United States Government Accountability Office

GAO

Report to Congressional Committees

September 2005

INFORMATION TECHNOLOGY

Management Improvements Needed on Immigration and Customs Enforcement's Infrastructure Modernization Program

GAO-05-805

September 2005

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Management Improvements Needed on Immigration and Customs Enforcement's Infrastructure Modernization Program

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Highlights

Highlights of GAO-05-805, a report to congressional committees

Why GAO Did This Study

The Department of Homeland Security's (DHS) Atlas program is intended to modernize Immigration and Customs Enforcement's (ICE) information technology (IT) infrastructure. By congressional mandate, DHS is to develop and submit for approval an expenditure plan for Atlas that satisfies certain legislative conditions, including a review by GAO. GAO was asked to determine whether the plan satisfied certain legislative conditions and to provide observations on the plan and management of the program.

What GAO Recommends

To strengthen Atlas planning and management, GAO recommends that the Secretary of DHS ensure that ICE follows through on commitments to implement effective management controls and capabilities by, among other things, revising and updating the cost-benefit analysis; making the program office operational; developing and implementing rigorous performance program management practices; and ensuring that future expenditure plans fully disclose the system capabilities, schedule, cost, and benefits to be delivered. In its written comments on this report, DHS concurred with GAO's recommendations and stated actions that it was taking to implement them.

www.gao.gov/cgi-bin/getrpt?GAO-05-805.

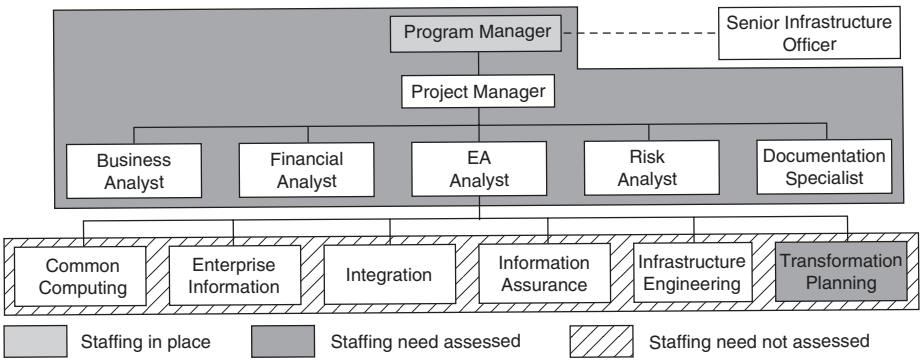
To view the full product, including the scope and methodology, click on the link above. For more information, contact Randy Hite, (202) 512-3439, HiteR@gao.gov.

What GAO Found

DHS's fiscal year 2004 Atlas expenditure plan, related documentation, and program officials' statements satisfied all conditions imposed by Congress, including (1) meeting the capital planning and investment control review requirements established by the Office of Management and Budget (OMB); (2) complying with the DHS enterprise architecture; (3) complying with the acquisition rules, requirements, guidelines, and systems acquisition management practices of the federal government; and (4) being reviewed and approved by ICE's Investment Review Board, DHS, and OMB. However, this satisfaction is based more on plans and commitments that provide for meeting these conditions than on completed actions. As such, much remains to be accomplished for Atlas planning and management efforts to be considered effective and thereby minimize the risks associated with the program's capacity to deliver promised IT infrastructure capabilities and benefits on time and within budget.

GAO developed a number of observations about the expenditure plan and DHS's management of the program. The observations address the need for economic justification of Atlas, rigorous and disciplined program management practices, performance measurements that are linked to goals and benefits, and an expenditure plan that provides sufficient information on program commitments for it to be a useful accountability tool. For example, Atlas's existing economic justification does not reflect recent and planned changes in the program's scope and purpose, including plans to expand the program beyond IT infrastructure upgrades. In addition, program management controls and capabilities have yet to be established. While ICE has begun to establish an Atlas program office, this office is not yet operational and is not adequately staffed. For example, while ICE has assigned a program manager and three contracting staff, it has not yet determined how many staff will be needed on the Atlas projects. In addition, while the program manager recently assessed staffing needs for program support positions, and identified several, none have been filled (see graphic).

Proposed Program Management Office



Source: GAO analysis of DHS data.

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Abbreviations

DHS	Department of Homeland Security
ICE	Immigration and Customs Enforcement
IT	information technology
OMB	Office of Management and Budget

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United States Government Accountability Office
Washington, D.C. 20548

September 7, 2005

The Honorable Judd Gregg
Chairman
The Honorable Robert C. Byrd
Ranking Member
Subcommittee on Homeland Security
Committee on Appropriations
United States Senate

The Honorable Harold Rogers
Chairman
The Honorable Martin Olav Sabo
Ranking Member
Subcommittee on Homeland Security
Committee on Appropriations
House of Representatives

The 2004 Department of Homeland Security Appropriations Act[1] provided $40 million for Immigration and Customs Enforcement's (ICE) program to modernize its information technology (IT) infrastructure.[2] The goals of the program—which ICE refers to as "Atlas"—are to, among other things, improve information sharing, strengthen information security, and improve workforce productivity. The act provided that the Department of Homeland Security (DHS) was prohibited from obligating the $40 million until it developed a plan for how the funds are to be spent that satisfied certain legislative conditions, including having the plan reviewed by us. On March 16, 2005, DHS submitted its fiscal year 2004 expenditure plan to the Senate and House Appropriations Subcommittees on Homeland Security. Pursuant to the act, we reviewed the plan; our objectives were to (1) determine whether the plan satisfies legislative conditions specified in the act and (2) provide any other observations about the plan and management of the program.

On May 10 and 24, 2005, we briefed the Senate and House Homeland Security Subcommittee staffs, respectively, on the results of our review.

[1]Pub. L. No. 108-90 (Oct. 1, 2003).

[2]During fiscal year 2004, the Department of Homeland Security reprogrammed about $30.2 million of the $40 million to address other ICE priorities, thereby leaving $9.8 million for the program.

This report transmits the results of that work. The full briefing, including our scope and methodology, is reprinted in appendix I.

Compliance with Legislative Conditions

DHS satisfied each of the applicable legislative conditions specified in the act. In particular, the plan, including related program documentation and program officials' statements, satisfied or provided for satisfying all key aspects of (1) meeting the capital planning and investment control review requirements of the Office of Management and Budget (OMB);[3] (2) complying with the DHS enterprise architecture;[4] (3) complying with acquisition rules, requirements, guidelines, and systems acquisition management practices of the federal government; and (4) having the plan reviewed and approved by ICE's Investment Review Board, DHS, and OMB.

However, satisfaction of these legislative conditions is based in large part on plans and oral commitments by program officials that provide for meeting the conditions. To illustrate, OMB capital planning requirements direct agencies planning to make a major IT investment, like Atlas, to among other things (1) summarize the investment's life-cycle costs; (2) analyze costs and benefits, including return on investment; (3) establish performance goals and measures; and (4) develop security and privacy plans. The Atlas program does not have a current life-cycle cost estimate nor a current cost-benefit analysis showing return on investment. It also does not have a complete set of performance measures. Further, the program does not have an up-to-date security plan that includes Atlas, and officials have yet to develop a privacy impact assessment for the program. The program manager acknowledged these shortfalls and either planned or orally committed to fully satisfy the requirements when expenditure plan funds become available.

[3]OMB Circular A-11 establishes policy for planning, budgeting, acquiring, and managing federal capital assets. Capital investment and control requirements are now found in OMB Circular A-11, part 7, rather than in part 3.

[4]An enterprise architecture provides a clear and comprehensive picture of an organization's operations and its supporting systems and infrastructure. It is an essential tool for effectively and efficiently engineering business processes and for implementing and evolving supporting systems in a manner that maximizes interoperability, minimizes overlap and duplication, and optimizes performance.

Other Observations on the Expenditure Plan and Management of Atlas

Our observations address the need for economic justification of Atlas, rigorous and disciplined program management practices, performance measurements that are linked to goals and benefits, and an expenditure plan that provides sufficient information on program commitments to make the plan a useful accountability tool. An overview of specific observations follows:

- *Economic justification (i.e., analysis of costs and benefits) does not reflect recent and planned changes in the program's scope and purpose.* The existing cost-benefit analysis—which was developed in 2002—has not yet been revised to reflect changes in the program's scope and purpose. Since ICE became responsible for Atlas in 2003 (inherited from the Immigration and Naturalization Service) it has materially changed the program's scope, purpose, and priorities. Specifically, Atlas was expanded to (1) support additional law enforcement units[5] (and their business requirements) that were merged into ICE and (2) provide the flexibility to support new ICE priorities, such as integrating future antiterrorism programs and projects and facilitating information sharing with domestic and international law enforcement organizations. In addition, the program is also being expanded beyond infrastructure upgrades to include efforts to streamline and reengineer core business functions with the application of IT. According to the fiscal year 2004 expenditure plan and program manager, revising the analysis is a "next step" to be taken and the goal is to have a contractor complete an updated cost-benefit analysis on or about September 30, 2005.

- *Program management controls and capabilities have yet to be established.* ICE has begun to establish an Atlas program office; however, the program office is not yet operational. Specifically, the bureau has drafted a management structure and plan, which includes staff roles and responsibilities. However, the structure and plan are currently being reviewed by ICE management and have not been made final. Moreover, of the $63.52 million that ICE reported was obligated for Atlas in fiscal years 2002 and 2003, only about $900,000 (or about 1.4 percent of the total amount) was obligated for program management capabilities. In contrast, our work on other IT modernization programs (including two in DHS) show that 19 percent was invested in such

[5]The units include the Federal Air Marshals Service, Federal Protective Service, Customs investigations, and Customs intelligence.

management capabilities. In addition, while key acquisition management processes have been defined in ICE's System Development Life Cycle methodology, the program office has yet to implement these processes.

Further, the program office is not adequately staffed.[6] Currently, the office has staffed the program manager position, and it has three contracting staff performing functions such as developing staffing needs assessments and other program management-related activities. While the program manager recently assessed staffing needs for program support positions (e.g., financial management, contracting, and enterprise architecture), he has not yet performed a needs assessment to determine the staffing needs for the five of the six projects that comprise the Atlas program**.** Moreover, of the seven program support positions that the program manager has determined are needed, none have been filled, according to program officials. The program manager stated that ICE plans to strengthen program management controls and capabilities once funds provided for in the expenditure plan are available.

- *Program goals, expected benefits, and reported achievements are not fully aligned.* The Atlas expenditure plan and documentation show that the program has defined goals and expected benefits and has reported actual achievements accomplished during fiscal years 2002 and 2003. However, the relationships among goals, benefits, and achievements have not been defined and are not apparent in all cases. Moreover, the reported achievements are not expressed in terms of measurable outcomes or results, but rather as activities completed. The program manager stated that the 2002 and 2003 achievements were not analyzed and aligned to program goals and benefits, and that outcome-based measures were not developed in part because the emphasis at the time was on buying and deploying long overdue infrastructure upgrades as quickly as possible. He stated that in the future, the program intends to define, ensure, and disclose the linkage among program goals, benefits, and results.

[6]According to the program manager, Atlas staffs were transferred to the US-Visitor and Immigrant Status Indicator Technology program in 2003, which is managed by the DHS Under Secretary for Border and Transportation Security.

- *Fiscal year 2004 expenditure plan does not provide sufficient information on program commitments to permit effective congressional oversight.* The Atlas expenditure plan does not show the level of detail and scope of the program needed for Congress to understand its plans and commitments relative to system capabilities, cost, benefits, and schedule. Further, it does not sufficiently describe progress made against program commitments (e.g., expected benefits). According to the program manager, the state of the plan reflects the program's uncertainty about the appropriate level of detail in expenditure plans. He stated that future plans will include missing content.

Conclusions

The fiscal year 2004 Atlas expenditure plan, in combination with related program documentation and program officials' statements, satisfies the legislative conditions set forth by Congress. However, this satisfaction is based more on plans and commitments that provide for meeting these conditions than on completed actions. As such, much remains to be accomplished for Atlas planning and management efforts to be considered effective and thereby minimize the risks associated with the program's capacity to deliver promised IT infrastructure capabilities and benefits on time and within budget.

The current state of planning and management puts the program at risk. While this is partially due to events beyond the program's control, such as the department's decision to reprogram Atlas funding and to redeploy Atlas staff to competing DHS priorities, as well as to change the program's scope and purpose when it transitioned from the Immigration and Naturalization Service to ICE, it is also due to the program's decision not to use fiscal years 2002 and 2003 funds to invest in program management capabilities.

Given that more than $60 million has reportedly been obligated to date on the program, resources have been available to strengthen planning and management capabilities in key areas, but investment in these areas has been deferred. Deferral of establishing such program planning and management controls and capabilities—such as having reliable and current economic justification for the program; a capable program office; and clearly aligned program goals, benefits, and performance measures—introduce unnecessary risk to the program.

Moreover, not providing congressional decision makers with the information that they need about program commitments to be met with the

expenditure plan funds—including the benefits to be produced, the capabilities to be delivered, and the cost and schedule estimates to be met—impedes congressional oversight.

Recommendations for Executive Action

To minimize risks to the Atlas program, we recommend that the Secretary of Homeland Security, through the Under Secretary for Border and Transportation Security, direct the Assistant Secretary for Immigration and Customs Enforcement to ensure that ICE follows through on commitments to implement effective management controls and capabilities by taking the following five steps:

- Revising and updating the cost-benefit analysis, to identify current mission requirements; how they will be met; and an estimate of the program's incremental and life-cycle costs, benefit, schedule, and return on investment. This should also include establishing plans, associated tasks, and milestones for accomplishing this effort.

- Making the Atlas program office operational by (1) developing a staffing needs assessment to determine the positions and the level of staffing needed for all projects to adequately manage the program, including a human capital strategy and timetable for acquiring the staff and bringing them on board; (2) finalizing the roles and responsibilities for the positions identified in the staffing assessment and for the projects; and (3) implementing and institutionalizing key acquisition management controls, including risk management processes where relevant responsibilities are assigned and key risks and their status are reported to an executive body.

- Developing and implementing an updated Atlas security plan and privacy impact assessment. This should also include establishing plans, associated tasks, and milestones for accomplishing this effort.

- Developing and implementing rigorous performance management practices for the Atlas program that include properly aligned goals, benefits, achievements, and anticipated achievements that are defined in measurable terms. This should also include establishing plans, associated tasks, and milestones for accomplishing this effort.

- Ensuring that future expenditure plans fully disclose the system capabilities, schedule, cost, and benefits to be delivered, as well as the acquisition strategy for Atlas.

Agency Comments

In the department's written comments on a draft of this report, which were contained in a letter signed by the director, DHS Departmental GAO/Office of Inspector General Liaison, DHS concurred with all of our recommendations and stated actions it was taking to implement them. DHS's comments are reprinted in appendix II.

We are sending copies of this report to the Chairmen and Ranking Members of other Senate and House committees and subcommittees that have authorization and oversight responsibilities for homeland security. We are also sending copies to the Secretary of Homeland Security and the Director of OMB. Copies of this report will also be available at no charge on our Web site at www.gao.gov.

Should you or your offices have any questions on matters discussed in this report, please contact me at (202) 512-3439 or at hiter@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. Key contributors to this report are listed in appendix III.

Randolph C. Hite
Director, Information Technology Architecture
and Systems Issues

Briefing to the Staffs of the Subcommittees on Homeland Security, Senate and House Committees on Appropriations

Appendix I

Information Technology: Management Improvements Needed on Immigration and Customs Enforcement's Infrastructure Modernization Program

Briefing to the Staffs of the
Subcommittees on Homeland Security,
Senate and House Committees on Appropriations

May 10 and May 24, 2005

Briefing Overview

- Introduction
- Objectives
- Results in Brief
- Background
- Results
  - Legislative Conditions
  - Observations
- Conclusions
- Recommendations
- Agency Comments
- Attachment I: Scope and Methodology

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Introduction

The Department of Homeland Security's (DHS) Bureau of Immigration and Customs Enforcement (ICE)[1] is responsible for enforcing border security, trade, and other laws by, for example, investigating and collecting intelligence on individuals and groups who act to violate these laws. ICE is also responsible for detecting and deterring hostile acts on U.S. commercial aviation and protecting federal facilities.

Atlas is an ICE program to modernize the bureau's information technology (IT) infrastructure. IT infrastructure includes the hardware (e.g., servers, routers, storage devices, communication lines) and system software (e.g., database management and operating systems and network management) that provide an environment for operating and maintaining software applications.

According to ICE, the goals of Atlas include improving information sharing, strengthening information security, and improving workforce productivity.

[1]ICE was formed from the former Immigration and Naturalization Service, U.S. Customs Service, and other entities. Atlas began in 2002 under the former INS.

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Introduction

The fiscal year 2004 Department of Homeland Security Appropriations Act[2] appropriated $40 million for Atlas and provided that DHS was prohibited from obligating these funds until the department submitted a plan for how the funds were to be spent that satisfied the following legislative conditions:

- meets the capital planning and investment control review requirements established by the Office of Management and Budget (OMB), including OMB Circular A-11, part 3,[3]
- complies with DHS's enterprise architecture,[4]
- complies with the acquisition rules, requirements, guidelines, and systems acquisition management practices of the federal government,

[2]Pub.L. No. 108-90 (Oct. 1, 2003).

[3]OMB Circular A-11 establishes policy for planning, budgeting, acquisition, and management of federal capital assets. Capital investment and control requirements are now found in OMB Circular A-11, part 7, rather than part 3.

[4]As agreed with the staffs of the appropriations subcommittees, we assessed compliance with the DHS enterprise architecture in lieu of the ICE enterprise architecture.

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Introduction

- is reviewed and approved by ICE's Investment Review Board (IRB),[5] DHS, and OMB, and
- is reviewed by GAO.

During fiscal year 2004, DHS reprogrammed about $30.2 million of the Atlas funds to cover other ICE priorities, leaving $9.8 million for the program.

DHS submitted its fiscal year 2004 expenditure plan for $9.8 million on March 16, 2005, to its Senate and House Appropriations Subcommittees on Homeland Security.

[5]The purpose of the IRB is to integrate capital planning and investment control, budgeting, and acquisition. It is also to ensure that spending on investments directly supports and furthers the mission and that this spending provides optimal benefits and capabilities to stakeholders and customers.

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Objectives

As agreed, our objectives were to

1. determine whether the Atlas fiscal year 2004 expenditure plan satisfies the legislative conditions, and
2. provide any other observations about the expenditure plan and DHS's management of the Atlas program.

We conducted our work at DHS and ICE headquarters in Washington, D.C. from March 2005 through May 2005 in accordance with generally accepted government auditing standards. Details of our scope and methodology are provided in attachment I.

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Results in Brief

Objective 1: Satisfaction of Legislative Conditions

Legislative conditions		Status
1.	Meets the capital planning and investment control review requirements established by OMB, including OMB Circular A-11, part 7.[6]	Satisfied[7]
2.	Complies with the DHS enterprise architecture.	Satisfied
3.	Complies with the acquisition rules, requirements, guidelines, and systems acquisition management practices of the federal government.	Satisfied
4.	Is reviewed and approved by ICE IRB, DHS, and OMB.	Satisfied
5.	Is reviewed by GAO.	Satisfied

[6]Capital investment and control requirements are now found in OMB Circular A-11, part 7, rather than part 3.
[7]Satisfied: Satisfied or provides for satisfying every aspect of the condition that we reviewed.

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Results in Brief

Objective 2: Other Observations

- Economic justification does not reflect recent and planned changes in the program's scope and purpose.
- Program management controls and capabilities have yet to be established.
- Program goals, expected benefits, and reported achievements are not fully aligned.
- Fiscal year 2004 expenditure plan does not provide sufficient information on program commitments to permit effective congressional oversight.

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Results in Brief

Recommendations

We are making recommendations to the Secretary of DHS to improve Atlas expenditure planning and program management.

In commenting on a draft of this briefing, ICE's chief information officer and the Atlas program manager agreed with our findings and conclusions and stated that our recommendations were reasonable.

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Background
ICE

ICE was formed as a component agency of DHS in 2003 when the law enforcement functions of the Justice Department's former Immigration and Naturalization Service (INS) and the Treasury Department's former Customs Service, among other agencies, were merged into DHS.

The ICE mission is to ensure the security of the American people and homeland by investigating violators of, and thereby, enforcing the nation's immigration and customs laws; protecting U.S. commercial air carriers, airports, passengers, and crews; policing and securing federal buildings and other facilities; and collecting, analyzing, and disseminating intelligence to assist it in these endeavors.

Headed by the Assistant Secretary of Immigration and Customs Enforcement, ICE has approximately 15,000 employees in over 400 offices domestically and in other countries.

The Atlas program was started by INS in 2002. Responsibility for the program was transferred to ICE in 2003 as part of the establishment of DHS.

The figure on the following page shows ICE and Atlas organizational placement within the department.

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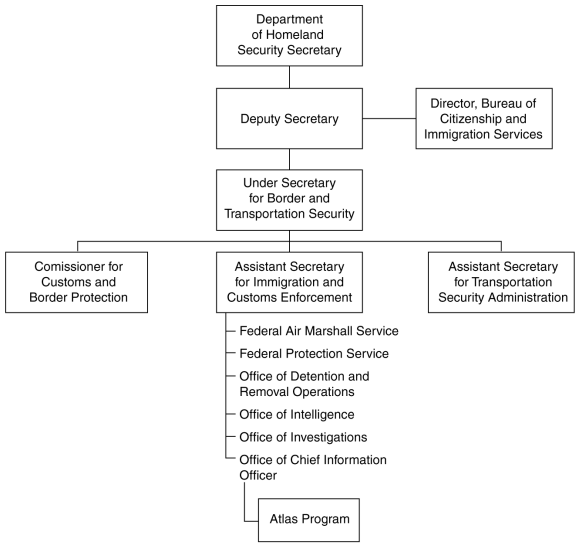
Background
ICE and Atlas Organizational Placement

Simplified DHS organizational chart showing ICE and Atlas program



Source: GAO analysis of DHS data.

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Background
Impetus for Atlas

According to ICE officials, Atlas was initiated to address information sharing and security limitations within the former INS caused by, for example,

- obsolete hardware/software that needed refreshing;
- incompatible, non-interoperable information systems; and
- uneven system security capabilities.

These officials stated that these challenges were exacerbated by the formation of ICE because the organizations that merged into ICE had different hardware/software environments (e.g., multiple e-mail systems) and different mission and customer needs.

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Background
Goals of Atlas

The stated goals of Atlas are, among other things, to:

- enhance workforce productivity,
- strengthen integrity, security, and privacy of information and data assets, and
- promote information sharing and collaboration.

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Background
Atlas Projects

The fiscal year 2004 expenditure plan states that Atlas consists of seven interrelated projects, which are briefly described below.

Project	Description
Common Computing Environment	•Acquire and deploy a common e-mail application (MS Exchange) to replace multiple and disparate e-mail applications currently in use across ICE organizations. •Implement hardware and software (i.e., Active Directory) that enables the common e-mail application to operate on multiple local area networks. •Install new desktop computers.
Integration (Connectivity)	•Connect new bureau organizations (e.g., Federal Protective Service, Federal Air Marshal Service) to ICE's communications network to, among other things, provide investigators and other staff quicker access to information used to accomplish mission duties. •Identify a solution for optimizing the integration and performance of these connections and develop a plan to implement it.
Electronic Access and E-Government	According to the program manager, Electronic Access and E-Government has recently been merged with the Enterprise Information project, which is described on the next slide.

Source: DHS data.

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Background
Atlas Projects

Continued.

Project	Description
Enterprise Information	•Develop and prototype an approach to integrate systems and information across ICE, including developing a central data repository with the capabilities to access, navigate, and search information across multiple sources (referred to as Enterprise Query) and share information across existing systems on a real time basis (referred to as Enterprise Interoperability). •Establish infrastructure to support implementation of Web-based applications (i.e., electronic government).
Information Assurance	•Strengthen security of ICE's information, network, and systems by expanding the capabilities of the bureau's Security Operations Center in the following areas: audit log management, intrusion detection, firewall management, cryptographic services, computer forensics, vulnerability scanning, and penetration testing.
Infrastructure Engineering	•Provide engineering facilities (e.g., interoperability laboratory) and automated tools and procedures to manage and operate ICE's IT infrastructure and evaluate and test new technologies before deploying them in the operational environment.

Source: DHS data.

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Background
Atlas Projects

Continued.

Project	Description
Transformation Planning	•Implement program management structures, policies, and processes to stand up the program office. •Provide adequate program office staffing. •Centralize and streamline procurement planning and procedures to enable more efficient purchasing of hardware and software products and services. •Manage and oversee Atlas projects and contractors, including developing tools to help in these endeavors. •Ensure compliance with DHS's enterprise architecture. •Monitor adherence to cost, schedule, and performance goals.

Source: DHS data.

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Background
Atlas Funding

Since fiscal year 2002, Atlas has been provided $143.17 million in appropriated funds.

- $39.1 million from INS counterterrorism funding in fiscal year 2002.[8]
- $24.47 million from INS investment and operations and maintenance funding in fiscal year 2003.
- $40 million from DHS appropriations in fiscal year 2004,[9] of which $30.2 million was reprogrammed by DHS to cover other ICE priorities, leaving $9.8 million.
- $39.6 million from DHS appropriations in fiscal year 2005.[10]

[8]Counterterrorism funding came from the Department of Defense and Emergency Supplemental Appropriations for Recovery from and Response to Terrorist Attacks on the United States Act, 2002. Pub. L. No. 107-117 (Jan. 10, 2002); H.R. Report 107-350 (Dec. 19, 2001).
[9]Pub.L. No. 108-90 (Oct. 1, 2003).
[10]Pub.L.. No. 108-334 (Oct. 18, 2004).

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Background
Atlas Expenditures

As shown in the table below, ICE reports that it has obligated $63.52[11] million in fiscal years 2002 and 2003 appropriated funds on various Atlas projects.

Project	Expenditures in fiscal year 2002 (in millions)	Expenditures in fiscal year 2003 (in millions)	Total (in millions)
Common Computing Environment	$0	$10.51	$10.51
Integration (Connectivity)	6.09	20.41	26.50
Electronic Access and E-Government	0	0	0
Enterprise Information	1.34	4.56	5.90
Information Assurance	10.20	9.52	19.72
Infrastructure Engineering	0	0	0
Transformation Planning	0	.89	.89
Total	$17.63	$45.89	$63.52

Source: DHS data.

[11]According to the program manager, of the $63.57 million that Congress appropriated in fiscal years 2002 and 2003, $63.52 million was obligated to Atlas projects and the remainder ($.05 million) was reprogrammed to other ICE priorities.

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Background
Planned Use of Fiscal Year 2004 Funding

According to the fiscal year 2004 expenditure plan, the $9.8 million will be spent on five projects that are immediate needs of the program.

Project	FY 04 Funds (in millions)	Planned Use
Common Computing Environment	$3.5	• Acquire and deploy e-mail application to ICE organizations. • Implement Active Directory. • Develop plan for acquiring desktop computers.
Integration (Connectivity)	3.4	• Connect new ICE organizations' systems to bureau's communications network. • Develop solution and implementation plan for optimizing performance of connections.
Electronic Access and E-Government[12]	0	• None.
Enterprise Information	.75	• Begin developing data repository and Enterprise Query capability. • Convert selected existing administrative applications (e.g., time and attendance) to Web-based environment.
Information Assurance	0	• None.
Infrastructure Engineering	.25	• Develop laboratory to test and evaluate to-be-acquired desktop computers and other equipment.
Transformation Planning	1.92	• Acquire program office support staff. • Acquire automated tool to help manage and oversee projects, including cost, schedule, and performance. • Study how to streamline procurement processes.
Total	$9.82	

Source: DHS data.

[12]According to the program manager, the project Electronic Access and E-Government was recently merged with Enterprise Information.

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Objective 1 Results
Legislative Conditions

The Atlas expenditure plan satisfies each of the legislative conditions.

Condition 1 Satisfied. The expenditure plan, including related program documentation and statements from the program manager, either satisfies or provides for satisfying the capital planning and investment control review requirements established by OMB, including Circular A-11, part 3,[13] which establishes policy for planning, budgeting, acquisition, and management of federal capital assets.

Examples of our analysis are in the following table. As the table shows, not all OMB requirements have been satisfied, but oral commitments have been made for doing so. Given that ICE has reportedly already invested $63.52 million on Atlas projects and plans to invest another $9.8 million this year, it is important for ICE to follow through on these commitments.

[13]Capital investment and control requirements are now found in OMB Circular A-11, part 7, rather than part 3.

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Objective 1 Results
Legislative Conditions

Examples of OMB Circular A-11 requirements	Results of our findings
Indicate whether the investment was approved by an investment review committee.	The plan was approved on November 16, 2004, by the ICE IRB chair and on January 12, 2005, by the chief information officer, who chairs the DHS Enterprise Architecture Board.
Provide justification and describe acquisition strategy.	The plan and supporting documentation justify the program on the basis of current capability deficiencies and mission needs. However, neither includes an analysis of costs and benefits or return on investment. These documents also provide some aspects of a high-level acquisition strategy, such as identifying the five contracts that have been, and are to be used to acquire hardware and software products and program support services. The program manager stated that a current cost-benefit analysis and a more detailed acquisition strategy will be developed once expenditure plan funds become available.
Summarize life cycle costs and cost-benefit analysis, including the return on investment.	The program does not have a current life-cycle cost estimate nor a current cost-benefit analysis showing return on investment. Program officials stated they intend to revise and update by September 2005 Atlas's cost-benefit and other analyses (dated 2002). However, the officials did not have documentation defining how this was to be accomplished. The program manager stated that a current cost and benefit analysis will be developed once expenditure plan funds become available.[14]
Provide performance goals and measures.	The plan and supporting documentation identify one preliminary performance metric for each of Atlas's planned projects. According to the program manager, these are the program's initial performance measures and additional measures, linked to program goals, will be developed once expenditure plan funds become available. Performance goals and measures were not used to track the $63 million invested in Atlas during fiscal years 2002 and 2003.[14]

[14]These areas are more fully discussed in the observation sections of the briefing.

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Objective 1 Results
Legislative Conditions

Examples of OMB Circular A-11 requirements	Results of our findings
Address security and privacy.	The plan and supporting documentation state the importance of security and privacy and provide high-level information on intended security measures, including one proposed project—Information Assurance—that is intended to implement a bureauwide security program. In addition, ICE has a December 2003 bureau-wide security plan. However, plans for the Information Assurance project have not been developed, and the expenditure plan does not allocate any fiscal year 2004 funding to the project. Further, ICE's December 2003 bureauwide security plan does not mention Atlas or the Information Assurance project. Moreover, ICE has not developed an Atlas privacy impact assessment. According to the program manager, ICE intends to update the security plan and prepare a privacy impact assessment, but existing plans do not provide for how and when this will be accomplished.
Provide risk inventory and assessment.	Assessments performed on risks were via ad hoc meetings. A draft risk management plan was developed from these meetings and the plan contains an inventory of risks. It does not, however, identify, among other things, how the risks will be monitored. The Atlas program manager stated that the program office is in the process of developing more effective risk management and oversight processes and intends to add a risk analyst position when Atlas funding is received.

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Objective 1 Results
Legislative Conditions

Condition 2 Satisfied. The plan, including related program documentation and DHS officials' statements, either satisfies or provides for satisfying the condition that the department ensure Atlas is compliant with DHS's enterprise architecture (EA).

An EA provides a clear and comprehensive picture of an organization's operations and its supporting systems and infrastructure. It is an essential tool for effectively and efficiently engineering business processes and for implementing and evolving supporting systems in a manner that maximizes interoperability, minimizes overlap and duplication, and optimizes performance. We have worked with the Congress, OMB, and the federal Chief Information Officers Council to highlight the importance of architectures for both organizational transformation and IT management. An important element of EA management is ensuring that IT investments are compliant with EA, including basing such assessments on documented analysis.

On August 6, 2004, we reported on version 1.0 of DHS's EA, stating that DHS's initial EA provides a partial foundation but was missing key elements expected to be found in a well-defined architecture.[15] DHS has since developed version 2.0 of its EA. We have not reviewed this version of DHS's EA.

[15]GAO, *Homeland Security: Efforts Under Way to Develop Enterprise Architecture, but Much Work Remains*, GAO-04-777 (Washington, D.C.: August 6, 2004).

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Objective 1 Results
Legislative Conditions

DHS's Enterprise Architecture Board and Enterprise Architecture Center of Excellence[16] are responsible for determining whether programs comply with the EA. On December 8, 2004, Atlas's program manager requested the center to assess the program's compliance with the EA. On January 10, 2005, the center reported the results of its assessment to the board, stating that Atlas was in compliance. On January 12, 2005, the board approved this compliance determination.

The center based its determination on documentation submitted by the program manager and discussions among center staff, including officials from DHS's Infrastructure Transformation Office and IT Security Office. However, the determination was not based on documented analysis mapping Atlas's infrastructure architecture to the EA. Such analysis is necessary to make informed alignment determinations. According to the center's chair, who also serves as DHS's chief architect, because Atlas is in the early stages of its life-cycle and therefore is not very well defined, such an analysis was not required, and when Atlas is more defined, a thorough and documented analysis will be performed.

[16]A review group made of subject manner experts that recommends EA compliance to the DHS Enterprise Architecture Board and ultimately to the DHS IRB.

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Objective 1 Results
Legislative Conditions

Given the critical role that Atlas is to play in contributing to DHS's strategic information sharing and interoperability goals, it is important for ICE and DHS to follow through on the stated provision to base future Atlas compliance determinations on documented and verifiable analysis.

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Objective 1 Results
Legislative Conditions

Condition 3 Satisfied. The plan, including related program documentation and statements from the Atlas program manager, either satisfies or provides for satisfying the condition to comply with the acquisition rules, requirements, guidelines, and systems acquisition management practices of the federal government. These practices provide a management framework based on the use of rigorous and disciplined processes for planning, managing, and controlling the acquisition of IT resources, including:

- acquisition planning, which ensures, among other things, that reasonable plans, milestones, and schedules are developed and that all aspects of the acquisition effort are included in these plans;
- solicitation, which involves making sure that a request for proposal that delineates a project's requirements is prepared and, consistent with relevant solicitation laws and regulations, that a contractor is selected that can most cost-effectively satisfy these requirements;
- requirements development and management, which includes establishing and maintaining a common and unambiguous definition of requirements among the acquisition team, the system users, and the development contractor;

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Objective 1 Results
Legislative Conditions

- project management, provides for management of the activities within the project office and supporting contractors to ensure a timely, efficient, and cost-effective acquisition;
- contract tracking and oversight, which ensures that the development contractor performs according to the terms of the contract; needed contract changes are identified, negotiated, and incorporated into the contract; and contractor performance issues are identified early, when they are easier to address; and
- evaluation, which determines whether the acquired products and services satisfy contract requirements before acceptance.

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Objective 1 Results
Legislative Conditions

These acquisition management processes are also embodied in published best practices models, such as the Software Engineering Institute (SEI)'s Software Acquisition Capability Maturity Model®.[17] Examples of our analysis of ICE performance of these processes and practices are shown on the following table. They show that not all aspects of the processes and practices have been implemented, but that oral commitments have been made for doing so. Given that ICE has already invested $63.52 million on Atlas projects and plans to invest another $9.8 million this year, it is important for ICE to follow through on these commitments.

[17]Developed by Carnegie Mellon Software Engineering Institute (SEI), *Software Acquisition Capability Maturity Model* (SA-CMM®), Version 1.03 (March 2002).

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Objective 1 Results
Legislative Conditions

Examples of practices	Results of our analysis
Acquisition planning[18] Ensures that reasonable planning for the acquisition is conducted including, among other things, developing an acquisition strategy and plan, determining the cost and schedule, and identifying risks, and defining requirements.	The expenditure plan and supporting documents (e.g., the fiscal year 2005 Atlas budget submission to OMB known as an Exhibit 300) provide aspects of a high-level acquisition strategy, such as identifying the five contracts that have been, and are to be used, to acquire products and program support services. According to the program manager, a detailed acquisition strategy will be developed when expenditure plan funds become available and current program life cycle cost and schedule estimates will be developed by September 2005. A draft risk management plan for the program has been developed that contains an inventory of risks, and according to the fiscal year 2004 expenditure plan and the Atlas program manager, the program will follow the bureau's 2002 System Development Life Cycle, which we have previously reported addresses key system acquisition planning and requirements definition activities.[19]
Project management[20] Provides for the management of activities within the project office and supporting contractors to ensure a timely, efficient, and cost-effective acquisition.	ICE has begun to establish a program office with responsibility for managing the acquisition, deployment, operation, and sustainment of Atlas. However, current staffing consists of a program manager and three contractor support staff, leaving key program office positions not staffed (e.g., project managers, EA analyst, business analyst, risk analyst). The expenditure plan states that the program office will comply with the bureau's 2002 System Development Life Cycle, which includes activities to promote a timely, efficient, and cost-effective acquisition, such as implementing key acquisition management processes advocated by Software Engineering Institute's acquisition model, and monitoring progress through monthly reports on project cost, schedule, and performance.

[18]For example see, Carnegie Mellon Software Engineering Institute, *Software Acquisition Capability Maturity Model* (SA-CMM®), Version 1.03 (March 2002).

[19]For example see, GAO, *Information Technology: Homeland Security Needs to Improve Entry Exit System Expenditure Planning*, GAO-03-563 (Washington, D.C.: June 9, 2003).

[20]For example see, Carnegie Mellon Software Engineering Institute, *Software Acquisition Capability Maturity Model* (SA-CMM®), Version 1.03 (March 2002).

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Objective 1 Results
Legislative Conditions

Condition 4 Satisfied. DHS and OMB satisfied the legislative condition requiring that the plan be reviewed and approved by the ICE IRB, DHS, and OMB.

- The ICE IRB chair approved the fiscal year 2004 expenditure plan on November 16, 2004.
- The DHS chief information officer, who also chairs the Enterprise Architecture Board, approved the plan on January 12, 2005.
- OMB approved the plan on January 4, 2005.

Condition 5 Satisfied. GAO satisfied the condition that it review the plan.

Our review was completed on May 5, 2005.

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Objective 2 Results
Observations: Economic Justification

Observation 1: Economic justification does not reflect recent and planned changes in the program's scope and purpose.

Cost-benefit analyses are essential tools for making informed program investment selection and control decisions and for establishing the return on investment benchmark against which to measure whether investments are delivering intended business value. Accordingly, the Clinger-Cohen Act, OMB guidance,[21] and investment management best practices recognize the importance of having reliable and current cost-benefit analyses.

INS developed an analysis of Atlas's costs and benefits in 2002. The analysis estimated that the program would cost about $800 million to implement over a 6-year period and would provide benefits of approximately $1.1 billion dollars, primarily through better system response times and reduced operations and maintenance costs, as shown in the following figure.

[21]Clinger-Cohen Act of 1996, 40 U.S.C. 11101-11704; and Office of Management and Budget (OMB) Circular A-130, Management of Federal Information Resources (November 30, 2000).

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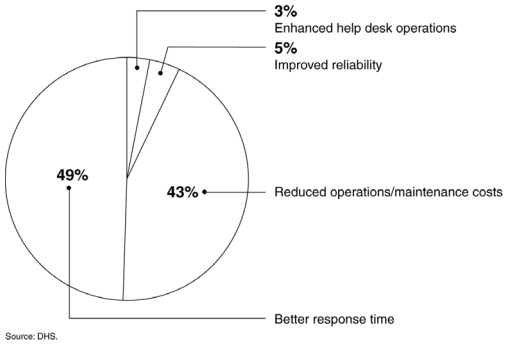
Objective 2 Results
Observations: Economic Justification

Sources of Atlas program benefits



As we have previously reported,[22] it is important for cost-benefit analyses to be updated to reflect material changes to a program's scope, purpose, cost, timeframes, etc., so that agency officials will have a reliable basis for program investment decisions.

[22]For example, see GAO, *Information Technology: Greater Use of Best Practices Can Reduce Risks in Acquiring Defense Health Care System*, GAO-02-345 (Washington, D.C.: September 26, 2002).

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Objective 2 Results
Observations: Economic Justification

Observation 1: Cont.

Since ICE became responsible for Atlas in 2003, the bureau has materially changed the program's scope, purpose, and priorities. Specifically, Atlas was expanded to

- support additional law enforcement units (and their business requirements) that were merged into ICE (e.g., Federal Air Marshals Service, Federal Protective Service, Customs investigations, Customs intelligence); and
- provide the flexibility to support new ICE priorities (e.g., integrating future anti-terrorism programs and projects, facilitating information sharing with domestic and international law enforcement organizations).

In addition, the program manager said that the program is to include efforts to streamline and reengineer core business functions with the application of information technology. According to this official, details of these efforts are to be defined in the fiscal year 2005 Atlas expenditure plan.

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Objective 2 Results
Observations: Economic Justification

Observation 1: Cont.

According to the Atlas program manager, the cost benefit analysis has not yet been revised to reflect changes to the program's scope and purpose because doing so has not been a priority. According to the fiscal year 2004 expenditure plan, revising the analysis is a "next step" to be taken. However, existing plans do not identify a date for doing so. The program manager stated that a current cost-benefit analysis will be developed once funds provided for in the expenditure plan become available. He also stated that the goal is to have a contractor complete an updated cost benefit analysis on or about September 30, 2005.

Until the cost benefit analysis is revised to reflect recent and planned changes to the program, DHS will not have a reliable basis for making informed Atlas investment decisions.

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Objective 2 Results

Observations: Program Management Controls and Capabilities

Observation 2: Program management controls and capabilities have yet to be established.

As we have previously reported,[23] the success of major modernization programs such as Atlas depends on having an operational program office that has, among other things, effectively implemented rigorous and disciplined program management process controls and adequately filled key human capital positions. Two activities key to strategically managing human capital are performing staffing needs assessments and defining staff roles and responsibilities.

The SEI's Software Acquisition Capability Maturity Model (SA-CMM®)[24] has defined a suite of key acquisition process areas that are necessary to manage the system acquisition program in a rigorous and disciplined fashion. As described earlier in the briefing, these process areas include:

- acquisition planning,
- solicitation,
- requirements development and management,
- project management,
- contract tracking and oversight, and
- evaluation.

[23] For example, see GAO, *Information Technology: Homeland Security Needs to Improve Entry Exit System Expenditure Planning*, GAO-03-563 (Washington, D.C.: June 9, 2003).

[24] Carnegie Mellon Software Engineering Institute, *Software Acquisition Capability Maturity Model* (SA-CMM®), Version 1.03 (March 2002).

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Objective 2 Results

Observations: Program Management Controls and Capabilities

Observation 2: Cont.

ICE has begun to establish an Atlas program office. For example, the bureau has drafted a management structure and plan, which includes staff roles and responsibilities. However, the structure and plan are currently being reviewed by ICE management and the program office is not yet operational. Moreover, while key acquisition management processes have been defined in the System Development Life Cycle methodology, which our previous work[25] has shown adequately defines the critical management processes needed to successfully acquire systems, the program office has yet to implement these processes.

[25] For example, see GAO, *Information Technology: Homeland Security Needs to Improve Entry Exit System Expenditure Planning*, GAO-03-563 (Washington, D.C.: June 9, 2003).

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Objective 2 Results

Observations: Program Management Controls and Capabilities

Observation 2: Cont.

In addition, the program office is not adequately staffed.[26] Currently, the office has staffed the program manager position and it has three contracting staff performing such functions as developing staffing needs assessments and other program management related activities. Further, while the program manager recently assessed staffing needs for program support positions (e.g., financial management, contracting, EA), he has not yet determined the staffing needs for five Atlas projects**.** Specifically, the program manager recently asked, and the project managers provided estimates of, staffing needed, but these estimates were not based on an estimating methodology or staffing needs assessment. Instead, the project managers provided estimates of the staff that could be obtained given the funding provided in the plan. Moreover, of the seven program support positions that the program has determined it needs, none have been filled. (The figure on the next slide shows the proposed office structure, along with the organizational areas where staffing needs have and have not been assessed, and where staffing needs have and have not been filled.)

[26]According to the program manager, Atlas staff were transferred to the US-Visitor and Immigrant Status Indicator Technology program in 2003, which is managed by the DHS Under Secretary for Border and Transportation Security.

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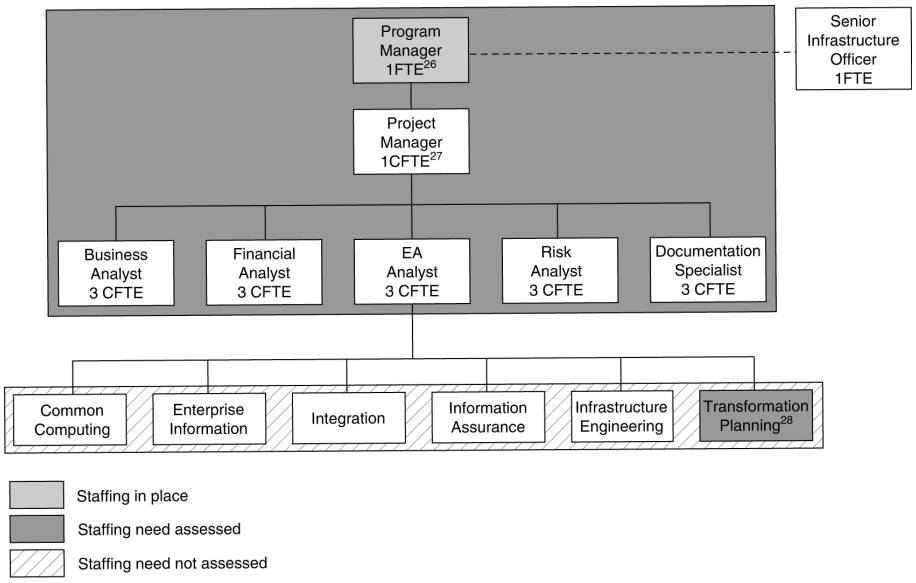
Objective 2 Results

Observations: Program Management Controls and Capabilities

Observation 2: Cont. Proposed Program Management Office



Source: GAO analysis of DHS data.

[27]Government full-time employees
[28]Contracting full-time employees
[29]According to the program manager, the staff for the Transformation Planning project also serve as the staff for the program office.

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Objective 2 Results

Observations: Program Management Controls and Capabilities

Observation 2: Cont.

The program manager attributes the state of the program office, including controls and capabilities, to competing DHS priorities. He stated that ICE plans to strengthen program management controls and capabilities once funds provided for in the expenditure plan are available. In particular, he cited two projects (Transformation Planning and Infrastructure Engineering) in the expenditure plan that have this goal. However, existing program documentation does not describe how and when these projects are to achieve this goal. Moreover, it should be noted that of the $63.52 million obligated for Atlas in fiscal years 2002 and 2003, $900,000 (or about 1.4 percent of the total) was obligated for these two projects. While the current expenditure plan proposes investing $2.17 of the $9.8 million on these two projects, this still represents but 4 percent of the $73.37 million Atlas funding to date going to improving program management. By contrast, our work on other IT modernization programs, such as US-VISIT, shows that roughly 19 percent was invested in program management.

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Objective 2 Results

Observations: Program Management Controls and Capabilities

Observation 2: Cont.

Until the above program management controls and capabilities are in place and functioning, ICE faces the increased likelihood that Atlas will not meet its objectives on schedule and within budget.

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Objective 2 Results
Observations: Performance Goals and Measures

Observation 3: Program goals, expected benefits, and reported achievements are not fully aligned.

The Clinger-Cohen Act[30] requires the use of effective IT management practices, including measuring the contributions of IT investments to achieving agency mission outcomes. To this end, OMB states[31] that agencies should, among other things

- establish program performance goals and expected benefits,
- develop outcome-based measures to assess actual program performance (i.e., achievements) against expected benefits, and
- ensure that goals, expected benefits, and achievements are properly aligned.

[30]Clinger-Cohen Act of 1996, Public Law 104-106; and Office of Management and Budget (OMB) Circular A-130, Management of Federal Information Resources (November 30, 2000).
[31]OMB Circular No. A-11, Part 7 (revised July 2004).

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Objective 2 Results
Observations: Performance Goals and Measures

Observation 3: Cont.

The Atlas expenditure plan and documentation show that the program has defined goals and expected benefits and has reported actual achievements accomplished during 2002 and 2003. The stated goals include:

- enhancing productivity, and
- assuring integrity, security, and privacy of information and data assets, and
- promoting information sharing and collaboration.

The stated benefits include:

- better response time,
- reduced operations/maintenance costs,
- improved reliability, and
- enhanced help desk operations.

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Objective 2 Results
Observations: Performance Goals and Measures

Observation 3: Cont.

In addition, examples of stated achievements are

- purchased Active Directory hardware and software for the e-mail system,
- initiated an interim Security Operations Center, and
- developed a data encryption approach for the network.

However, the relationships among goals, benefits, and achievements have not been defined, and are not otherwise apparent in all cases. For example, it is not clear how the following reported achievements relate to Atlas goals.

- improving the capacity of the network,
- implementing tools to monitor network performance, and
- completing an Enterprise Information Concept of Operations document.

Moreover, the reported achievements are not expressed in terms of measurable outcomes or results, but rather as activities completed.

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Objective 2 Results
Observations: Performance Goals and Measures

Observation 3: Cont.

The program manager stated that the 2002 and 2003 achievements were not analyzed and aligned to program goals and benefits and outcome-based measures were not developed because the emphasis at the time was on buying and deploying long-overdue infrastructure upgrades as quickly as possible. However, he also stated that the program intends to define, ensure, and disclose the linkage among program goals, benefits, and results in the future. To this end, the program manager stated that one performance measure for each project has been defined as a starting point and that other outcome-based performance measures will be defined and used to assess program progress. However, existing program plans and documentation do not specify how and when this will be done.

The program manager also told us that the state of Atlas's performance practices are due to competing DHS priorities limiting the resources that have been devoted to the program. Until the program aligns its goals, benefits, and performance measures, it will not have the necessary means for measuring progress, ensuring accountability, and making well-informed investment decisions.

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Objective 2 Results
Observations: Expenditure Plan Lacks Detail

Observation 4: Fiscal year 2004 expenditure plan does not provide sufficient information on program commitments to permit effective congressional oversight.

As we have previously reported,[32] the legislative requirement to submit expenditure plans for major IT modernization programs, like Atlas, to the Appropriations Committees is intended to provide lawmakers with a sufficient understanding of the programs to permit informed decision-making about the use of the appropriated funds and provide a mechanism for holding the agency accountable for results. Our prior experience in working with Congress and other agencies on developing and implementing expenditure plans shows that these plans need to disclose a sufficient level and scope of information for Congress to understand what the system capabilities and benefits are to be delivered, by when, at what cost, and what progress is being made against the commitments.

The Atlas expenditure plan does not show the level of detail and scope of the program for Congress to understand its plans and commitments relative to system capabilities, cost, benefits, and schedule. Further, it does not sufficiently describe progress made against program commitments (e.g., expected benefits).

[32]For example, see GAO, *Information Technology: Homeland Security Needs to Improve Entry Exit System Expenditure Planning*, GAO-03-563 (Washington, D.C.: June 9, 2003).

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Objective 2 Results
Observations: Expenditure Plan Lacks Detail

Observation 4: Cont.

Instead, the expenditure plan and supporting documentation describe, for example, high-level system capabilities to be delivered under each project, planned expenditure aggregated by project (not linked to system capabilities). It does not link planned expenditures to system capabilities, set milestones for delivery of system capabilities, or discuss benefits to be realized as a result of planned system investments.

According to the Atlas program manager, the state of the plan reflects the program's uncertainty about the appropriate level of detail in expenditure plans. This official also stated that future plans will reflect GAO's published work on the content of program expenditure plans. If it does not, the Congress will not have essential information needed to make informed decisions about expenditure plan approval and to oversee progress.

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Conclusions

The fiscal year 2004 Atlas expenditure plan, in combination with related program documentation and program officials' statements, satisfies the legislative conditions set forth by Congress. However, this satisfaction is based on plans and commitments that provide for meeting these conditions, rather than on completed actions to satisfy the conditions. As such, much remains to be accomplished before Atlas planning and management efforts can be considered effective and thereby minimize the risks associated with the program's capacity to deliver promised IT infrastructure capabilities and benefits on time and within budget.

The current state of planning and management puts the program at risk. While this is partially due to events beyond the program's control, such as the department's decision to reprogram Atlas funding and to redeploy Atlas staff to competing DHS priorities, as well as changes to the program's scope and purpose when it transitioned from INS to ICE, it is also due to the program's decision to not use fiscal year 2002 and 2003 funds to invest in program management capabilities.

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Conclusions

Given that more than $60 million has been reportedly obligated to date on the program, resources have been available to strengthen planning and management capabilities in key areas, but investment in these areas has been deferred. Deferral of establishing such program planning and management controls and capabilities, such as having reliable and current economic justification for the program, a capable program office, and clearly aligned program goals, benefits, and performance measures, introduce unnecessary risk to the program.

Moreover, not providing congressional decision-makers with the information that they need about program commitments to be met with the expenditure plan funds, including the benefits to be produced, the capabilities to be delivered, and the cost and schedule estimates to be met, impedes congressional oversight.

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Recommendations for Executive Action

To minimize risks to the Atlas program, we recommend that the Secretary of Homeland Security, through the Under Secretary for Border and Transportation Security, direct the Assistant Secretary for Immigration and Customs Enforcement to ensure that ICE follows through on commitments to implement effective management controls and capabilities by

- Revising and updating the cost-benefit analysis to identify current mission requirements, how they will be met, and an estimate of the program's incremental and life-cycle costs, benefit, schedule, and return on investment. This should also include establishing plans, associated tasks, and milestones for accomplishing this effort.
- Making the Atlas program office operational by (1) developing a staffing needs assessment to determine the positions and the level of staffing needed for all projects to adequately manage the program, including a human capital strategy for acquiring the staff and a timetable for bringing them on board; (2) finalizing the roles and responsibilities for the positions identified in the staffing assessment and for the projects; and (3) implementing and institutionalizing key acquisition management controls, including risk management processes where relevant responsibilities are assigned and key risks and their status are reported to an executive body.

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Recommendations for Executive Action

- Developing and implementing an updated Atlas security plan and privacy impact assessment. This should also include establishing plans, associated tasks, and milestones for accomplishing this effort.
- Developing and implementing rigorous performance management practices for the Atlas program that include properly aligned goals, benefits, and achievements, and anticipated achievements that are defined in measurable terms. This should also include establishing plans, associated tasks, and milestones for accomplishing this effort.
- Ensuring that future expenditure plans fully disclose the system capabilities, schedule, cost-benefits to be delivered, as well as the acquisition strategy for Atlas.

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Agency Comments

In providing oral comments on a draft of this briefing, ICE's chief information officer and the Atlas program manager agreed with our findings and conclusions and stated that our recommendations were reasonable. They also provided technical comments, which we incorporated in the briefing as appropriate.

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Attachment I
Scope and Methodology

To accomplish our objectives, we

- analyzed the fiscal year 2004 Atlas expenditure plan and supporting documents against legislative conditions and other relevant federal requirements, guidance, and best practices to determine whether the conditions were met, and in doing so, considered the conditions met when the expenditure plan, including supporting program documentation and program officials' representations, either satisfied or provided for satisfying the conditions, and
- assessed supporting documentation and interviewed program and other involved ICE and DHS officials to determine capabilities in key program management areas, such as
  - acquisition planning,
  - enterprise architecture,
  - project management,
  - human capital planning, and
  - risk management.

For DHS data that we did not substantiate, we have made appropriate attribution indicating that data's source.

We conducted our work at ICE and DHS headquarters in Washington, D.C. from March 2005 through May 2005 in accordance with generally accepted government auditing standards.

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Comments from the U.S. Department of Homeland Security

U.S. Department of Homeland Security
Washington, DC 20528

Homeland Security

August 18, 2005

Mr. Randolph C. Hite
Director, Information Technology Architecture and System Issues
U.S. Government Accountability Office
Washington, DC 20548

The Department of Homeland Security (DHS) appreciates the opportunity to review and comment on the Government Accountability Office's (GAO) draft report GAO-05-805 entitled, "INFORMATION TECHNOLOGY: Management Improvements Needed in Immigration and Customs Enforcement's Infrastructure Modernization Program". The Department concurs with all recommendations for executive action contained in the report.

To minimize risks to the Atlas program, GAO made the following recommendations to ensure Immigration and Customs Enforcement (ICE) follows through on commitments to implement effective management controls and capabilities.

It should also be noted that with the recent release of expenditure authority for the ATLAS FY04 funds, ICE is now better positioned to aggressively address the concerns identified in the GAO Draft Report. Some of the immediate steps already taken are described below.

GAO Recommendation 1: Revising and updating the cost-benefit analysis, to identify current mission requirements, how they will be met, and an estimate of the program's incremental and life cycle costs, benefit, schedule and return on investment. This should also include establishing plans, associated tasks and milestones for accomplishing this effort.

Response: An Atlas Preliminary Business Case was completed on June 21, 2005. It reflects a high-level statement of the planned functionality and environment established by Atlas. The Atlas Comprehensive Business Case is being developed and is scheduled for completion by September 30, 2005. The Atlas Comprehensive Business Case will include a detailed cost benefit analysis, operations and maintenance costs for all six Atlas projects.

GAO Recommendation 2: Making the Atlas Program office operational by (1) developing a staffing needs assessment to determine the positions and the level of staffing needed for all projects to adequately manage the program, including a human capital strategy for acquiring the staff and a timetable for bringing them on board; (2) finalizing the roles and responsibilities for the positions identified in the staffing assessment and for the projects; and (3) implementing and institutionalizing key acquisition management controls, including risk management processes where relevant responsibilities are assigned and key risks and their status are reported to an executive body.

www.dhs.gov

Response: The Atlas Program Management Office (PMO) has been established and full project staffing for the Atlas PMO has been initiated. A draft organizational assessment for the Atlas PMO is complete and undergoing review by ICE management. The draft organizational assessment includes a detailed description of functional roles and responsibilities for each Atlas PMO position. A comprehensive Atlas staffing plan will be completed by September 30, 2005. Full project staffing for the Atlas PMO will begin immediately.

Atlas acquisition strategies are reflected in the FY 2005 Atlas Expenditure Plan, currently undergoing formal DHS management review. The required Atlas Program Management Plan, Atlas Risk Management Plan, Atlas Acquisition Plan, and Atlas Acquisition Program Baseline are scheduled for completion by October 31, 2005.

GAO Recommendation 3: Developing and implementing an updated atlas security plan and privacy impact assessment. This should also include establishing plans, associated tasks and milestones for accomplishing this effort.

Response: A Systems Security Plan, and Systems Security Test Plan, are being developed and will be completed by December 31, 2005. The Atlas Privacy Impact Assessment was submitted to the DHS Privacy Office on August 2, 2005 for review.

GAO Recommendation 4: Developing and implementing rigorous performance management practices for the Atlas program that include properly aligned goals, benefits and achievements, and anticipated achievements that are defined in measurable terms. This should also include establishing plans, associated tasks and milestones for accomplishing this effort.

Response: The FY 2005 Atlas Expenditure Plan includes a section containing outcome measures and an appendix containing proposed Atlas performance measures. ICE submitted the proposed Atlas performance measures to the Office of Management and Budget (OMB) on July 13, 2005, with its PART review.

The Atlas PMO is in the process of developing policies and procedures to track these performance measures, and acquiring project management tools to be used to support tracking program/project costs, schedules, and performance.

GAO Recommendation 5: Ensuring that future expenditure plans fully disclose the system capabilities, schedule, cost and benefits to be delivered, as well as the acquisition strategy for Atlas.

Response: The FY 2005 Atlas Expenditure Plan, currently being reviewed by DHS management, is a 74-page document consisting of an Executive Summary, six sections and six appendices, and addresses planned outcomes for each project, including system capabilities, project schedule, costs, planned budget obligations and Atlas program benefits. The FY 2005 Atlas Expenditure Plan also outlines acquisition strategies. Future Atlas Expenditure Plans will be further improved based upon lessons learned.

We thank you for the opportunity to provide comments on this draft report and look forward to working with you on future homeland security issues.

Sincerely,

Steven J. Pecinovsky
Director, Departmental GAO/OIG Liaison

GAO Contact and Staff Acknowledgments

GAO Contact

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Staff Acknowledgments

In addition to the individual named above, Gary Mountjoy, Assistant Director; Nancy Glover; James Houtz; and Tammi Nguyen made key contributions to this report.

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