the overlap of the investment with other systems	P	In its assessment, U.S. Coast Guard identified an area of focus for fiscal year 2011 that was to determine how the investment aligns strategically/tactically with other business intelligence investments. U.S. Coast Guard did not identify whether the Business Intelligence investment overlapped or duplicated functions performed by other business intelligence investments.

Key: Y= fully addressed the key factor

P= partially addressed the key factor

N= did not address the key factor

Source: GAO analysis of DHS data.

Table 17: U.S. Coast Guard: Analysis of Extent to Which Core Accounting System Suite's Fiscal Year 2011 OA Addressed OMB Key Factors

Key factor	Yes, no, or partial	Summary of partial rating
1. Assesses current costs against life-cycle cost	N	
2. Includes a structured schedule assessment	N	
3. Includes a structured assessment of performance goals	Y	
4. Identifies whether the investment supports customer processes as designed and is delivering the goods and services it was designed to deliver	Y	
5. Measures the effect the investment has on the performing organization itself	Y	
6. Includes a measure of how well the investment contributes to achieving the organization's business needs and strategic goals	Y	
7. Compares current performance with a pre-established cost baseline and estimates	N	

Key factor	Yes, no, or partial	Summary of partial rating
8. Identifies any areas for innovation in the areas of customer satisfaction, strategic and business results, and financial performance	Y	
9. Identifies if the agency revisited alternative methods for achieving the same mission needs and strategic goals	N	
10. Addresses issues such as greater utilization of technology or consolidation of investments to better meet organizational goals	Y	
11. Includes an ongoing review of the status of the risks identified in the investment's planning and acquisition phases	N	
12. Identifies a need to redesign, modify, or terminate the investment	Y	
13. Includes an analysis on the need for improved methodology (i.e., better ways for the investment to meet cost and performance goals)	N	
14. Identifies any lessons learned	N	
15. Identifies if the investment had a cost or schedule variance	Y	
16. Identifies recommendations to redesign or modify an asset before it becomes a problem	N	
17. Includes information on the overlap of the investment with other systems	Y	

Key: Y= fully addressed the key factor

P= partially addressed the key factor

N= did not address the key factor

Source: GAO analysis of DHS data.

Table 18: U.S. Coast Guard: Analysis of Extent to Which Direct Access's Fiscal Year 2011 OA Addressed OMB Key Factors

Key factor	Yes, no, or partial	Summary of partial rating
1. Assesses current costs against life-cycle cost	Y	
2. Includes a structured schedule assessment	Y	
3. Includes a structured assessment of performance goals	Y	
4. Identifies whether the investment supports customer processes as designed and is delivering the goods and services it was designed to deliver	Y	
5. Measures the effect the investment has on the performing organization itself	Y	
6. Includes a measure of how well the investment contributes to achieving the organization's business needs and strategic goals	Y	
7. Compares current performance with a pre-established cost baseline and estimates	N	
8. Identifies any areas for innovation in the areas of customer satisfaction, strategic and business results, and financial performance	Y	
9. Identifies if the agency revisited alternative methods for achieving the same mission needs and strategic goals	Y	

10. Addresses issues such as greater utilization of technology or consolidation of investments to better meet organizational goals	Y	
11. Includes an ongoing review of the status of the risks identified in the investment's planning and acquisition phases	N	
12. Identifies a need to redesign, modify, or terminate the investment	Y	
13. Includes an analysis on the need for improved methodology (i.e., better ways for the investment to meet cost and performance goals)	Y	
14. Identifies any lessons learned	N	
15. Identifies if the investment had a cost or schedule variance	N	
16. Identifies recommendations to redesign or modify an asset before it becomes a problem	Y	
17. Includes information on the overlap of the investment with other systems	Y	

Key: Y= fully addressed the key factor

P= partially addressed the key factor

N= did not address the key factor

Source: GAO analysis of DHS data.

Table 19: U.S. Coast Guard: Analysis of Extent to Which Marine Information for Safety and Law Enforcement's Fiscal Year 2011 OA Addressed OMB Key Factors

Key factor	Yes, no, or partial	Summary of partial rating
1. Assesses current costs against life-cycle cost	N	
2. Includes a structured schedule assessment	N	
3. Includes a structured assessment of performance goals	P	U.S. Coast Guard provided a summary of the investments' performance goals for the past year, including significant deliverables, but it did not include how or when these goals were to be achieved nor did it include if any other goals remained outstanding.
4. Identifies whether the investment supports customer processes as designed and is delivering the goods and services it was designed to deliver	Y	
5. Measures the effect the investment has on the performing organization itself	Y	
6. Includes a measure of how well the investment contributes to achieving the organization's business needs and strategic goals	Y	
7. Compares current performance with a pre-established cost baseline and estimates	N	
8. Identifies any areas for innovation in the areas of customer satisfaction, strategic and business results, and financial performance	Y	

9. Identifies if the agency revisited alternative methods for achieving the same mission needs and strategic goals	Y	
10. Addresses issues such as greater utilization of technology or consolidation of investments to better meet organizational goals	Y	
11. Includes an ongoing review of the status of the risks identified in the investment's planning and acquisition phases	N	
12. Identifies a need to redesign, modify, or terminate the investment	Y	
13. Includes an analysis on the need for improved methodology (i.e., better ways for the investment to meet cost and performance goals)	N	
14. Identifies any lessons learned	N	
15. Identifies if the investment had a cost or schedule variance	N	
16. Identifies recommendations to redesign or modify an asset before it becomes a problem	N	
17. Includes information on the overlap of the investment with other systems	N	

Key: Y= fully addressed the key factor

P= partially addressed the key factor

N= did not address the key factor

Source: GAO analysis of DHS data.

Table 20: U.S. Citizenship and Immigration Services: Analysis of Extent to Which Immigration Computer Linked Application Information Management System's Fiscal Year 2011 OA Addressed OMB Key Factors

Key factor	Yes, no, or partial	Summary of partial rating
1. Assesses current costs against life-cycle cost	P	U.S. Citizenship and Immigration Services identified cost centers and said that they managed costs of the program well, but did not assess current costs against life-cycle costs.
2. Includes a structured schedule assessment	P	U.S. Citizenship and Immigration Services identified schedule milestones, the management of scheduling, and identified assurance of the project moving forward on schedule, but it did not measure current progress on milestones against the established schedule.
3. Includes a structured assessment of performance goals	Y	
4. Identifies whether the investment supports customer processes as designed and is delivering the goods and services it was designed to deliver	Y	
5. Measures the effect the investment has on the performing organization itself	Y	
6. Includes a measure of how well the investment contributes to achieving the organization's business needs and strategic goals	Y	

7. Compares current performance with a pre-established cost baseline and estimates	P	The assessment identified the financial management background of the system, its scope, and major costs. It also identified the financial performance results, and identified planned actions to improve financial performance, but it did not provide a comparison between the pre-established cost baseline and current performance.
8. Identifies any areas for innovation in the areas of customer satisfaction, strategic and business results, and financial performance	Y	
9. Identifies if the agency revisited alternative methods for achieving the same mission needs and strategic goals	Y	
10. Addresses issues such as greater utilization of technology or consolidation of investments to better meet organizational goals	Y	
11. Includes an ongoing review of the status of the risks identified in the investment's planning and acquisition phases	P	U.S. Citizenship and Immigration Services identified risks associated with the system, including risks that could affect schedule, among other things; however, it did not detail potential costs associated with the risks.
12. Identifies a need to redesign, modify, or terminate the investment	Y	
13. Includes an analysis on the need for improved methodology (i.e., better ways for the investment to meet cost and performance goals)	N	
14. Identifies any lessons learned	Y	
15. Identifies if the investment had a cost or schedule variance	N	
16. Identifies recommendations to redesign or modify an asset before it becomes a problem	N	
17. Includes information on the overlap of the investment with other systems	Y	

Key: Y= fully addressed the key factor

P= partially addressed the key factor

N= did not address the key factor

Source: GAO analysis of DHS data.

Tables 21-27 show our analysis for HHS's investments with OAs in fiscal year 2011.

Table 21: Centers for Disease Control and Prevention: Analysis of Extent to Which National Select Agency Registry's Fiscal Year 2011 OA Addressed OMB Key Factors

Key factor	Yes, no, or partial	Summary of partial rating
1. Assesses current costs against life-cycle cost	Y	
2. Includes a structured schedule assessment	N	
3. Includes a structured assessment of performance goals	Y	
4. Identifies whether the investment supports customer processes as designed and is delivering the goods and services it was designed to deliver	N	
5. Measures the effect the investment has on the performing organization itself	Y	
6. Includes a measure of how well the investment contributes to achieving the organization's business needs and strategic goals	Y	
7. Compares current performance with a pre-established cost baseline and estimates	N	
8. Identifies any areas for innovation in the areas of customer satisfaction, strategic and business results, and financial performance	Y	
9. Identifies if the agency revisited alternative methods for achieving the same mission needs and strategic goals	Y	
10. Addresses issues such as greater utilization of technology or consolidation of investments to better meet organizational goals	Y	
11. Includes an ongoing review of the status of the risks identified in the investment's planning and acquisition phases	N	
12. Identifies a need to redesign, modify, or terminate the investment	Y	
13. Includes an analysis on the need for improved methodology (i.e., better ways for the investment to meet cost and performance goals)	N	
14. Identifies any lessons learned	N	
15. Identifies if the investment had a cost or schedule variance	N	
16. Identifies recommendations to redesign or modify an asset before it becomes a problem	Y	
17. Includes information on the overlap of the investment with other systems	N	

Key: Y= fully addressed the key factor

P= partially addressed the key factor

N= did not address the key factor

Source: GAO analysis of HHS data.

Table 22: Centers for Medicare and Medicaid Services: Analysis of Extent to Which Beneficiary e-Services's Fiscal Year 2011 OA Addressed OMB Key Factors

Key factor	Yes, no, or partial	Summary of partial rating
1. Assesses current costs against life-cycle cost	N	
2. Includes a structured schedule assessment	N	
3. Includes a structured assessment of performance goals	Y	
4. Identifies whether the investment supports customer processes as designed and is delivering the goods and services it was designed to deliver	Y	
5. Measures the effect the investment has on the performing organization itself	P	Centers for Medicare and Medicaid Services determined that it improved population health by providing Medicare information via public websites and providing customer service channels for beneficiaries to manage their health; it did not analyze or identify the effect the investment had on the department and its mission.
6. Includes a measure of how well the investment contributes to achieving the organization's business needs and strategic goals	N	
7. Compares current performance with a pre-established cost baseline and estimates	N	
8. Identifies any areas for innovation in the areas of customer satisfaction, strategic and business results, and financial performance	Y	
9. Identifies if the agency revisited alternative methods for achieving the same mission needs and strategic goals	N	
10. Addresses issues such as greater utilization of technology or consolidation of investments to better meet organizational goals	Y	
11. Includes an ongoing review of the status of the risks identified in the investment's planning and acquisition phases	N	
12. Identifies a need to redesign, modify, or terminate the investment	N	
13. Includes an analysis on the need for improved methodology (i.e., better ways for the investment to meet cost and performance goals)	N	
14. Identifies any lessons learned	N	
15. Identifies if the investment had a cost or schedule variance	N	
16. Identifies recommendations to redesign or modify an asset before it becomes a problem	N	
17. Includes information on the overlap of the investment with other systems	N	

Key: Y= fully addressed the key factor

P= partially addressed the key factor

N= did not address the key factor

Source: GAO analysis of HHS data.

Table 23: Centers for Medicare and Medicaid Services: Analysis of Extent to Which Health Care Quality Improvement and Evaluation System's Fiscal Year 2011 OA Addressed OMB Key Factors

Key factor	Yes, no, or partial	Summary of partial rating
1. Assesses current costs against life-cycle cost	N	
2. Includes a structured schedule assessment	N	
3. Includes a structured assessment of performance goals	N	
4. Identifies whether the investment supports customer processes as designed and is delivering the goods and services it was designed to deliver	Y	
5. Measures the effect the investment has on the performing organization itself	N	
6. Includes a measure of how well the investment contributes to achieving the organization's business needs and strategic goals	N	
7. Compares current performance with a pre-established cost baseline and estimates	N	
8. Identifies any areas for innovation in the areas of customer satisfaction, strategic and business results, and financial performance	Y	
9. Identifies if the agency revisited alternative methods for achieving the same mission needs and strategic goals	N	
10. Addresses issues such as greater utilization of technology or consolidation of investments to better meet organizational goals	Y	
11. Includes an ongoing review of the status of the risks identified in the investment's planning and acquisition phases	N	
12. Identifies a need to redesign, modify, or terminate the investment	Y	
13. Includes an analysis on the need for improved methodology (i.e., better ways for the investment to meet cost and performance goals)	N	
14. Identifies any lessons learned	N	
15. Identifies if the investment had a cost or schedule variance	N	
16. Identifies recommendations to redesign or modify an asset before it becomes a problem	N	
17. Includes information on the overlap of the investment with other systems	N	

Key: Y= fully addressed the key factor

P= partially addressed the key factor

N= did not address the key factor

Source: GAO analysis of HHS data.

Table 24: Health Resources and Services Administration: Analysis of Extent to Which Electronic Handbooks Program Management Office's Fiscal Year 2011 OA Addressed OMB Key Factors

Key factor	Yes, no, or partial	Summary of partial rating
1. Assesses current costs against life-cycle cost	N	
2. Includes a structured schedule assessment	P	Health Resources and Services Administration identified standard and unscheduled maintenance efforts performed as scheduled, but it did not comparatively analyze these efforts against completion dates and goals.
3. Includes a structured assessment of performance goals	Y	
4. Identifies whether the investment supports customer processes as designed and is delivering the goods and services it was designed to deliver	Y	
5. Measures the effect the investment has on the performing organization itself	Y	
6. Includes a measure of how well the investment contributes to achieving the organization's business needs and strategic goals	Y	
7. Compares current performance with a pre-established cost baseline and estimates	Y	
8. Identifies any areas for innovation in the areas of customer satisfaction, strategic and business results, and financial performance	Y	
9. Identifies if the agency revisited alternative methods for achieving the same mission needs and strategic goals	Y	
10. Addresses issues such as greater utilization of technology or consolidation of investments to better meet organizational goals	Y	
11. Includes an ongoing review of the status of the risks identified in the investment's planning and acquisition phases	Y	
12. Identifies a need to redesign, modify, or terminate the investment	Y	
13. Includes an analysis on the need for improved methodology (i.e., better ways for the investment to meet cost and performance goals)	Y	
14. Identifies any lessons learned	Y	
15. Identifies if the investment had a cost or schedule variance	Y	
16. Identifies recommendations to redesign or modify an asset before it becomes a problem	Y	
17. Includes information on the overlap of the investment with other systems	Y	

Key: Y= fully addressed the key factor

P= partially addressed the key factor

N= did not address the key factor

Source: GAO analysis of HHS data.

Table 25: Health Resources and Services Administration: Analysis of Extent to Which National Practitioner Data Bank's Fiscal Year 2011 OA Addressed OMB Key Factors

Key factor	Yes, no, or partial	Summary of partial rating
1. Assesses current costs against life-cycle cost	Y	
2. Includes a structured schedule assessment	P	Health Resources and Services Administration identified schedule assessment results that reflect a "green" score for the last four quarters. It also identifies that earned value management is reporting no discrepancies in cost and schedule. However, the department did not perform a comparative analysis of the planned and actual schedule milestones.
3. Includes a structured assessment of performance goals	Y	
4. Identifies whether the investment supports customer processes as designed and is delivering the goods and services it was designed to deliver	Y	
5. Measures the effect the investment has on the performing organization itself	Y	
6. Includes a measure of how well the investment contributes to achieving the organization's business needs and strategic goals	Y	
7. Compares current performance with a pre-established cost baseline and estimates	Y	
8. Identifies any areas for innovation in the areas of customer satisfaction, strategic and business results, and financial performance	Y	
9. Identifies if the agency revisited alternative methods for achieving the same mission needs and strategic goals	Y	
10. Addresses issues such as greater utilization of technology or consolidation of investments to better meet organizational goals	Y	
11. Includes an ongoing review of the status of the risks identified in the investment's planning and acquisition phases	P	Health Resources and Services Administration identified the investment's cost, schedule, and performance outcomes; but did not address the status of risks, and their potential impacts were not identified.
12. Identifies a need to redesign, modify, or terminate the investment	Y	
13. Includes an analysis on the need for improved methodology (i.e., better ways for the investment to meet cost and performance goals)	Y	
14. Identifies any lessons learned	Y	
15. Identifies if the investment had a cost or schedule variance	Y	
16. Identifies recommendations to redesign or modify an asset before it becomes a problem	Y	
17. Includes information on the overlap of the investment with other systems	N	

Key: Y= fully addressed the key factor

P= partially addressed the key factor

N= did not address the key factor

Source: GAO analysis of HHS data.

Table 26: Indian Health Service: Analysis of Extent to Which Infrastructure, Office Automation, and Telecommunications's Fiscal Year 2011 OA Addressed OMB Key Factors

Key factor	Yes, no, or partial	Summary of partial rating
1. Assesses current costs against life-cycle cost	Y	
2. Includes a structured schedule assessment	Y	
3. Includes a structured assessment of performance goals	Y	
4. Identifies whether the investment supports customer processes as designed and is delivering the goods and services it was designed to deliver	Y	
5. Measures the effect the investment has on the performing organization itself	Y	
6. Includes a measure of how well the investment contributes to achieving the organization's business needs and strategic goals	Y	
7. Compares current performance with a pre-established cost baseline and estimates	Y	
8. Identifies any areas for innovation in the areas of customer satisfaction, strategic and business results, and financial performance	Y	
9. Identifies if the agency revisited alternative methods for achieving the same mission needs and strategic goals	Y	
10. Addresses issues such as greater utilization of technology or consolidation of investments to better meet organizational goals	Y	
11. Includes an ongoing review of the status of the risks identified in the investment's planning and acquisition phases	P	Indian Health Service analyzed cost and schedule progress, but it did not include an assessment of the risks and potential impacts.
12. Identifies a need to redesign, modify, or terminate the investment	Y	
13. Includes an analysis on the need for improved methodology (i.e., better ways for the investment to meet cost and performance goals)	Y	
14. Identifies any lessons learned	N	
15. Identifies if the investment had a cost or schedule variance	Y	
16. Identifies recommendations to redesign or modify an asset before it becomes a problem	Y	
17. Includes information on the overlap of the investment with other systems	N	

Key: Y= fully addressed the key factor

P= partially addressed the key factor

N= did not address the key factor

Source: GAO analysis of HHS data.

Table 27: National Institutes of Health: Analysis of Extent to Which Business Intelligence System's Fiscal Year 2011 OA Addressed OMB Key Factors

Key factor	Yes, no, or partial	Summary of partial rating
1. Assesses current costs against life-cycle cost	N	
2. Includes a structured schedule assessment	N	
3. Includes a structured assessment of performance goals	Y	
4. Identifies whether the investment supports customer processes as designed and is delivering the goods and services it was designed to deliver	Y	
5. Measures the effect the investment has on the performing organization itself	P	National Institutes of Health identified that the investment was in line with the appropriate component's enterprise architecture, but did not identify the effect the investment had on other aspects of the component, such as its mission and business processes.
6. Includes a measure of how well the investment contributes to achieving the organization's business needs and strategic goals	N	
7. Compares current performance with a pre-established cost baseline and estimates	N	
8. Identifies any areas for innovation in the areas of customer satisfaction, strategic and business results, and financial performance	N	
9. Identifies if the agency revisited alternative methods for achieving the same mission needs and strategic goals	Y	
10. Addresses issues such as greater utilization of technology or consolidation of investments to better meet organizational goals	N	
11. Includes an ongoing review of the status of the risks identified in the investment's planning and acquisition phases	Y	
12. Identifies a need to redesign, modify, or terminate the investment	N	
13. Includes an analysis on the need for improved methodology (i.e., better ways for the investment to meet cost and performance goals)	Y	
14. Identifies any lessons learned	N	
15. Identifies if the investment had a cost or schedule variance	Y	
16. Identifies recommendations to redesign or modify an asset before it becomes a problem	N	
17. Includes information on the overlap of the investment with other systems	N	

Key: Y= fully addressed the key factor

P= partially addressed the key factor

N= did not address the key factor

Source: GAO analysis of HHS data.

Appendix III: Comments from the Department of Defense

DEPARTMENT OF DEFENSE
6000 DEFENSE PENTAGON
WASHINGTON, D.C. 20301-6000

CHIEF INFORMATION OFFICER

SEP 2 1 2012

Mr. David A. Powner,
Director, Information Technology Management
U.S. Government Accountability Office
441 G Street, NW, Washington, DC 20548

Dear Mr. Powner,

This is the Department of Defense (DoD) response to the GAO draft report, GAO-12-963, 'INFORMATION TECHNOLOGY: Agencies Need to Strengthen Oversight of Billions of Dollars in Operations and Maintenance,' dated August 28, 2012 (GAO Code 311261)

Our comments on the draft report are attached. My point of contact is Mr. Kevin Garrison, 571-372-4473, Kevin.garrison@osd.mil

Sincerely,

David L. DeVries
Deputy Chief Information Officer for
Information Enterprise

**GAO DRAFT REPORT DATED AUGUST 2012
GAO-12-963 (GAO CODE 311261)**

**INFORMATION TECHNOLOGY: Agencies Need to Strengthen Oversight of
Billions of Dollars in Operations and Maintenance**

**DEPARTMENT OF DEFENSE COMMENTS
TO THE GAO RECOMMENDATIONS**

RECOMMENDATION 1: "To ensure that major steady state IT investments are being adequately analyzed, we recommend that the Secretaries of Defense, Veterans Affairs, and Treasury direct appropriate officials to develop an OA policy, annually perform OAs on all investments, and ensure the assessments include all key factors."

DoD RESPONSE: DoD concurs with the recommendation and will promulgate Operational Analysis (OA) guidance in coordination with OMB.

Appendix IV: Comments from the Department of Homeland Security

Homeland
Security

September 21, 2012

David A. Powner
Director, Information Technology Management Issues
U.S. Government Accountability Office
441 G Street, NW
Washington, DC 20548

Re: Draft Report GAO-12-963, "INFORMATION TECHNOLOGY: Agencies Need To
        Strengthen Oversight of Billions of Dollars In Operations and Maintenance
        Investments"

Dear Mr. Powner:

Thank you for the opportunity to review and comment on this draft report. The U.S. Department of
Homeland Security (DHS) appreciates the U.S. Government Accountability Office's (GAO's) work
in planning and conducting its review and issuing this report.

The Department is pleased to note GAO's positive acknowledgement that the Department
recently implemented steps to make Operational Analyses (OAs) a priority and to ensure
consistent application of departmental and Office of Management and Budget (OMB) policy.

The draft report contained one recommendation directly involving DHS with which the
Department concurs. Specifically, GAO recommended that the Secretary of Homeland Security
direct the Chief Information Officer (CIO) to:

Recommendation: Ensure OAs are performed annually on all major steady state investments
and the assessments include all key factors.
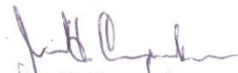
Response: Concur. On May 24, 2012, the Department's CIO signed a memorandum
requiring OAs to be completed annually. *Operational Analysis Guidance* (DHS Instruction
Guide 102-02-002) has been drafted and is pending approval. The draft guidance includes all
the key factors as prescribed by OMB in Circular A-130, *Management of Federal Information
Resources*. In addition, a scoring template was created. The guidance has been distributed to
the Capital Planning and Investment Control community to be shared with their Program
Managers for the FY 2014 Exhibit 300 submission. Each OA submitted with the FY 2014
Exhibit 300s has been reviewed on the basis of guidance, and feedback has been provided to
the Components. The signed OAs will be sent to OMB in February 2013 with the final
Exhibit 300s for the President's budget.

DHS will continue to review the OAs annually for quality and adherence to our template. In
the future, the annual OA review process will be incorporated in the portfolio review process,
annual information technology budget review process, and/or CIO health assessment review
process.

Again, thank you for the opportunity to review and comment on this draft report. Technical comments were provided previously under separate cover. Please feel free to contact me if you have any questions. We look forward to working with you in the future.

Sincerely,

Jim H. Crumpacker
Director
Departmental GAO-OIG Liaison Office

2

Appendix V: Comments from the Department of the Treasury

DEPARTMENT OF THE TREASURY
WASHINGTON, D.C. 20220

SEP 1 4 2012

David A. Powner
Director, Information Technology Management Issues
U.S. Government Accountability Office
441 G Street NW
Washington, DC 20548

Dear Mr. Powner:

Thank you for the opportunity to provide comments on GAO's Draft Report, *Information Technology: Agencies Need to Strengthen Oversight of Billions of Dollars in Operations and Maintenance Investments* (GAO-12-963).

Treasury appreciates GAO's efforts in developing this report. We agree with GAO's recommendations for Treasury and anticipate we will publish our revised Operational Analyses (OA) policy by the end of calendar year 2012. A draft of this policy was provided to GAO on August 23, 2012. Additionally, on September 13, 2012, we provided a report to GAO summarizing OAs for 9 of the 16 investments identified in GAO's report as not having an OA, and we are developing OAs for the remaining 7.

Please contact me at 202-622-1200 if you need anything further.

Sincerely,

for Robyn East
Deputy Assistant Secretary for Information Systems
and Chief Information Officer

Appendix VI: Comments from the Department of Veterans Affairs

DEPARTMENT OF VETERANS AFFAIRS
Washington DC 20420

September 13, 2012

Mr. David A. Powner
Director, Information Technology
  Management Issues
U.S. Government Accountability Office
441 G Street, NW
Washington, DC 20548

Dear Mr. Powner:

The Department of Veterans Affairs (VA) has reviewed the Government Accountability Office's (GAO) draft report, *"INFORMATION TECHNOLOGY: Agencies Need to Strengthen Oversight of Billions of Dollars in Operations and Maintenance Investments"* (GAO-12-963). VA generally agrees with GAO's conclusions and concurs with GAO's recommendation to the Department.

The enclosure specifically addresses GAO's recommendation to the draft report. VA appreciates the opportunity to comment on your draft report.

Sincerely,

John R. Gingrich
Chief of Staff

Enclosure

Enclosure

Department of Veterans Affairs (VA) Comments to
Government Accountability Office (GAO) Draft Report
*"INFORMATION TECHNOLOGY: Agencies Need to Strengthen Oversight of
Billions of Dollars in Operations and Maintenance Investments"*
(GAO-12-963)

<u>GAO Recommendation</u>: **To ensure that major steady state IT investments are
being adequately analyzed, we recommend that the Secretary of Veterans Affairs
direct appropriate officials to develop an OA policy, annually perform OA's on all
investments, and ensure the assessments include all key factors.**

<u>VA Response</u>: Concur. VA understands and acknowledges the need for appropriate
officials to develop an operational analyses (OA) policy, annually perform OA's on all
investments, and ensure the assessments include all key factors required by Office of
Management and Budget. VA's Chief Information Officer anticipates that the policy will
be published by the second quarter of fiscal year (FY) 2013.

VA will develop a process to comply with all 17 required elements of "operational
assessment" performed annually which may include standing up an office using
Resource and Performance Management, Customer Satisfaction, and Information
Technology Service Management Program Analysis to synthesize the information.
VA's Chief Information Officer anticipates that the process will be implemented by the
third quarter of FY 2013.

GAO Contact

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Staff Acknowledgments

In addition to the contact name above, individuals making contributions to this report included Gary Mountjoy (Assistant Director), Gerard Aflague, Rebecca Eyler, Lori Martinez, and Teresa Smith.