HOMELAND SECURITY

US-VISIT Program Faces Operational, Technological, and Management Challenges

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Homeland Security and Justice Issues
US-VISIT Program Faces Operational, Technological, and Management Challenges

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Although US-VISIT has conducted various exit demonstration projects at a small number of POEs, a biometric exit capability is not currently available. According to program officials, this is due to a number of factors. For example, at this time the only proven technology available for biometric land exit verification would necessitate mirroring the processes currently in use for entry at these POEs, which would create costly staffing demands and infrastructure requirements, and introduce potential trade, commerce, and environmental impacts. Further, a pilot project to examine an alternative technology at land POEs did not produce a viable solution. By statute, DHS was to have reported to Congress by June 2005 on how it intended to fully implement a comprehensive, biometric entry/exit program, but DHS had not yet reported how it intended to do so, or use nonbiometric solutions.

DHS continues to face longstanding US-VISIT management challenges and future uncertainties. For example, DHS had not articulated how US-VISIT is to strategically fit with other land border security initiatives and mandates and could not ensure that these programs work in harmony to meet mission goals and operate cost effectively. DHS had drafted a strategic plan defining an overall immigration and border management strategy but, as of February 2007, the plan was under review by OMB. Further, critical acquisition management processes need to be established and followed to ensure that program capabilities and expected mission outcomes are delivered on time and within budget. These processes include effective project planning, requirements management, contract tracking and oversight, test management, and financial management. Until these issues are addressed, the risk of US-VISIT continuing to fall short of expectations is increased.
Mr. Chairman and Members of the Committee:

I appreciate the opportunity to be here today to provide a summary of our work on the challenges facing the Department of Homeland Security (DHS) as it implements United States Visitor and Immigrant Status Indicator Technology (US-VISIT) at air, sea, and land ports of entry (POE).¹

In the years since the 2001 terrorist attacks, the need to secure U.S. borders has taken on added importance and has received increasing attention from Congress and the public. In an effort to avoid repetition of such attacks, and improve overall national security, Congress and the Administration have sought better ways to record and track the entry and departure of foreign visitors who pass through U.S. POEs by air, land, or sea; to verify their identities; and to authenticate their travel documentation. Pursuant to several statutory mandates, DHS, in consultation with the Department of State, established an automated visitor system to integrate information on the entry and exit from the United States of foreign nationals, called the US-VISIT Program. According to DHS, the purpose of US-VISIT is to enhance the security of U.S. citizens and visitors, facilitate legitimate travel and trade, ensure the integrity of the U.S. immigration system, and protect visitors’ privacy. The program is managed by the US-VISIT Program Office, which is headed by the US-VISIT Director, who currently reports to the DHS Deputy Secretary. However, as of March 31, 2007, the US-VISIT Program Office is expected to report to the newly established Under Secretary for the National Protection and Program Directorate. US-VISIT is used in the field by officers with U.S. Customs and Border Protection (CBP), a separate DHS component.

US-VISIT is designed to use biographic information (e.g., name, nationality, and date of birth) and biometric information (e.g., digital fingerprint scans and photographs) to verify the identity of those covered by the program. The program applies to certain visitors whether they hold a nonimmigrant visa or are traveling from a country that has a visa waiver

¹ A port of entry is generally a physical location, such as a pedestrian walkway and/or a vehicle plaza with booths, and associated inspection and administration buildings, at a land border crossing point, or a restricted area inside an airport or seaport, where entry into the country by persons and cargo arriving by air, land, or sea is controlled by U.S. Customs and Border Protection.
agreement with the United States under the Visa Waiver Program. U.S. citizens, lawful permanent residents, and most Canadian and Mexican citizens are currently exempt from being processed under US-VISIT upon entering and exiting the country.

Many aspects of US-VISIT program implementation have been driven or defined by various legislative mandates. These include a 2001 statutory requirement to focus particularly on the use of biometric technology in developing the integrated entry-exit system subsequently named US-VISIT; a 2002 statutory requirement to develop biometric identifier standards to be used to verify the identity of persons seeking to enter the United States at POEs; and a requirement to install at all POEs equipment and software to allow biometric comparison and authentication of U.S. visas and other travel and entry documents issued to aliens, as well as Visa Waiver Program participant passports. In addition, by law, an integrated entry and exit data system was to be implemented at all U.S. POEs, including land POEs, by December 31, 2005, but there was no specific requirement to collect any new data on foreign nationals departing at land POEs by that date. The Intelligence Reform and Terrorism Prevention Act of 2004, on the other hand, did require the collection of biometric exit data for all

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2 The Visa Waiver Program enables nationals of certain countries to travel to the United States for tourism or business for stays of 90 days or less without obtaining a visa. Most western European countries participate in this program, along with Japan, Singapore, Australia, Brunei, and New Zealand.

3 To visit the United States, Mexican citizens generally need either a Mexican passport and U.S. visa, or a Border Crossing Card (BCC), which is issued to Mexican visitors who wish to enter the country for business or pleasure for no more than 6 months. The BCC contains machine-readable biographic and biometric information. Mexican citizens with BCCs who are traveling within 25 miles of the border, (75 miles in Arizona, if entering through certain POEs near Tucson) and who plan to stay no more than 30 days, are generally not subject to US-VISIT processing upon entry. A Mexican citizen is subject to US-VISIT requirements, however, if a CBP officer determines that the entrant intends to stay more than 30 days or travel beyond the 25- or 75-mile limit.

4 On July 27, 2006, DHS issued a Notice of Proposed Rulemaking that, if finalized, would expand the scope of US-VISIT to include, among others, lawful permanent residents, aliens seeking admission on immigrant visas, refugees and asylees, and certain categories of Canadians. DHS did not report how many additional persons would be covered by US-VISIT if the rule was adopted.
individuals subject to US-VISIT, but it did not set a deadline for implementation of this requirement.\footnote{For a legislative overview of the US-VISIT program, see appendix III of GAO, \textit{Border Security: US-VISIT Program Faces Strategic, Operational, and Technological Challenges at Land Ports of Entry}, GAO-07-248 (Washington, D.C.: December 2006).}

My testimony today draws on this body of completed work to provide a snapshot of what US-VISIT capabilities have and have not been delivered, what work has recently begun to enhance already delivered capabilities, and the range of longstanding challenges that hamper DHS efforts to establish and live up to program expectations and commitments. All the work on which this testimony is based was performed in accordance with generally accepted government auditing standards.

**Summary**

DHS is operating US-VISIT entry capabilities at most POEs and has begun to work to move from 2 to 10 fingerprint biometric capabilities and expand electronic information sharing with stakeholders. Of particular note is the fact that a US-VISIT biometric-based entry screening capability is operating at 115 airports, 14 seaports, and 154 land POEs. While US-VISIT has improved DHS’s ability to process visitors and verify identities upon entry, we found that management controls in place to identify and evaluate computer and other operational problems at land POEs were insufficient and inconsistently administered.

Although US-VISIT has conducted various exit demonstration projects at a small number of POEs, a biometric exit capability is not currently available. According to program officials, this is due to a number of factors. For example, at this time the only proven technology available for biometric land exit verification would necessitate mirroring the processes currently in use for entry at these POEs, which would create costly staffing demands and infrastructure requirements, and introduce potential trade, commerce, and environmental impacts. Further, a pilot project to examine an alternative technology at land POEs did not produce a viable solution. By statute, DHS was to have reported to Congress by June 2005 on how it intended to fully implement a comprehensive, biometric entry/exit program, but DHS had not yet reported how it intended to do so, or use nonbiometric solutions.

DHS continues to face longstanding US-VISIT management challenges and future uncertainties. For example, DHS had not articulated how US-VISIT is to strategically fit with other land border security initiatives and
mandates and could not ensure that these programs work in harmony to meet mission goals and operate cost effectively. DHS had drafted a strategic plan defining an overall immigration and border management strategy but, in February 2007, we were told that the plan was with OMB and had not yet been approved. Further, critical acquisition management processes need to be established and followed to ensure that program capabilities and expected mission outcomes are delivered on time and within budget. These processes include effective project planning, requirements management, contract tracking and oversight, test management, and financial management. As we have reported for several years, DHS has yet to adequately do these things. Until these issues are addressed, the risk of US-VISIT continuing to fall short of expectations is increased.

**Background**

US-VISIT is a large, complex governmentwide program intended to

- collect, maintain, and share information on certain foreign nationals who enter and exit the United States;

- identify foreign nationals who (1) have overstayed or violated the terms of their visit; (2) can receive, extend, or adjust their immigration status; or (3) should be apprehended or detained by law enforcement officials;

- detect fraudulent travel documents, verify visitor identity, and determine visitor admissibility through the use of biometrics (digital fingerprints and a digital photograph); and

- facilitate information sharing and coordination within the immigration and border management community.

The US-VISIT Program Office has responsibility for managing the acquisition, deployment, operation, and sustainment of US-VISIT and has been delivering US-VISIT capability incrementally based, in part, on statutory deadlines for implementing specific portions of US-VISIT. For example, the statutory deadline for implementing US-VISIT at the 50 busiest land POEs was December 31, 2004, and at the remaining POEs, December 31, 2005. From fiscal year 2003 through fiscal year 2007, total funding for the US-VISIT program has been about $1.7 billion. According to program officials, as of January 31, 2007, almost $1.3 billion has been
obligated to acquire, develop, deploy, enhance, operate, and maintain US-VISIT entry capabilities, and to test and evaluate exit capability options.\textsuperscript{6}

Since 2003, DHS has planned to deliver US-VISIT capability in four increments: Increment 1 (air and sea entry and exit), Increment 2 (air, sea, and land entry and exit), Increment 3 (land entry), and Increment 4, which is to define, design, build, and implement more strategic program capability, and which program officials stated will consist of a series of incremental releases or mission capability enhancements that will support business outcomes. In Increments 1 through 3, the program has built interfaces among existing (“legacy”) systems, enhanced the capabilities of these systems, and deployed these capabilities to air, sea, and land POEs. The capabilities that DHS currently has regarding the first three increments have been largely acquired and implemented through existing system contracts and task orders.

In reports on US-VISIT over the last several years, we have identified numerous challenges that DHS faces in delivering program capabilities and benefits on time and within budget. In September 2003, we reported that the US-VISIT program is a risky endeavor, both because of the type of program it is (large, complex, and potentially costly) and because of the way that it was being managed.\textsuperscript{7} We reported, for example, that the program’s acquisition management process had not been established, and that US-VISIT lacked a governance structure. In March 2004, we testified that DHS faces a major challenge maintaining border security while still welcoming visitors. Preventing the entry of persons who pose a threat to the United States cannot be guaranteed, and the missed entry of just one can have severe consequences. Also, US-VISIT is to achieve the important law enforcement goal of identifying those who overstay or otherwise violate the terms of their visas. Complicating the achievement of these security and law enforcement goals are other key US-VISIT goals: facilitating trade and travel through POEs and providing for enforcement of U.S. privacy laws and regulations.\textsuperscript{8} Subsequently, in May 2004, we reported that DHS had not employed the kind of rigorous and disciplined

\textsuperscript{6} This includes, for example, computers, printers, digital cameras, fingerprint scanners, telecommunications upgrades, existing system enhancements, and facilities modifications.


management controls typically associated with successful programs. Moreover, in February 2006, we reported that while DHS had taken steps to implement most of the recommendations from our 2003 and 2004 reports, progress in critical areas had been slow. As of February 2006, of 18 recommendations we made since 2003, only 2 had been fully implemented, 11 had been partially implemented, and 5 were in the process of being implemented, although the extent to which they would be fully carried out is not yet known. In addition, in June 2006, we reported that US-VISIT contract and financial management needed to be strengthened; in December 2006, we reported that the US-VISIT program faced strategic, operational and technological challenges at land ports of entry; and in February 2007, we reported that planned expenditures for the US-VISIT program needed to be adequately defined and justified.

US-VISIT Scope, Operations, and Processing at POEs

Currently, US-VISIT’s scope includes the pre-entry, entry, status, and exit of hundreds of millions of foreign national travelers who enter and leave the United States at over 300 air, sea, and land POEs. Most land border crossers—including U.S. citizens, lawful permanent residents, and most Canadian and Mexican citizens—are, by regulation or statute, not required to enroll into US-VISIT. In fiscal year 2004, for example, U.S. citizens and lawful permanent residents constituted about 57 percent of land border

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12 Since the statute governing US-VISIT applies to foreign national arrival and departure data only, U.S. citizens do not fall within the scope of the program and therefore are exempt from US-VISIT screening. Also, in general, regardless of whether they are to be processed into US-VISIT, Mexican citizens must present either a passport and visa or a BCC when seeking admission to the United States, while Canadian citizens generally do not need such documents at this time (Canadian visitors at land POEs may need passports as early as January 2008, however, under regulations implementing a new statutory provision on passport requirements). According to US-VISIT, when a Mexican receives a BCC, the data on the individual entered into U.S. databases at the time of their visa application are accessible by US-VISIT—if they are to be processed into it for any reason.
crossers; Canadian and Mexican citizens constituted about 41 percent; and less than 2 percent were US-VISIT enrollees. Figure 1 shows the number and percentage of persons processed under US-VISIT as a percentage of all border crossings at land, air, and sea POEs in fiscal year 2004.

<table>
<thead>
<tr>
<th>Land ports of entry</th>
<th>Air ports of entry</th>
<th>Sea ports of entry</th>
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<tbody>
<tr>
<td>1.4%</td>
<td>42.2%</td>
<td>38.8%</td>
</tr>
<tr>
<td>98.6%</td>
<td>57.8%</td>
<td>61.2%</td>
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Note: Persons processed by US-VISIT may include foreign nationals who were also issued an I-94 arrival/departure form (which shows the date of arrival, port of entry, and date the authorized period of admission expires) valid for multiple entries and who have re-entered multiple times. Total entering the United States includes U.S. citizens who may have re-entered the country multiple times and foreign nationals, including those not issued I-94s, such as Canadian citizens and Mexicans with BCCs, and those issued multiple entry I-94s who also may have re-entered multiple times. U.S. citizens do not fall within the statutory scope of US-VISIT and therefore are exempt from US-VISIT screening.

Foreign nationals subject to US-VISIT who intend to enter the country encounter different inspection processes at different types of POEs depending on their mode of travel. Those who intend to enter the United States at an air or sea POE are to be processed, for purposes of US-VISIT, in the primary inspection area upon arrival. Generally, these visitors are subject to prescreening, before they arrive, via passenger manifests, which are forwarded to CBP by commercial air or sea carrier in advance of
arrival. By contrast, foreign nationals intending to enter the United States at land POEs are generally not subject to prescreening because they arrive in private vehicles or on foot and there is no manifest to record their pending arrival. Thus, when foreign nationals subject to US-VISIT arrive at a land POE in vehicles, they initially enter the primary inspection area where CBP officers, often located in booths, are to visually inspect travel documents and query the visitors about such matters as their place of birth and proposed destination. Visitors arriving as pedestrians enter an equivalent primary inspection area, generally inside a CBP building. If the CBP officer believes a more detailed inspection is needed or if the visitors are required to be processed under US-VISIT, the visitors are to be referred to the secondary inspection area—an area away from the primary inspection area—which is generally inside a facility. The secondary inspection area inside the facility generally contains office space, waiting areas, and space to process visitors, including US-VISIT enrollees. Equipment used for US-VISIT processing includes a computer, printer, digital camera, and a two-fingerprint scanner. Visitors covered by US-VISIT who are determined to be admissible are issued an I-94 arrival/departure form, which, among other things, records their date of arrival and the date their authorized period of admission expires.

13 Under the Enhanced Border Security and Visa Entry Reform Act of 2002 (Pub. L. No. 107-173, § 402(a), 116 Stat. 543, 557-59), commercial air and sea carriers are to transmit crew and passenger manifests to appropriate immigration officials before arrival of an aircraft or vessel in the United States. These manifests are transmitted to CBP through the Advanced Passenger Information System (APIS), which helps officers identify (1) those arrivals for which biometric data are available and (2) foreign nationals who need to be scrutinized more closely.

14 Visitors traveling on nonimmigrant visas are issued Form I-94 and visitors from Visa Waiver Program countries are issued Form I-94W. Both forms show the date of arrival, port of entry, and date the authorized period of admission expires. At land border POEs, the Form I-94 issued to foreign nationals covered by US-VISIT who are deemed admissible is considered issued for multiple entries, unless specifically annotated otherwise. A multiple entry I-94 permits them to re-enter the country, generally for up to 6 months, without additional US-VISIT processing during the period covered by the I-94.
The US-VISIT program office has largely met its expectations relative to a biometric entry capability. For example, on January 5, 2004, it deployed and began operating most aspects of its planned biometric entry capability at 115 airports and 14 seaports for selected foreign nationals, including those from visa waiver countries; as of December 2006, the program office had deployed and began operating this entry capability in the secondary inspection areas of 154 of 170 land POEs. According to program officials, 14 of the remaining 16 POEs have no operational need to deploy US-VISIT because visitors who are required to be processed through US-VISIT are, by regulation, not authorized to enter into the United States at these locations. The other two POEs do not have entry capability deployed because they do not have the necessary transmission lines to operate US-VISIT; CBP officers at those sites have continued to process visitors manually. CBP officials told us that US-VISIT’s entry capability has generally enhanced their ability to process visitors subject to US-VISIT by providing assurance that visitors’ identities can be confirmed through biometric identifiers and by automating the paperwork associated with processing I-94 arrival/departure forms.

To the department’s credit, the development and deployment of this entry capability was largely in accordance with legislative time lines and has occurred during a period of considerable organizational change, starting with the creation of DHS from 23 separate agencies in early 2003, followed by the birth of a US-VISIT program office shortly thereafter—which was only about 5 months before the program had to meet its first legislative milestone. Compounding these program challenges was the fact that the systems that were to be used in building and deploying a biometric entry capability were managed and operated by a number of the separate agencies that had been merged to form the new department, each of which was governed by different policies, procedures, and standards.

Moreover, DHS reports that US-VISIT entry capabilities have produced results. According to US-VISIT’s Consolidated Weekly Summary Report, as of December 28, 2006, there have been more than 5,400 biometric hits in primary entry, resulting in more than 1,300 people having adverse actions,

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15 On September 30, 2004, US-VISIT expanded biometric entry procedures to include individuals from visa waiver countries applying for admission.

16 According to CBP, these POEs are classified as Class B ports. Under 8 C.F.R. §100.4 (c) (2), only citizens of the United States, Canada, and Bermuda, and Lawful Permanent Residents of the United States and certain holders of border crossing cards may enter through Class B ports.
such as denial of entry, taken against them. According to the report, about 4,100 of these hits occurred at air and sea ports of entry and over 1,300 at land ports of entry. Further, the report indicates that more than 1,800 biometric hits have been referred to DHS’s immigration enforcement unit, resulting in 293 arrests. We did not verify the information in the consolidated report.

Another potential consequence, although difficult to demonstrate, is the deterrent effect of having an operational entry capability. Although deterrence is not an expressly stated goal of the program, officials have cited it as a potential byproduct of having a publicized capability at the border to screen entry on the basis of identity verification and matching against watch lists of known and suspected terrorists. Accordingly, the deterrent potential of the knowledge that unwanted entry may be thwarted and the perpetrators caught is arguably a layer of security that should not be overlooked.

Despite these results, US-VISIT’s entry capability at land POEs has not been without operational and system performance problems. During recent visits to land POEs, we identified some space constraints and other capacity issues. For example, at the Nogales-Morley Gate POE in Arizona, where up to 6,000 visitors are processed daily (and up to 10,000 on holidays), equipment was installed\(^\text{17}\) but not used because of CBP concerns about its ability to carry out the US-VISIT process in a constrained space while thousands of other people not subject to US-VISIT are processed through the facility daily.\(^\text{18}\) Thus, visitors that are to be processed into US-VISIT from Morley Gate are directed to return to Mexico (a few feet away) and to walk approximately 100 yards to the Nogales-DeConcini POE facility, which has the capability to handle secondary inspections of this kind.

Going forward, DHS plans to introduce changes and enhancements to US-VISIT at land POEs intended to further bolster CBP’s ability to verify the identity of individuals entering the country, including a transition from digitally scanning 2 fingerprints to scanning 10. While such changes are intended to further enhance border security, deploying them may have an

\(^{17}\) Such equipment includes a computer, printer, digital camera, and fingerprint scanners.

\(^{18}\) CBP based this decision on the high volume of pedestrians entering the United States through the Morley Gate POE; the fact that, before deployment, I-94s had not been previously issued at the Morley Gate POE; and the close proximity of the Morley Gate POE facility to the nearby DeConcini POE facility, about 100 yards away.
impact on aging and space-constrained land POE facilities because they could increase inspection times and adversely affect POE operations. Our site visits, interviews with US-VISIT and CBP officials, and the work of others suggest that both before and after US-VISIT entry capability was installed at land POEs, these facilities faced a number of challenges—operational and physical—including space constraints complicated by the logistics of processing high volumes of visitors and associated traffic congestion. Moreover, our work over the past 3 years showed that the US-VISIT program office had not taken necessary steps to help ensure that US-VISIT entry capability operates as intended. For example, in February 2006 we reported that the approach taken by the US-VISIT Program Office to evaluate the impact of US-VISIT on land POE facilities focused on changes in I-94 processing time at 5 POEs and did not examine other operational factors, such as US-VISIT’s impact on physical facilities or work force requirements. As a result, program officials did not always have the information they needed to anticipate problems that occurred, such as problems processing high volumes of visitors in space-constrained facilities.

In addition, we found that management controls did not always alert US-VISIT and CBP to operational problems. Our standards for internal controls in the federal government state that it is important for agencies to have controls in place to help ensure that policies and procedures are applied and that managers be made aware of problems so that they can be addressed and resolved in a timely fashion. CBP officials at 12 of 21 land POE sites we visited told us about US-VISIT-related computer slowdowns and freezes that adversely affected visitor processing and inspection times, and at 9 of the 12 sites, computer processing problems were not always reported to CBP’s computer help desk, as required by CBP guidelines. Although various controls are in place to alert US-VISIT and CBP officials to problems as they occur, these controls did not alert officials to all problems, given that they had been unaware of the problems we identified before we brought them to their attention. These computer processing problems have the potential to not only inconvenience travelers because of the increased time needed to complete the inspection

19 GAO-06-296.

process, but to compromise security, particularly if CBP officers are unable to perform biometric checks—one of the critical reasons US-VISIT was installed at POEs.

Our internal control standards also call for agencies to establish performance measures throughout the organization so that actual performance can be compared to expected results. While the US-VISIT Program Office established performance measures for fiscal years 2005 and 2006 intended to gauge performance of various aspects of US-VISIT at air, sea, and land POEs in the aggregate, performance measures specifically for land POEs had not been developed. It is important to do so, given that there are significant operational and facility differences among these different types of POEs. Additional performance measures that consider operational and facility differences at land POEs would put US-VISIT program officials in a better position to identify problems, trends, and areas needing improvements.

Implementing a Biometric US-VISIT Exit Capability has Been a Challenge

DHS has devoted considerable time and resources toward establishing an operational exit capability. Over the last 4 years, it has committed over $160 million to pilot test and evaluate an exit solution at 12 air, 2 sea, and 5 land POEs. Despite this considerable investment of time and resources, the US-VISIT program still does not have either an operational exit capability or a viable exit solution to deploy to all air, sea, and land POEs.

A Biometric Exit Capability is being Tested at Air and Sea POEs, But Operational Concerns Need to be Addressed

Although US-VISIT is pilot testing a biometric exit capability for air and sea POEs, it is not currently available at all ports. In January 2004, devices for collecting biometric data were deployed to one airport and one seaport on a pilot basis. Subsequently, this pilot was expanded to 12 airports and 2 seaports. The pilot tested several exit alternatives, including an enhanced kiosk (a self-service device that captures a digital photograph and fingerprint, and prints out an encoded receipt), a mobile device (a handheld device operated by a workstation attendant that captures a digital photograph and fingerprint), and a validator (a handheld device operated by a workstation attendant that captures a digital photograph and fingerprint and then matches the captured photograph and fingerprint to the ones originally captured via the kiosk and encoded in the receipt).

21 Workstation attendants also assist travelers in using the kiosk.
Each alternative required the traveler to comply with inspection processes. The pilot was completed in May 2005, and established the technical feasibility of a biometric exit solution. However, it identified issues that limited the operational effectiveness of the solution, such as the lack of traveler compliance with the processes.

The fiscal year 2006 expenditure plan allocated $33.5 million to continue the exit pilots for air and sea POEs. According to program officials, US-VISIT is now developing a plan for deploying a comprehensive, affordable exit solution. However, no time frame has been established for this plan being approved or implemented. Meanwhile, US-VISIT plans to conduct a second pilot phase at air and sea POEs that will involve multiple operational scenarios which would compel greater traveler compliance, such as repositioning the kiosks, integrating biometric exit into airport check-in processes, integrating biometric exit into existing airline processes, integrating biometric exit into Transportation Security Administration screening checkpoints, and enhancing the use of Immigration and Customs Enforcement programs intended for enforcement, such as screening of targeted flights at selected airports.

Various factors have prevented US-VISIT from implementing a biometric exit capability at land POEs. Federal laws require the creation of a US-VISIT exit capability using biometric verification methods to ensure that the identity of visitors leaving the country can be matched biometrically against their entry records. However, according to officials at the US-VISIT Program Office and CBP and US-VISIT program documentation, there are interrelated logistical, technological, and infrastructure constraints that have precluded DHS from achieving this mandate, and there are cost factors related to the feasibility of implementation of such a solution. The major constraint to performing biometric verification upon exit at this time, in the US-VISIT Program Office’s view, is that the only proven technology available would necessitate mirroring the processes currently in use for US-VISIT at entry. A mirror image system for exit would, like one for entry, require CBP officers at land POEs to examine the travel documents of those leaving the country, take fingerprints, compare visitors’ facial features to photographs, and, if questions about

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identity arise, direct the departing visitor to secondary inspection for additional questioning. These steps would be carried out for exiting pedestrians as well as for persons exiting in vehicles. The US-VISIT Program Office concluded in January 2005 that the mirror-imaging solution was “an infeasible alternative for numerous reasons, including but not limited to, the additional staffing demands, new infrastructure requirements, and potential trade and commerce impacts.”

US-VISIT officials told us that they anticipated that a biometric exit process mirroring that used for entry could result in delays at land POEs with heavy daily volumes of visitors. And they stated that in order to implement a mirror image biometric exit capability, additional lanes for exiting vehicles and additional inspection booths and staff would be needed, though they had not determined precisely how many. According to these officials, it is unclear how new traffic lanes and new facilities could be built at land POEs where space constraints already exist, such as those in congested urban areas. (For example, San Ysidro, California, currently has 24 entry lanes, each with its own staffed booth and 6 unstaffed exit lanes. Thus, if full biometric exit capability were implemented using a mirror image approach, San Ysidro’s current capacity of 6 exit lanes would have to be expanded to 24 exit lanes.) As shown in figure 3, based on observations during our site visit to the San Ysidro POE, the facility is surrounded by dense urban infrastructure, leaving little, if any, room to expand in place. Some of the 24 entry lanes for vehicle traffic heading northward from Mexico into the United States appear in the bottom left portion of the photograph, where vehicles are shown waiting to approach primary inspection at the facility; the 6 exit lanes (traffic toward Mexico), which do not have fixed inspection facilities, are at the upper left.

Other POE facilities are similarly space-constrained. At the POE at Nogales-DeConcini, Arizona, for example, we observed that the facility is bordered by railroad tracks, a parking lot, and industrial or commercial buildings. In addition, CBP has identified space constraints at some rural POEs. For example, the Thousand Islands Bridge POE at Alexandria Bay, New York, is situated in what POE officials described as a “geological bowl,” with tall rock outcroppings potentially hindering the ability to expand facilities at the current location. Officials told us that in order to accommodate existing and anticipated traffic volume upon entry, they are in the early stages of planning to build an entirely new POE on a hill about a half-mile south of the present facility. CBP officials at the Blaine-Peace Arch POE in Washington state said that CBP also is considering whether to relocate and expand the POE facility, within the next 5 to 10 years, to better handle existing and projected traffic volume. According to the US-VISIT program officials, none of the plans for any expanded, renovated, or relocated POE include a mirror image addition of exit lanes or facilities comparable to those existing for entry.
In 2003, the US-VISIT Program Office estimated that it would cost approximately $3 billion to implement US-VISIT entry and exit capability at land POEs where US-VISIT was likely to be installed and that such an effort would have a major impact on facility infrastructure at land POEs. We did not assess the reliability of the 2003 estimate. The cost estimate did not separately break out costs for entry and exit construction, but did factor in the cost for building additional exit vehicle lanes and booths as well as buildings and other infrastructure that would be required to accommodate a mirror imaging at exit of the capabilities required for entry processing. US-VISIT program officials told us that they provided this estimate to congressional staff during a briefing, but that the reaction to this projected cost was negative and that they therefore did not move ahead with this option. No subsequent cost estimate updates had been prepared, and DHS’s annual budget requests have not included funds to build the infrastructure that would be associated with the required facilities.

US-VISIT officials stated that they believe that technological advances over the next 5 to 10 years will make it possible to utilize alternative technologies that provide biometric verification of persons exiting the country without major changes to facility infrastructure and without requiring those exiting to stop and/or exit their vehicles, thereby precluding traffic backup, congestion, and resulting delays. US-VISIT’s report assessing biometric alternatives noted that although limitations in technology currently preclude the use of biometric identification because visitors would have to be stopped, the use of the as yet undeveloped biometric verification technology supports the long-term vision of the US-VISIT program. However, no such technology or device currently exists that would not have a major impact on facilities. The prospects for its development, manufacture, deployment, and reliable utilization are currently uncertain or unknown, although a prototype device that would permit a fingerprint to be read remotely without requiring the visitor to come to a full stop is under development.

While logistical, technical, and cost constraints may prevent implementation of a biometrically based exit technology for US-VISIT at this time, it is important to note that there currently is not a legislatively mandated date for implementation of such a solution. The Intelligence

Reform and Terrorism Prevention Act of 2004 requires US-VISIT to collect biometric exit data from all individuals who are required to provide biometric entry data. The act did not set a deadline, however, for requiring collection of biometric exit data from all individuals who are required to provide biometric entry data. Although US-VISIT had set a December 2007 deadline for implementing exit capability at the 50 busiest land POEs, US-VISIT has since determined that implementing exit capability by this date is no longer feasible, and a new date for doing so has not been set.

US-VISIT has tested nonbiometric technology to record travelers’ departure, but testing showed numerous performance and reliability problems. Because there is at present no biometric technology that can be used to verify a traveler’s exit from the country at land POEs without also making major and costly changes to POE infrastructure and facilities, US-VISIT tested radio frequency identification (RFID) technology as a nonbiometric means of recording visitors as they exit. RFID technology can be used to electronically identify and gather information contained on a tag—in this case, a unique identifying number embedded in a tag on a visitor’s arrival/departure form— which an electronic reader at the POE is intended to detect. While RFID technology required few facility and infrastructure changes, US-VISIT’s testing and analysis at five land POEs at the northern and southern borders identified numerous performance and reliability problems, such as the failure of RFID readers to detect a majority of travelers’ tags during testing. For example, according to US-VISIT, at the Blaine-Pacific Highway test site, of 166 vehicles tested during a 1-week period, RFID readers correctly identified 14 percent—a sizable departure from the target read rate of 70 percent.

Another problem that arose was that of cross-reads, in which multiple RFID readers installed on poles or structures over roads, called gantries, picked up information from the same visitor, regardless of whether the individual was entering or exiting in a vehicle or on foot. Thus, cross-reads resulted in inaccurate record keeping.

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26 A US-VISIT program official explained that for vehicles exiting during RFID testing, one could “reasonably expect” a read rate of 70 percent because vehicles are not required to stop upon exit. The official also cited vehicle speed, safety, and awareness (of optimal positioning of the arrival/departure form; for example, holding the form up to the window of the vehicle) as factors that affected RFID read rates.
Even if RFID deficiencies were to be fully addressed and deadlines set, questions remain. For example, the RFID solution did not meet the congressional requirement for a biometric exit capability because the technology that had been tested cannot meet a key goal of US-VISIT—ensuring that visitors who enter the country are the same ones who leave. By design, an RFID tag embedded in an I-94 arrival/departure form cannot provide the biometric identity-matching capability that is envisioned as part of a comprehensive entry/exit border security system using biometric identifiers for tracking overstays and others entering, exiting, and re-entering the country. Specifically, the RFID tag in the I-94 form cannot be physically tied to an individual. This situation means that while a document may be detected as leaving the country, the person to whom it was issued at time of entry may be somewhere else.

DHS was to have reported to Congress by June 2005 on how the agency intended to fully implement a biometric entry/exit program. In February 2007, US-VISIT officials told us that this plan had been forwarded to the Office of Management and Budget (OMB) for review. According to statute, this plan is to include, among other things, a description of the manner in which the US-VISIT program meets the goals of a comprehensive entry and exit screening system—including both biometric entry and exit—and fulfills statutory obligations imposed on the program by several laws enacted between 1996 and 2002. Until such a plan is finalized and issued, DHS is not able to articulate how entry/exit concepts will fit together—including any interim nonbiometric solutions—and neither DHS nor Congress is positioned to prioritize and allocate resources for a US-VISIT exit capability or plan for the program’s future.

Our work and other best practice research have shown that applying disciplined and rigorous management practices improves the likelihood of delivering expected capabilities on time and within budget. Such practices and processes include determining how the program fits within the larger context of an agency’s strategic plans and related operational and technology environments, whether the program will produce benefits in excess of costs over its useful life, and whether program impacts and options are being fully identified, considered, and addressed. To further ensure that programs are managed effectively, it is important that they be executed in accordance with acquisition and financial management

DHS Continues to Face Longstanding US-VISIT Management Challenges and Future Uncertainties

requirements and best practices, and that progress against program commitments is defined and measured so that program officials can be held accountable for results.

Over the last several years, we have reported on fundamental limitations in DHS’s efforts to define and justify the program’s future direction and to cost-effectively manage the delivery of promised capabilities on time and within budget. To a large degree, what is operating and what is not operating today, and what future program changes are underway and yet to be defined, are affected by these limitations. DHS needs to address these challenges going forward, and the recommendations that we made are aimed at encouraging this. Until these recommendations are fully implemented, the program will be at greater risk of not optimally meeting mission needs and falling short of meeting expectations.

DHS Has Not Defined and Developed US-VISIT Within a DHS-wide Operational and Technological Context

As we previously reported, agency programs need to properly fit within a common strategic context or frame of reference governing key aspects of program operations (such as who is to perform what functions, when and where they are to be performed, what information is to be used to perform them, and what rules and standards will govern the use of technology to support them). Without a clear operational context to guide and constrain both US-VISIT and other border security and immigration enforcement initiatives, DHS risks investing in programs and systems that are duplicative, are not interoperable, and do not optimize enterprisewide mission operations and produce intended outcomes.

For almost 4 years, DHS has continued to pursue US-VISIT (both in terms of deploying interfaces between and enhancements to existing systems and in defining a longer-term, strategic US-VISIT solution) without producing the program’s operational context. In September 2003, we reported that DHS had not defined key aspects of the larger homeland security environment in which US-VISIT would need to operate. In the absence of a DHS-wide operational and technological context, program officials were making assumptions about certain policy and standards decisions that had not been made, such as whether official travel documents would be required for all persons who enter and exit the country—including U.S. and Canadian citizens—and how many fingerprints would be collected for biometric comparisons. We further

reported that if the program office’s assumptions and decisions turned out to be inconsistent with subsequent policy or standards decisions, it would require US-VISIT rework.

According to the program’s Chief Strategist, an immigration and border management strategic plan was drafted in March 2005 to show how US-VISIT is aligned with DHS’s organizational mission and to define an overall vision for immigration and border management. According to this official, the vision provides for an immigration and border management enterprise that unifies multiple departmental and external stakeholders around common objectives, strategies, processes, and infrastructures. As of February 2007, about 2 years later, we were told that this strategic plan has not yet been approved, although the program’s Acting Director stated that the plan is currently with OMB and should be provided to the House and Senate Appropriations Subcommittees on Homeland Security by March 2007.

However, at the same time, US-VISIT has not taken steps to ensure that the direction that it is taking is both operationally and technologically aligned with DHS’s enterprise architecture (EA). As the report that we issued this week states, the DHS Enterprise Architecture Board, which is the DHS entity that determines EA compliance, has not reviewed the US-VISIT architecture compliance for more than 2 years. However, since August 2004, both US-VISIT and the EA have changed. For example, additional functionality, such as the interoperability of US-VISIT’s Automated Biometric Information System (IDENT) and the Department of Justice’s Integrated Automated Fingerprint Identification System (IAFIS), and the expansion of IDENT to collect t10 rather than 2 fingerprints, has been added. Also, two versions of the DHS EA have been issued since August 2004.

While the strategic plan has not been approved or disseminated, the program office has developed a strategic vision and blueprint and begun to implement it. According to program officials, this future vision is to be delivered through a number of planned mission capability enhancements. Of these, the first enhancement is underway and is to provide several new capabilities, including what the program refers to as “Unique Identity,” which is to include the migration from the 2-fingerprint to 10-fingerprint collection at program enrollment. It is also to interoperate US-VISIT’s IDENT system and the Department of Justice’s IAFIS system. Currently, the US-VISIT officials plan to complete Unique Identity in several phases and have it fully operational by December 2009, although these plans have not yet approved by DHS.
At this same time, DHS has launched other major border security programs without adequately defining the relationships to US-VISIT and each other. For example, the Intelligence Reform and Terrorism Prevention Act of 2004 directs DHS and the Department of State to develop and implement a plan, no later than June 2009, that requires U.S. citizens and foreign nationals of Canada, Bermuda, and Mexico to present a passport or other document or combination of documents deemed sufficient to show identity and citizenship to enter the United States (this is currently not a requirement for these individuals entering the United States via sea and land POEs from most countries within the western hemisphere). This effort, known as the Western Hemisphere Travel Initiative, was first announced in 2005. In May 2006, we reported that DHS and the Department of State had taken some steps to carry out the initiative, but they had a long way to go to implement their proposed plans. Among other things, key decisions had yet to be made about what documents other than a passport would be acceptable when U.S. citizens and citizens of Canada enter or return to the United States. Further, while DHS and Department of State had proposed an alternative form of passport, called a PASS card, that would rely on RFID technology to help DHS process U.S. citizens re-entering the country, DHS had not made decisions involving a broad set of considerations that include (1) utilizing security features to protect personal information, (2) ensuring that proper equipment and facilities are in place to facilitate crossings at land borders, and (3) enhancing compatibility with other border crossing technology already in use.

DHS has also initiated another border security program, known as the Secure Border Initiative (SBI)—a multi-year, multi-billion dollar program, to secure the borders and reduce illegal immigration by installing state-of-the-art surveillance technologies along the border, increasing border security personnel, and ensuring information access to DHS personnel at and between POEs. Under SBI and its component, called SBI\textit{net}, DHS

\footnote{Pub. L. No. 108-458, § 7209 (Dec. 17, 2004), as amended, Pub. L. No. 109-295, § 546 (Oct. 4, 2006). In November 2006, DHS and the Department of State issued a final rule announcing that, beginning on January 23, 2007, citizens of the United States, Canada, Mexico, and Bermuda are required to present a passport to enter the United States when arriving by air from any part of the Western Hemisphere (8 C.F.R. Parts 212 and 235 and 22 C.F.R. Parts 41 and 53). According to DHS, a separate proposed rule addressing land and sea travel will be published at a later date with specific requirements for travelers entering the United States through land and sea border crossings.}

\footnote{GAO, Observations on Efforts to Implement the Western Hemisphere Travel Initiative on the U.S. Canadian Border; GAO-06-741R (Washington, D.C.: May 25, 2006).}
plans to integrate personnel, infrastructures, technologies, and rapid response capability into a comprehensive border protection capability. DHS reports that, among other things, SBI\textit{net} is to encompass both the northern and southern land borders, including the Great Lakes, under a unified border control strategy whereby CBP is to focus on the interdiction of cross-border violations between and at the land POEs, funneling traffic to the land POEs. As part of SBI, DHS also plans to focus on interior enforcement—disrupting and dismantling cross-border crime into the interior of the United States while locating and removing aliens who are present in the United States in violation of law. However, it is unclear how SBI\textit{net} will be linked, if at all, to US-VISIT so that the two can share technology, infrastructure, and data.

Clearly defining the dependencies among US-VISIT and programs like the Western Hemisphere Travel Initiative and SBI is important because there is commonality among their strategic goals and operational environments. For example, both US-VISIT and SBI share the goal of securing the POEs. Moreover, there is overlap in the data that each is to produce and use. For example, both US-VISIT and the Western Hemisphere Travel Initiative will require identification data for travelers at POEs.

Despite these dependencies, DHS has yet to define these relationships or how they will be managed. Further, according to a March 6, 2006 memo from the DHS Joint Requirements Council, the US-VISIT strategic plan did not provide evidence of sufficient coordination between the program and the other entities involved in border security and immigration efforts. The council’s recommendation was that the strategic plan not be approved until greater coordination between US-VISIT and other components was addressed.

According to the Acting Program Director, a number of efforts are underway to coordinate with other entities, such as with CBP on RFID, with the Coast Guard on development of a mobile biometric reader, and with State on standards for document readers. Without a clear, complete, transparent, and understood definition of how related programs and initiatives are to interact, US-VISIT and other border security and immigration enforcement programs run the risk of being defined and implemented in a way that does not optimize DHS-wide performance and results.
The decision to invest in any system or capability should be based on reliable analyses of return on investment. That is, an agency should have reasonable assurance that a proposed program will produce mission value commensurate with expected costs and risks. According to OMB guidance, individual increments of major systems should be individually supported by analyses of benefits, cost, and risk. Thus far, DHS has yet to develop an adequate basis for knowing whether its incrementally deployed US-VISIT capabilities represent a good return on investment, particularly in light of shortfalls in DHS’s assessments of the program’s operational impacts, including costs of proposed capabilities. Without this knowledge, DHS will not know until after the fact whether it is investing wisely or pursuing cost-effective and affordable solutions.

US-VISIT had not assessed the cost and benefits of its early increments. For example, we reported in September 2003 that it had not assessed the costs and benefits of Increment 1. Again, in February 2005, we reported that although the program office developed a cost-benefit analysis for its land entry capability, it had not justified the investment because the treatment of both benefits and costs were unclear and insufficient. Further, we reported that the cost estimates on which the cost-benefit analysis was based were of questionable reliability because effective cost-estimating practices were not followed. Most recently, in February 2006, we reported again that the program office had not justified its investment in its air and sea exit capability. For example, we reported that while the cost-benefit analysis explained why the investment was needed, and considered at least two alternatives to the status quo, which is consistent with OMB guidance for cost-benefit analyses, it did not include a complete uncertainty analysis for the three exit alternatives evaluated. Specifically, it did not include a sensitivity analysis\(^\text{31}\) for the three alternatives, which is a major part of an uncertainty analysis. A complete analysis of uncertainty is important because it provides decision makers with a perspective on the potential variability of the cost and benefit estimates should the facts, circumstances, and assumptions change. Further, the cost estimate upon which the analysis was based did not meet key criteria for reliable cost estimating. For example, it did not include a detailed work breakdown structure, which serves to organize and define the work to be performed so that associated costs can be identified and estimated.

Further, as we state in our February 2007 report, DHS has devoted considerable time and resources toward establishing an operational exit

\(^{31}\) A sensitivity analysis is a quantitative assessment of the effect that a change in a given assumption, such as unit labor cost, will have on net present value.
capability at land, air, and sea POEs. For example, over the last 4 years, DHS has committed over $160 million to evaluate and operate exit pilots at selected air, sea, and land POEs. Notwithstanding this considerable investment of time and resources, the US-VISIT program still does not have either an operational exit capability or a viable exit solution to deploy to all air, sea, and land POEs.

Moreover, US-VISIT exit pilot reports have raised concerns and limitations. For example, as we previously stated, land exit pilots experienced several performance problems, such as the failure of RFID readers to detect a majority of travelers’ tags during testing and cross-reads, in which multiple RFID readers installed on poles or structures over roads, called gantries, picked up information from the same visitor.

Notwithstanding these results, we reported in February 2007 that the program office planned to invest another $33.5 million to continue its air and sea exit pilots. However, neither the fiscal year 2006 expenditure plan nor other exit-related program documentation adequately defined what these efforts entail or what they will accomplish. In particular, the plan and other exit-related documentation merely state that $33.5 million will be used to continue air and sea exit pilots while a comprehensive exit solution is developed. They do not adequately describe measurable outcomes (benefits and results) from the pilot efforts, or related cost, schedule, and capability commitments that will be met. Further, the plan does not recognize the challenges revealed from the prior exit efforts, nor does it show how proposed exit investments address these challenges. In addition, the plan allocates more funding for continuing the air and sea exit pilots ($33.5 million) than the prior year’s plan said would be needed to fully deploy an operational air and sea exit solution ($32 million). According to program officials, the air and sea exit pilots are being continued to maintain a presence intended to provide a deterrent effect at exit locations, and to gather additional data that could help support planning for a comprehensive exit solution.

Moreover, US-VISIT reported in August 2006 that it planned to spend an additional $21.5 million to continue its land exit demonstration project without adequate justification. However, we reported in February 2007 that these plans lacked adequate justification in light of the problems we discussed earlier in this statement. Accordingly, program officials told us that they intend to terminate the land exit project until a comprehensive exit strategy can be developed. They have also stated that a small portion of the $21.5 million is to be used to close out the demonstration project and have requested that the remainder of the money be reprogrammed to support Unique Identity.
Knowing how planned US-VISIT capabilities will impact POE operations is critical to US-VISIT investment decision makers. In May 2004, we reported that the program had not assessed how deploying entry capabilities at land POEs would impact the workforce and facilities. We questioned the validity of the program’s assumptions and plans concerning workforce and facilities, since the program lacked a basis for determining whether its assumptions were correct and thus whether its plans were adequate.

Subsequently, the program office evaluated the operational performance of the land entry capability with the stated purpose of determining the effectiveness of its performance at the 50 busiest land POEs. For this evaluation, the program office established a baseline for comparing the average time it takes to issue and process entry/exit forms at 3 of these 50 POEs, and then conducted two evaluations of the processing times at the three POEs, one after the entry capability was deployed as a pilot, and another one 3 months later, after the entry capability was deployed to all 50 POEs. The evaluation results showed that the average processing times decreased for all three sites. Program officials concluded that these results supported their workforce and facility investment assumptions that no additional staff was required to support deployment of the entry capability and that minimal modifications were required at the facilities.32

However, the scope of the evaluations was not sufficient to satisfy the evaluations’ stated purpose for assessing the full impact of the entry capability. For example, the selection of the three sites, according to program officials, was based on a number of factors, including whether the sites already had sufficient staff to support the pilot. Selecting sites based on this factor is problematic because it presupposes that all not POEs have the staff needed to support the land entry capability. In addition, evaluation conditions were not always held constant: specifically, fewer workstations were used to process travelers in establishing the baseline processing times at two of the POEs than were used during the pilot evaluations.

Moreover, CBP officials from a land port of entry that was not an evaluation site (San Ysidro) told us that US-VISIT deployment had not reduced but actually lengthened processing times. (San Ysidro processes the highest volume of travelers of all land POEs.) Although these officials did not provide specific data to support their statement, their perception

32 Specifically, they said minimal modifications to interior workspace were required to accommodate biometric capture devices and printers and to install electrical circuits. These officials stated that modifications to existing officer training and interior space were the only changes needed.
nevertheless raises questions about the potential impact of land entry
capabilities on the 47 sites that were not evaluated.

Exacerbating this situation is the fact that DHS plans to introduce changes
and enhancements to US-VISIT at land POEs to verify the identity of
individuals entering the country, including a transition from digitally
scanning 2 fingerprints to 10. While such changes are intended to further
enhance border security, deploying them may have an impact on aging and
spatially-constrained land POEs facilities because they could increase
inspection times and adversely affect POEs operations. Moreover, the
increase from 2 to 10 fingerprints can affect the capacity of the systems
and communications networks processing because of the larger data sets
being processed and transmitted (10 vs 2 fingerprints). This need for
increased capacity will in turn affect program costs.

The impact of planned exit capabilities at air and sea POEs has also not
been adequately analyzed, and is thus not available to inform investment
decisions. In February 2005, we reported that the program office had not
adequately planned for evaluating its exit pilot at air and sea POEs
because the pilot’s evaluation scope and timeline were compressed. As a
result, the US-VISIT program office extended the pilot from 5 to 14 POEs
(12 airports and 2 seaports). Notwithstanding the expanded scope of the
pilot, the exit alternatives were not sufficiently evaluated. Specifically, the
program office evaluated these alternatives against three criteria,
including compliance with the exit process. According to the exit
evaluation plan report, the average compliance rate across all three
alternatives was only 24 percent. The evaluation report cited several
reasons for the low compliance rate, including that compliance during the
pilot was voluntary. As a result, the evaluation report concluded that
national deployment of the exit solution will not meet the desired
compliance rate unless the scope of the exit process is expanded to
incorporate an enforcement mechanism, such as not allowing persons to
reenter the United States if they do not comply with the exit process or not
allowing persons to board a carrier until they are processed by an airline
or the Transportation Security Administration. As of February 2006,
program officials had not conducted any formal evaluation of enforcement
mechanisms or their possible effect on compliance and cost, and
according to the Acting Program Director, they do not plan to do so.

31 The other two evaluation criteria were conduciveness to travel and cost.

32 Compliance rates were 23 percent for the kiosk, 36 percent for the mobile device, and 26
percent for the validator.
Program management is an important and integral aspect of any system acquisition program. The importance of program management, however, does not by itself justify any level of investment in such activities. Rather, investments in program management capabilities should be viewed the same as investments in any program capability, meaning the scope, nature, size, and value of the investment should be disclosed and justified in relation to the size and significance of the acquisition activities being performed.

As our February 2007 report states, US-VISIT’s planned investment in program management-related activities has risen steadily over the last 4 years, while planned investment in development of new program capabilities has declined. Figure 3 shows the breakdown of planned expenditures for US-VISIT fiscal year 2002 through 2006 expenditure plans.

![Figure 3: US-VISIT Breakdown of Planned Expenditures as a Dollar Amount for FY2002 Through FY2006](image_url)

DHS Has Not Adequately Justified Increases in, and Disclosed the Scope and Nature of, Program Management-Related Fiscal Year 2006 Expenditures

Note: According to US-VISIT program officials, actual cost information for program management and operations cannot be readily provided due to limitations in their financial management system.
Specifically, the fiscal year 2003 expenditure plan provided $30 million for program management and operations and about $325 million for new development efforts, whereas the fiscal year 2006 plan provided $126 million for program management-related functions—an increase of $96 million—and $93 million for new development. This means that the fiscal year 2006 plan proposed expending $33 million more for program management and operations than it is for new development.

The increase in planned program management-related expenditures is more pronounced if it is viewed as a percentage of planned development expenditures. Figure 4 shows planned US-VISIT expenditures for program management and operations as a percentage of development for fiscal years 2002 thru 2006.

![Figure 4: US-VISIT Planned Expenditures for Program Management and Operations as a Percentage of Development for FY2002 through FY2006](image)

Source: GAO analysis based on US-VISIT data.

Note: According to US-VISIT program officials, actual cost information for program management and operations cannot be readily provided due to limitations in their financial management system.

Specifically, planned program management-related expenditures represented about 9 percent of planned development in fiscal year 2003, but represented about 135 percent of fiscal year 2006 development, meaning that the fiscal year 2006 expenditure plan proposed spending
about $1.35 on program management-related activities for each dollar spent on developing new US-VISIT capability.

Moreover, the fiscal year 2006 expenditure plan did not explain the reasons for this recent growth or otherwise justify the sizeable proposed investment in program management and operations on the basis of measurable and expected value. Further, the plan did not adequately describe the range of planned program management and operations activities.

Program officials told us that the DHS Acting Undersecretary for Management raised similar concerns about the large amount of program management and operations funding in the expenditure plan. In January 2007, DHS submitted a revised expenditure plan to the House and Senate Appropriations Subcommittees on Homeland Security, at the committee’s direction, to address their concerns. The revised plan allocates some program management funds to individual increments and to two new categories—program services and data integrity and biometric support, and program and project support contractor services. However, the revised plan still shows a relatively sizeable portion of proposed funding going toward program management-related activities.

Managing major programs like US-VISIT requires applying discipline and rigor when acquiring and accounting for systems and services. Our work and other best practice research have shown that applying such rigorous management practices improves the likelihood of delivering expected capabilities on time and within budget. In other words, the quality of IT systems and services is largely governed by the quality of the management processes involved in acquiring and managing them. Some of these processes and practices are embodied in the Software Engineering Institute’s (SEI) Capability Maturity Models®, which define, among other things acquisition process management controls that, if implemented effectively, can greatly increase the chances of acquiring systems that provide promised capabilities on time and within budget. Other practices are captured in OMB guidance, which establishes policies for planning, budgeting, acquisition, and management of federal capital assets.

Over the last several years, we have made numerous recommendations aimed at strengthening US-VISIT program management controls relative to acquisition management, including for example configuration
management, security and privacy management, earned value
management (EVM), and contract tracking and oversight.

The program office has taken steps to lay the foundation for establishing
several of these controls. For example, the program adopted the SEI
Capability Maturity Model Integration (CMMI) to guide its efforts to
employ effective acquisition management practices, and approved an
acquisition management process improvement plan dated May 16, 2005.
The goal, as stated in the plan, was to conduct an independent CMMI
assessment in October 2006 to affirm that requisite process controls were
in place and operating.

In September 2005, the program office completed an initial assessment of
13 key acquisition process areas that revealed a number of weaknesses. To
begin addressing these weaknesses, the program office narrowed the
scope of the process improvement activities from 13 to 6 (project
planning, project monitoring and control, requirements development and
management, configuration management, product and process quality
assurance, and risk management) of the CMMI process areas and revised
its process improvement plan in April 2006 to reflect these changes. In
May 2006, the program conducted a second internal assessment of the six
key process areas, and according to the results of this assessment,
improvements were made, but weaknesses remained in all six process
areas. For example,

- a number of key acquisition management documents were not
  adequately prepared and processes were not sufficiently defined,
  including those related to systems development, budget and finance,
  facilities, and strategic planning (e.g., product work flow among
  organizational units was unclear and not documented); and
- roles, responsibilities, work products, expectations, resources, and
  accountability of external stakeholder organizations were not well-
  defined.

Notwithstanding these weaknesses, program officials told us that their
self-assessments show that they have made incremental progress in
implementing the 113 practices associated with the six key processes. (See

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35 EVM is a management tool to help ensure that work performed for a program or project
is consistent with cost and schedule goals.

36 The CMMI ranks organizational maturity according to five levels. Maturity levels 2
through 5 require verifiable existence and use of certain key process areas.
However, they also recently decided to postpone indefinitely the planned October 2006 independent appraisal. Instead, the program intends to perform quarterly internal assessments until the results show that they can pass an independent appraisal. Further, the program has not committed to a revised target date for having an external appraisal.

Figure 5: US-VISIT Progress in Implementing Key Acquisition Practices from August 2005 to November 2006

The acquisition management weaknesses in the six key process areas are exacerbated by weaknesses in other areas. For example, we recently reported\(^37\) that the US-VISIT contract tracking and oversight process suffers from a number of weaknesses. Specifically, we reported that the program had not effectively overseen US-VISIT-related contract work.

performed on its behalf by other DHS and non-DHS agencies, and these agencies did not always establish and implement the full range of controls associated with effective management of contractor activities. Further, the program office and other agencies did not implement effective financial controls.\footnote{Financial controls are practices to provide accurate, reliable, and timely accounting for billings and expenditures.} In particular, the program office and other agencies managing US-VISIT–related work were unable to reliably report the scope of contracting expenditures. In addition, some agencies improperly paid and accounted for related invoices, including making a duplicate payment and making payments for non-US-VISIT services from funds designated for US-VISIT.

Fully and effectively implementing the above discussed key acquisition management and related controls takes considerable time. However, considerable time has elapsed since we first recommended establishment of these controls and they are not yet operational and it is unclear when they will be. Therefore, it is important that these improvement efforts stay on track. Until these capabilities are in place, the program risks not meeting its stated goals and commitments.

US-VISIT has not yet implemented other key management practices, such as developing and implementing a security plan and employing an EVM system to help manage and control program cost and schedule. As we previously reported, the program’s 2004 security plan generally satisfied OMB and the National Institute of Standards and Technology security guidance. Further, the fiscal year 2006 expenditure plan states that all of the US-VISIT component systems have been certified and accredited and given full authority to operate. However, the 2004 security plan preceded the US-VISIT risk assessment, which was not completed until December 2005, and the security plan was not updated to reflect this risk assessment. According to program officials, they intend to develop a security strategy by the end of 2006 that reflects the risk assessment. We have ongoing work for the Senate Committee on Homeland Security and Governmental Affairs to review the information security controls associated with computer systems and networks supporting the US-VISIT program.

Regarding EVM, the program is currently relying on the prime contractor’s EVM system to manage the prime contractor’s progress against cost and schedule goals. According to the fiscal year 2006 expenditure plan, the program office has assessed the prime contractor’s EVM system against relevant standards. However, in reality, this EVM system was self-certified
by the prime contractor in December 2003 as meeting established standards. OMB requires that agencies verify contractor self-certifications. The program office has yet to do this, although program officials told us that they plan to retain the services of another contractor to perform this validation. This needs to be done quickly. Our review of the integrated baseline review, which agencies are required by OMB to complete to ensure that the EVM program baseline is accurate, showed that it did not address key baseline considerations, such as cost and schedule risks. Moreover, other US-VISIT contractors have not been required to use EVM, although program officials told us that this was to change effective October 1, 2006.

DHS Has Yet to Establish Effective Program Accountability Mechanisms

To ensure that programs manage their performance effectively, it is important that they define and measure progress against program commitments and hold themselves accountable for results. Measurements of the operational performance, progress, and results are important to reasonably ensure that problems and shortfalls can be addressed and resolved in a timely fashion and so that responsible parties can be held accountable.

More specifically, to permit meaningful program oversight, it is important that expenditure plans describe how well DHS is progressing against the commitments made in prior expenditure plans. However, US-VISIT’s expenditure plan for fiscal year 2006 (the fifth expenditure plan) continued a longstanding pattern of not describing progress against commitments made in previous plans. For example, according to the fiscal year 2005 expenditure plan, the prime contractor was to begin integrating the long-term Increment 4 strategy into the interim US-VISIT system’s environment and the overall DHS enterprise architecture, and that US-VISIT and the prime contractor would work with the stakeholder community to identify opportunities for delivery of long-term capabilities under Increment 4. However, the fiscal year 2006 plan does not discuss progress or accomplishments relative to these commitments.

Additionally, the expenditure plan committed to begin deploying the most effective exit alternative for capturing biometrics at air and sea POEs during fiscal year 2005. In contrast, the 2006 expenditure plan states that the exit pilots will continue throughout fiscal year 2006 and does not address whether the fiscal year 2005 schedule deployment commitment was met. Also, the fiscal year 2006 expenditure plan did not address all performance measures cited in the fiscal year 2005 plan. Specifically, the 2005 plan included 11 measures. In contrast, the 2006 plan listed 7 measures, 4 of which are similar, but not identical to, some of the 11
measures in the 2005 plan. This means that several of the 2005 plan’s measures are not addressed in the 2006 plan. Moreover, even in cases of similar performance measures, the fiscal year 2006 plan does not adequately describe progress in meeting commitments. For example, the fiscal year 2005 expenditure plan cited a performance measurement of “Pre-entry watch list hits on biometrically enabled visa applications.” The fiscal year 2006 plan cites the performance measure of “Number of biometric watch list hits for visa applicants processed at consular offices.” According to the latter plan, in fiscal year 2005 there were 897 such hits; however, neither plan cites a performance target against which to gauge progress, assuming that the two performance measures mean the same thing. Without such measurements, program performance and accountability can suffer.

Developing and deploying complex technology that records the entry and exit of millions of visitors to the United States, verifies their identities to mitigate the likelihood that terrorists or criminals can enter or exit at will, and tracks persons who remain in the country longer than authorized is a worthy goal in our nation’s effort to enhance border security in a post-9/11 era. But doing so also poses significant challenges; foremost among them is striking a reasonable balance between US-VISIT’s goals of providing security to U.S. citizens and visitors while facilitating legitimate trade and travel.

DHS has made considerable progress making the entry portion of the US-VISIT program at air, sea and land POEs operational, but our work raised questions whether DHS has adequately assessed how US-VISIT has affected operations at land POEs. Because US-VISIT will likely continue to have an impact on land POE facilities as it evolves—especially as new technology and equipment are introduced—it is important for US-VISIT and CBP officials to have sufficient management controls for identifying and reporting potential computer and other operational problems that could affect the ability of US-VISIT entry capability to operate as intended.

With respect to DHS’s effort to create an exit verification capability, developing and deploying this capability at land POEs has posed a set of challenges that are distinct from those associated with entry. US-VISIT has not determined whether it can achieve, in a realistic time frame, or at an acceptable cost, the legislatively mandated capability to record the exit of travelers at land POEs using biometric technology. Apart from acquiring

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**Concluding Observations**

DHS has made considerable progress making the entry portion of the US-VISIT program at air, sea and land POEs operational, but our work raised questions whether DHS has adequately assessed how US-VISIT has affected operations at land POEs. Because US-VISIT will likely continue to have an impact on land POE facilities as it evolves—especially as new technology and equipment are introduced—it is important for US-VISIT and CBP officials to have sufficient management controls for identifying and reporting potential computer and other operational problems that could affect the ability of US-VISIT entry capability to operate as intended.

With respect to DHS’s effort to create an exit verification capability, developing and deploying this capability at land POEs has posed a set of challenges that are distinct from those associated with entry. US-VISIT has not determined whether it can achieve, in a realistic time frame, or at an acceptable cost, the legislatively mandated capability to record the exit of travelers at land POEs using biometric technology. Apart from acquiring
new facilities and infrastructure at an estimated cost of billions of dollars, US-VISIT officials have acknowledged that no technology now exists to reliably record travelers’ exit from the country, and to ensure that the person leaving the country is the same person who entered, without requiring that person to stop upon exit—potentially imposing a substantial burden on travelers and commerce. US-VISIT officials stated that they believe a biometrically based solution that does not require those exiting the country to stop for processing, that minimizes the need for major facility changes, and that can be used to definitively match a visitor’s entry and exit will be available in 5 to 10 years. In the interim, it remains unclear how DHS plans to proceed. According to statute, DHS was required to report more than a year ago on its plans for developing a comprehensive biometric entry and exit system, but DHS has yet to finalize this road map for Congress. Until DHS finalizes such a plan, neither Congress nor DHS is likely to have sufficient information as a basis for decisions about various factors relevant to the success of US-VISIT, ranging from funding needed for any land POE facility modifications in support of the installation of exit technology to the trade-offs associated with ensuring traveler convenience while providing verification of travelers’ departure consistent with US-VISIT’s national security and law enforcement goals.

Fundamental questions about the program’s future direction and fit within the larger homeland security context as well as its return on investment remain unanswered. Moreover, the program is overdue in establishing the means to ensure that it is pursuing the right US-VISIT solution, and that it is managing it the right way. The longer the program proceeds without these, the greater the risk that the program will not optimally support mission operations and will fall short of commitments. Measuring and disclosing the extent to which these commitments are being met are also essential to holding the department accountable. We look forward to continuing to work constructively with the US-VISIT program to better ensure the program’s success.

This concludes my prepared testimony. I would be happy to respond to any questions that Members of the Committee may have.

For further information about this testimony, please contact me at (202) 512-8777 or stanar@gao.gov, or Randolph Hite, Director, at (202) 512-3439 or hiter@gao.gov. Other major contributors to this testimony include John Mortin, Assistant Director; Deborah Davis, Assistant Director; Amy Bernstein; Frances Cook; Odi Cuero; David Hinchman; James Houtz; Richard Hung; Sandra Kerr; Amanda Miller; Freda Paintsil; James R. Russell; Sushmita Srikanth; and Jonathan Tumin.

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