## OFFICE OF THE CHIEF INFORMATION OFFICER'S BUDGET

Office of the Secretary

Report Number: FI-2005-055 Date Issued: March 31, 2005



# Memorandum

U.S. Department of Transportation Office of the Secretary of Transportation Office of Inspector General

Subject: <u>ACTION</u>: Report on Office of the Chief Information Officer's Budget, DOT Report Number: FI-2005-055 Date: March 31, 2005

From: Theodore P. Alves *Kell CM* Assistant Inspector General for Financial and Information Technology Audits

Reply to Attn. of: JA-20

<sup>To:</sup> Chief Information Officer

This report addresses the results of our audit of the fiscal year (FY) 2005 Department of Transportation Office of the Chief Information Officer (OCIO) information technology (IT) budget request for enhancing security, E-Government services, and IT investment management. We conducted this audit in response to a request by the Senate Committee on Appropriations.<sup>1</sup>

The Department is responsible for one of the largest IT investment portfolios among civilian agencies, with an annual IT budget of about \$2.7 billion. The Clinger-Cohen Act of 1996 requires the Department, as well as other large Federal agencies, to appoint a Chief Information Officer (CIO) to help the Secretary of Transportation manage IT investments effectively and efficiently.

According to the Act, the CIO is responsible for providing policy guidance to the Department and ensuring that the Department maximizes its return on IT investments, with a focus on using IT to improve mission performance and service to the public. In the Department, the CIO reports directly to the Secretary and directs the OCIO.

In November 2002, the Inspector General testified before the Congress that the Department still had a long way to go to adequately secure its computer systems and properly manage its IT investments. The Department had been operating without a CIO for  $1\frac{1}{2}$  years before this testimony. In particular, we recommended that the Department quickly appoint a CIO with the authority to provide

<sup>&</sup>lt;sup>1</sup> Senate Report (108-146) Accompanying the FY 2004 Appropriation on Transportation, Treasury and Government.

Department-wide leadership and enforce compliance with security guidance.<sup>2</sup> In response, the Department committed to strengthen its management of IT resources and, in March 2003, appointed a CIO.

The Senate Committee on Appropriations requested this audit due to concerns over the significant dollar increase in OCIO budget requests. Table 1 shows the requested and enacted budgets for the OCIO beginning in FY 2001.

Fiscal Year	Requested	Enacted
2001	\$6.9	\$6.2
2002	6.3	6.0
2003	16.1	13.0
2004	23.4	10.0*
2005	16.7	10.6

# Table 1. History of OCIO Appropriations (\$ in Millions)

\* Includes \$7.5 million appropriated by the Congress and \$2.5 million received from Operating Administrations through internal reprogramming.

The Committee was also concerned with the high level of generality and vagueness in the budget justifications and with the potential for duplicative and overlapping IT budget requests between the OCIO and the Department's Operating Administrations (OAs). The Committee directed the Office of Inspector General (OIG) to submit a report to both House and Senate Committees on Appropriations assessing plans and progress made by the Department to improve IT security, E-Government services, and IT investment management. The Committee also directed us to evaluate the effectiveness of OCIO efforts to coordinate budget requests with the OAs, which are responsible for acquiring and operating the majority of the Department's IT systems.

Our audit objectives were to determine whether (1) the OCIO's FY 2005 budget request was adequately planned and supported, (2) the OCIO and OAs coordinated with each other in preparing the FY 2005 IT budget request to avoid duplicative or overlapping items, and (3) progress has been made to strengthen IT investment management, improve IT security controls, and implement E-Government services in the Department. The audit was conducted in accordance with <u>Government Auditing Standards</u> prescribed by the Comptroller General of the United States. Our scope and methodology are described in Exhibit A.

<sup>&</sup>lt;sup>2</sup> Report Number CC-2003-027, "Computer Security Challenges within the Department of Transportation," November 19, 2002. OIG Reports can be found on our website: www.oig.dot.gov.

## **RESULTS IN BRIEF**

The OCIO's role in Department-wide IT issues has changed dramatically in the last 2 years. Since FY 2003, the OCIO has played a central role in enforcing key IT initiatives, such as overseeing IT investment management decisions and ensuring that IT systems are secured against attack. In addition, the OCIO has taken on more operational responsibilities, including managing the telephone switching center for the Headquarters building and providing integrated network services to the OAs in Headquarters.

With these changes, however, came significant budgetary consequences that OCIO and OAs have not yet adequately addressed in budget presentations. We found that the OCIO needs to significantly improve its budget submission and oversight of contract services. We also found budget problems associated with the planned consolidation of common systems across OAs.

- First, the OCIO budget request represents only a small portion of the resources managed by the office. The full range of OCIO responsibilities and funding sources has not been adequately presented to the oversight organizations. Specifically, the OCIO has assumed increased operational responsibilities, which has required the OCIO to provide IT services, on a reimbursable basis, to other OAs. The Department's Working Capital Fund (WCF)<sup>3</sup> reimburses OCIO for these additional services. The OCIO budget request did not describe the services it provides to OAs nor the amount of funds expected for reimbursement of those services—\$50.8 million. On a combined basis, the OCIO expects to manage resources with a total value of \$67.5 million for FY 2005. However, only \$16.7 million of the \$67.5 million (25 percent) is reflected in its direct budget request.
- Second, although the OCIO had begun efforts to consolidate systems in 11 common business areas, the project management and budget responsibilities for these IT consolidation initiatives were not adequately defined. Historically, each OA made its own investment decisions and submitted separate budget requests to fund its system operations. Consolidating systems in common business areas, such as common IT support services or grant management operations, presents cost saving opportunities and helps eliminate the appearance of duplicate budget requests. However, it will require a more centralized approach and adjustments to the Department's IT project management and budget submission practices.

<sup>&</sup>lt;sup>3</sup> The WCF is used to fund both IT and non-IT administrative services. These services, provided mainly to OAs, were performed by the Transportation Administrative Service Center until FY 2003, when they were reassigned to the OCIO. Each OA contributes to the WCF for the services it receives.

Third, although OCIO's direct budget requests more than tripled from FY 2002 to FY 2004, the requests did not adequately describe the activities to be performed with the requested funds nor the benefits expected. Many of the terms used, such as architecture and E-Government, are not self-defining, and the budget documentation needs to better translate technical terms for the lay reader. Additionally, internal OCIO documentation supporting the OCIO's budget request did not adequately identify the specific activities, milestones, or resources that would be undertaken. For example, the OCIO requested funding to hire three contractor employees (each costing over \$300,000) to help implement the Department's Enterprise Architecture, but the budget support did not specify any activities requiring such highly skilled expert help.

In addition to providing more detailed support for its budget estimates, the OCIO also needs to strengthen oversight of contract services. We found one instance where as a result of a series of oversight lapses, the Department obligated approximately \$700,000 for an individual's services without competition and specific measurable products. The OCIO issued a series of 22 task order modifications to extend the individual's service period from 6 months to 20 months, which also increased the service charge from \$77,000 to approximately \$700,000. Eight of these modifications were issued retroactively after the services had been performed. Using such high-priced consulting personnel to perform broadly defined work on a nearly full-time basis for almost 2 years was excessive. This inappropriate use of contract service is related to the lack of specific action plans in the budget submission.

➢ Fourth, the Department needs to implement a robust and consistent management review process for IT investments. The Department, with an annual IT budget of about \$2.7 billion, is responsible for one of the largest IT investment portfolios among civilian agencies; however, we found that the OCIO and OAs need to perform more substantive and proactive reviews of IT investments. Further, the OCIO and OAs need to perform ad OAs need to provide the departmental Investment Review Board with adequate information needed to make informed decisions regarding whether or not to approve, modify, or terminate IT investment projects.

**The OCIO's full responsibilities and funding levels were not reflected in its budget submission.** The OCIO's direct budget request of \$16.7 million accounts for only about 25 percent of the resources that will be provided to it during the year. The OAs will reimburse the OCIO for the remaining \$50.8 million or

75 percent for operational services it will provide. These services include telephone and computer system network services, IT security services, and the operation of the consolidated Headquarters IT infrastructure (that is, supporting desktop computers, local area networks, and e-mail transmissions). Table 2 shows the reimbursable services OCIO has received and requested since FY 2003.

	FY 2003	FY 2004	FY 2005
OCIO Funding Source	Received	Received	Requested
Direct Appropriations	\$13.0M	\$10.0M	\$16.7M
Reimbursement by OAs (through the Department's Working Capital Fund)	\$41.7M	\$45.8M	\$50.8M
Total	\$54.7M	\$55.8M	\$67.5M

Table 2. OCIO Funding Sources by Fiscal Year

This reimbursement approach complies with appropriations law and is not in itself inappropriate. However, because the operational responsibilities and cost reimbursements from OAs are not identified in OCIO's direct budget request, the overall budget presentation does not clearly identify the resources provided to support these important operations.

For example, OAs are scheduled to reimburse the OCIO through the WCF about \$29 million in FY 2005 for operating the telephone switching center at the Headquarters building. However, the \$29 million is not specified in the OCIO budget request. The current budget presentation does not provide oversight organizations, such as the Department's Office of Budget, the Office of Management and Budget (OMB), and the Congress with the information they need to make informed budget decisions about OCIO's services and resources.

Similarly, OCIO's efforts to consolidate office IT infrastructures are not clearly presented in the budget. The FY 2005 direct OCIO budget request includes \$700,000 in direct funding for infrastructure consolidation. However, the OCIO also expects to be reimbursed another \$9.3 million from OAs for its IT consolidation efforts. Because the \$9.3 million is not reflected in OCIO's budget request, oversight organizations lack the information they need to understand the scope of this effort and the amount of resources needed. Future OCIO budget requests should fully describe the services to be provided to, and the reimbursements expected from, OAs. This will provide oversight organizations with the information needed to understand the planned use of funds at a time when budgetary requirements are shifting.

**Budget implications of DOT's consolidation efforts need to be better defined.** An important departmental initiative is to consolidate multiple systems maintained by individual OAs in 11 common business areas, such as common IT support services or grant management operations. The Department invests about \$300 million annually to operate individual systems in these areas. Consolidating systems in these common business areas presents cost saving opportunities and helps eliminate the appearance of duplicate budget requests. However, it will require a more centralized approach and adjustments to the Department's IT project management and budget submission practices.

Historically, each OA made its own investment decisions and submitted separate budget requests to fund its system operations. The consolidation efforts may require changes in how budget funds are allocated between OCIO and the OAs. In November 2004, the Department identified sponsors for each of the 11 common business areas. However, these sponsors have neither project management nor budget authority over individual OA systems. The Department needs to complete analyzing performance gaps and recommending how these systems should be consolidated and managed. In addition, the OCIO should ensure that future-year budget submissions reflect the planned use of anticipated cost savings from these consolidation initiatives.

The line items in the OCIO's budget request did not specify the activities to be undertaken. For FY 2005, the OCIO requested \$16.7 million—a 67 percent increase from the FY 2004 funding level—to strengthen the Department's IT investment management, protect IT systems from attack, and implement E-Government services. In several cases, the narrative describing the activities to be undertaken and the benefits to be achieved did not provide enough information for oversight organizations to understand how the funds would be used. For example, to strengthen IT management, the OCIO needs to ensure that OAs fully implement the newly developed capital planning and investment control procedures. However, the budget did not describe what activities the OCIO would undertake to do this.

Further, when we looked at OCIO documents supporting the budget request, we found that, in some cases, the OCIO had not developed sufficiently detailed work plans and reliable cost estimates. These are needed so that the OCIO can plan and focus its efforts on continuing to improve IT investment management, IT security, and E-Government services. The OCIO budget requests should clearly describe these improvement efforts.

Enhancing IT investment management, IT security, and E-Government services will be a multi-year effort. The OCIO should have a multi-year plan identifying the long-term goals, interim activities, milestones, and resources needed to adequately strengthen capital planning and investment control practices

throughout the Department. That plan should then be the basis for annual budget requests. The following paragraphs briefly outline the FY 2005 budget requests and the weaknesses we identified in IT investment management, IT security, and E-Government services.

➢ IT Investment Management. The funding request for IT investment management represents the largest direct OCIO budget increase in FY 2005—from \$2 million (FY 2004 enactment) to \$5.4 million largely due to additional contractor costs. However, we found that the OCIO's budget support documentation did not describe the specific activities it planned to undertake to improve IT management practices in the Department. Also, technical terms such as "enterprise architecture," are not self-explanatory and need to be described more fully.

This lack of detailed supporting documentation also made the OCIO's cost estimates questionable. For example, in reviewing support documentation used to develop its funding request, we found the OCIO planned to hire three technical experts (at over \$300,000 each) to help implement the Department Enterprise Architecture, but the OCIO had not prepared a work plan specifying what work would be performed by such highly skilled contractors.

In addition to providing more detailed support for its budget estimates, the OCIO also needs to ensure that it provides adequate oversight to contracts it awards. We found one instance where inadequate oversight of a contract to an individual consultant led to excessive charges. About \$700,000 was obligated over 20 months for work that was not competed and largely lacked measurable products. While obtaining expert help is a legitimate use of contract services, management should be mindful that it needs to seek competition and effectively use resources. In this case, because management did not identify specific requirements the contractor was to meet, it was not in a position to ensure that it received the best value from the services provided by the contractor.

As a result of a series of contract oversight lapses, the Department awarded approximately \$700,000 for the individual's services without competition. The OCIO avoided competition by directing an existing contractor to hire the individual as a sub-contractor. The Statement of Work for this individual's services was also broadly worded and did not define specific task-oriented deliverables. For example, the individual was asked to advise the OCIO on ways to improve the IT capital planning and enterprise architecture development process. However, instead of delivering reports identifying improvement opportunities, the individual was only required to provide undefined weekly status reports. Consequently, the Department could not objectively evaluate the individual's performance.

Also, the contract was allowed to grow to excessive levels without competition. The OCIO issued a series of 22 modifications to the task order that extended the service period from 6 months to 20 months and increased the cost of the individual's services from \$77,000 to approximately \$700,000. Eight of these modifications were issued retroactively after the services had been performed. Using such high-priced consulting personnel to perform broadly defined work on a nearly full-time basis for almost 2 years was excessive.

This inappropriate use of contract service is related to the lack of specific action plans in the budget submission. Future budget requests should be supported by more detailed plans describing needed activities, milestones, and resource requirements. These plans should then be used to award contracts with clearly defined product deliverables. In addition, both the OCIO and the Office of Acquisition, which is responsible for contract administration, need to develop an action plan to strengthen oversight of contract services.

IT Security. The funding request for IT security increased from \$3.7 million (FY 2004 enactment plus reprogramming) to \$4.8 million in FY 2005. Under the OCIO's leadership, the Department has strengthened IT security protection significantly in two areas—protecting IT infrastructure against attacks from the Internet and increasing the percentage of IT systems certified as having adequate security to support OA missions. However, both the OCIO and the OAs requested funding to protect IT infrastructure in the FY 2005 budget request.

Specifically, one of the planned activities in the OCIO's FY 2005 budget request was to install advanced vulnerability remediation and patch management software (estimated to cost \$2 million) to protect the Department's IT infrastructure. About 90 percent of the installation will be on the Federal Aviation Administration (FAA) network computers. We found that FAA is pursing a similar solution, and the two requests had not been properly coordinated. The OCIO stated that its request is necessary to ensure consistent oversight of all OA infrastructure. However, considering today's tight budget environment, the OCIO should avoid duplicate funding requests between the OCIO and OAs by ensuring OAs coordinate with the OCIO for performing similar tasks, such as evaluating and remediating network vulnerabilities with different software tools. E-Government Services. The OCIO budget request for E-Government services increased from \$1.3 million in FY 2004 to \$2.1 million in FY 2005. The request covered two activities: consolidating the Department's IT infrastructure and supporting OMB E-Government initiatives. In both cases, the budget contained only high-level general statements about how the funds would be used.

The OCIO needs to ensure that its IT infrastructure consolidation effort is carefully planned and justified. The budget request decreased from \$0.8 million in FY 2004 to \$0.7 million in FY 2005. However, the budget narrative provides little information for oversight organizations to understand the nature and scope of the proposed effort. In fact, the current IT infrastructure consolidation effort only addresses the Department's Headquarters operations, which accounts for about 15 percent of the Department's annual investment in IT infrastructure, \$192 million. The OCIO expects an 18 percent to 26 percent reduction in costs from consolidating the IT infrastructure at the Headquarters, based on industry averages. While we agree that such consolidation presents a cost-saving opportunity, we are concerned that the OCIO has not tailored the industry cost saving average based on the Department's needs and has not determined how the anticipated savings would be reflected in future-year budget submissions.

Duplicate IT infrastructures exist not only at the departmental Headquarters but also at FAA Headquarters and OA field offices. For example, FAA uses about 10 separate network infrastructures to support its Headquarters operations. Four OAs with field offices co-located in San Francisco use separate networks to stay connected with the departmental Headquarters. A Department-wide consolidation could be expected to generate significant additional savings. The OCIO needs to perform an analysis of the savings that could be achieved from consolidating the entire Department for the departmental Investment Review Board's consideration.

In addition, there is a related management issue concerning one of OMB's E-Government initiatives. The OCIO budget request to support OMB's E-Government initiatives increased from \$0.5 million (FY 2004 enactment) to \$1.4 million. The Department is participating in 15 of the 24 OMB-sponsored E-Government initiatives and is generally on, or slightly behind, planned implementation schedules, except for the E-payroll initiative.

OMB initially required the Department to start using another agency's—the Department of the Interior's—payroll system to support the Department's operations in October 2004. This initiative has proven to be more complicated than originally envisioned. First, since the Interior's system provides integrated payroll and personnel services, the Department decided to migrate

both operations. Second, converting FAA operations requires system modifications because FAA is exempted from Title 5 of the United States Code. As a result, OMB agreed to revise the target completion date to October 2005. This change has caused a cost increase estimated by the Deputy Chief Financial Officer to be at least \$2 million.

The E-payroll project is managed by the Office of the Assistant Secretary for Administration with support from the OCIO and the Assistant Secretary for Budget and Programs/Chief Financial Officer under the direction of an executive steering committee.<sup>5</sup> An internal review indicated that the E-payroll initiative was not properly planned and may lack the necessary resources to meet the stated completion dates. We would expect that a primary focus in FY 2005 would be to improve oversight of this project. The OCIO needs to work with the executive steering committee to complete and implement a detailed action plan to address weaknesses in the E-payroll project and submit the plan to the House and Senate Committees on Appropriations, as directed by the Senate.<sup>6</sup>

The Department needs to implement a robust and consistent review process for IT investments. The departmental Investment Review Board was not performing substantive and proactive reviews of IT investments. The Investment Review Board reviewed 10 major projects, with a total life-cycle cost of \$7.5 billion, through September 2004. However, we determined that for 3 of the 10 projects, known management problems were not presented to the Investment Review Board. This happened because OAs were not presenting the Investment Review Board with adequate information needed to make informed decisions about whether to approve, modify, or terminate projects.

In addition, more needs to be done to ensure adequate investment review by OA management. The Department's guidance authorizes each OA to establish its own review board to review IT investment projects. The departmental Board reviews only major investments—projects exceeding certain dollar thresholds or those deemed to have a significant impact on departmental missions. IT investments not meeting these criteria are deemed non-major. These investment projects, totaling

<sup>&</sup>lt;sup>5</sup> The E-payroll executive steering committee is composed of representatives of the Assistant Secretary for Administration, the Assistant Secretary for Budget and Programs/Chief Financial Officer, departmental Chief Information Officer, the Federal Aviation Administration, and the Federal Highway Administration (who represents all remaining OAs).

<sup>&</sup>lt;sup>6</sup> Transportation, Treasury and General Government Appropriations Bill, 2005; Senate Report 108-342; September 15, 2004. The Committee directs the OCIO working with the Assistant Secretary for Administration to submit a plan to the House and Senate Committees on Appropriations within 90 days of appropriations enactment that addresses the weaknesses identified by the Inspector General as they relate to E-payroll. The plan at a minimum shall include: (1) the original cost, (2) the original scope of the project, (3) any deviation from the original scope, (4) all cost increases over the original cost, (5) the estimated cost of completion, and (6) specific steps taken to improve project oversight and accountability.

\$600 million, should have been reviewed by OA boards in accordance with the Department's policy. However, we found that non-major projects were not adequately reviewed. The OCIO needs to ensure that OAs follow departmental guidance in reviewing and managing all IT investments.

In response to concerns we raised, the Department has taken steps to strengthen IT investment management reviews. In September 2004, the OCIO updated its criteria for selecting at-risk projects for the departmental Investment Review Board's review and issued specific guidance addressing the need for OAs to review non-major IT investments. In October 2004, the Investment Review Board also decided to consider a project's original baseline in evaluating project risks.

## SUMMARY OF RECOMMENDATIONS

- To provide adequate information for oversight organizations' decision-making, we are recommending that the OCIO disclose the full range of OCIO responsibilities and other sources of funding, including the departmental Working Capital Fund, in future-year budget submissions.
- To prepare for the FY 2007 budget review, we are recommending that the OCIO complete performance gap analyses for the proposed consolidation of common systems by June 2005 for the departmental Investment Review Board's consideration and keep the House and Senate Committees on Appropriations informed of the planned actions.
- To enhance future budget submissions, we are recommending that the OCIO develop a multi-year plan for continued enhancement of IT investment management, IT security, and E-Government services; strengthen oversight of contractors work; and better coordinate with OA CIO offices to avoid duplicate funding requests for performing similar services.
- To implement the E-Government initiatives, we are recommending that the OCIO refine the cost saving estimates (18 percent to 26 percent based on the industry average) for the planned consolidation of the Headquarters IT infrastructure; work with the E-payroll executive steering committee to strengthen oversight of the planned conversion to the Department of the Interior's payroll system; and submit the action plan for increased oversights to the House and Senate Committees on Appropriations, as directed by the Senate committee.

A complete list of our recommendations can be found on pages 12 and 13 of this report.

## AGENCY COMMENTS

We provided the OCIO with a draft of this report on March 1, 2005, and the OCIO provided a written response on March 30, 2005. The OCIO concurred with all nine recommendations and provided corrective action dates for recommendations 4 and 7. OCIO requested we modify page ix of our report to read "the OCIO stated that its request is necessary to ensure consistent oversight of all OA's infrastructure. However, considering today's tight budget environment, the OCIO should have insisted that the FAA coordinate their activities to determine the most cost effective way to meet the DOT requirement." We have modified our report to reflect the intent of this requested change.

## **ACTION REQUIRED**

In accordance with Department of Transportation Order 8000.1C, we request that you provide specific corrective action dates for recommendations 1, 2, 3, 5, 6, 8, and 9 within 30 days.

We appreciate the courtesies and cooperation of the Department of Transportation's OCIO representatives during this audit. If you have any questions concerning this report, please call me at (202) 366-1496 or Rebecca C. Leng, Deputy Assistant Inspector General for Information Technology and Computer Security, at (202) 366-1488.

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cc: Martin Gertel, M-1

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## **FINDINGS**

# The OCIO Needs To Identify Its Full Responsibilities and Funding in Budget Request

Our review of the Office of the Chief Information Officer's (OCIO) budget found that its direct appropriation request represents only a small portion of the resources managed by OCIO. In addition to direct appropriations, the OCIO receives reimbursements from the Operating Administrations (OAs) through the Department's Working Capital Fund (WCF). While these reimbursements account for about 75 percent of the resources OCIO controls, they are not reflected in its FY 2005 budget request of \$16.7 million. Specifically, an additional \$50.8 million will be provided to the OCIO from the Department's WCF in FY 2005.

Table 2 on page v shows the source of the majority of OCIO's resources since FY 2003, when it was made responsible for providing operational services.

The WCF was created to fund common administrative services provided to the various OAs. The fund is financed through negotiated agreements with the OAs. Although the program was renamed the Transportation Administrative Service Center in fiscal year (FY) 1997, its activities were moved back to the WCF during FY 2003.

The OCIO provides services to the OAs through the WCF in five major areas: (1) operating the Headquarters telephone switching center, (2) operating the consolidated IT infrastructure, (3) supporting WCF administrative functions, (4) operating the departmental computer network, and (5) providing IT security. Table 3 is a breakout of WCF items for OCIO for FYs 2004 and 2005.

Working Capital Fund Items	FY 2004	FY 2005
Operate HQ's Telephone Switching Center	\$22.7M	\$28.8M
Operate Consolidated IT Infrastructure	6.5M	9.3M
Support Common WCF Administrative Functions	7.6M	7.4M
Operate Departmental Network	3.1M	3.3M
Provide IT Security	2.1M	2.0M
	\$42.0M	\$50.8M
Discontinued Services	3.8M	0M
Total	\$45.8M	\$50.8M

# Table 3. Funding for OCIO Working Capital FundResponsibilities

The OCIO is reimbursed through the Department's WCF for IT services it provides to the entire Department. For example, OAs are scheduled to reimburse the OCIO about \$29 million in FY 2005 for operating the telephone switching center at the Department's Headquarters building. Other WCF responsibilities assigned to the OCIO include managing the Department's integrated network services, providing IT security protection, and establishing a consolidated IT infrastructure to support OAs' day-to-day office automation needs. However, the OCIO budget request did not describe the specific services it provides to OAs or the specific amounts it expects to be reimbursed for those services.

As a result, oversight organizations, such as the Department's Office of Budget, the Office of Management and Budget (OMB), and the Congress, lack the information they need to make informed budget decisions about the OCIO's services and resources. The OCIO budget request should describe in full the services to be provided to OAs and the reimbursements expected from OAs.

## Budget Implications of the Department's System Consolidation Efforts Need To Be Better Defined

Identifying opportunities to consolidate systems in common business areas is a major departmental FY 2005 initiative. However, these efforts are in an early stage of implementation and still present challenges to the Department.

The Department developed the Modernization Blueprint in September 2003. The blueprint cites the need to consolidate common departmental IT investments. After reviewing areas that could be consolidated, the OCIO and OAs identified opportunities to streamline systems in 11 business areas, as are outlined in Table 4. In November 2004, the Department identified sponsors for each of the 11 common business areas. However, these sponsors have neither project management nor budget authority over individual OA systems. The Department needs to complete analyzing system requirements and performance gaps and recommending how these systems should be consolidated and managed. In addition, the OCIO should ensure that future year budget submissions reflect the planned use of anticipated cost savings from these consolidation initiatives.

	Business Areas	No. of Current Systems	Consolidated Business Case Submitted for FY 2006	Amount of FY 2006 Budget Request (in Millions)
1	Enterprise			
	Architecture	11	Yes	\$ 7.2
2	Enterprise Document			
	Management	TBD*	Yes	9.6
3	Financial Management	26	Yes	45.0
4	Grants Management	5	Yes	7.3
5	Interfaces to			
	International Trade			
	Data System	TBD*	Yes	0.1
6	Intermodal Hazardous			
	Materials	TBD*	Yes	0.5
7	IT Infrastructure	61	Yes	214.6
8	Recruitment	TBD*	Yes	0.2
9	Internal Rulemaking			
	Management	3	No	0.4
10	Procurement			
	Management	9	No	5.5
11	Training	18	No	8.3
	Total			\$ 298.7

Table 4. Common Investments IdentifiedIn FY 2006 Business Cases

\*TBD = To Be Determined

For the FY 2006 budget submission, the Department has decided to continue requesting separate funding for the 11 business areas. However, as an initial step to consolidation, in September 2004, the Department prepared consolidated business cases (Exhibit 300) for 8 of 11 business areas, listing all individual systems and corresponding funding sources.<sup>7</sup> The departmental Investment Review Board requested the OCIO and the OAs to analyze and compare each system's capability, identify performance deficiencies, and develop a unified approach to eliminate duplication.

We view this as a critical step in consolidating common systems and achieving cost reductions. However, the OCIO needs to coordinate with the OAs to develop work plans and timetables for analyzing the systems, analyzing performance gaps, and recommending how these systems should be consolidated and managed. In

<sup>&</sup>lt;sup>7</sup> The Department plans to submit consolidated business cases for the remaining three business areas for the FY 2007 budget cycle.

addition, the OCIO should ensure that future-year budget submissions reflect the anticipated cost savings that will be achieved from consolidations and describe how the savings will be put to better use on other projects or activities.

Without such analysis, the Department does not know what cost reductions can be achieved from consolidating these systems or the implications for future OCIO and agency budgets. Quantifying the budgetary impact should provide additional insight to the Appropriations Committees and OMB about the potential to reduce costs. Congress should be fully informed of the Department's planned actions and associated budget implications.

## The OCIO Needs To Specify the Activities To Be Undertaken in Its Budget Request

In FY 2004, the Senate and House Committees on Appropriations did not approve the OCIO increased funding request due to the high level of generality and vagueness presented in its budget justification. In response to the Committees' request, we reviewed the support documentation for the OCIO's FY 2005 budget request of \$16.7 million—a 67 percent increase over the amount enacted in FY 2004. The request included funds to strengthen IT investment management, improve IT security controls, and implement E-Government services. We found, in several cases, that the OCIO direct budget request lacked clarity and specificity because it was not supported by detailed work plans and reliable cost estimates. Table 5 outlines the OCIO budget for FY 2004 and FY 2005.

Budget Items	FY 2004	Enacted	FY 2 Requ	
IT Investment Management			_	
Develop Enterprise Architecture	\$0.7M		\$2.3M	
Implement Capital Planning Controls	0.9M		2.3M	
Develop IT Strategic Management	0.4M		0.8M	
		\$2.0M		\$5.4M
IT Security*				
Protect IT Infrastructure	2.7M		3.4M	
Develop Common Access Architecture	0.1M		0.9M	
Promote DOT-wide Security Projects	0.9M		0.5M	
		3.7M		4.8M
<u>E-Government</u>				
Consolidate Agencies' IT Infrastructure	0.8M		0.7M	
Support OMB E-Government Initiatives	0.5M		1.4M	
		1.3M		2.1M
Resource Management/OST IRM Services		3.0M		4.4M
Total		\$10.0M		\$16.7M

Table 5.	OCIO FY 2004 and	d FY 2005 Budgets
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\* FY 2004 figure includes \$2.5M from OAs through internal reprogramming.

Although the OCIO direct budget requests more than tripled between FY 2002 and FY 2004, we found, in several cases, that the FY 2005 request did not adequately describe the activities to be performed with the requested funds. The descriptions of activities to be funded are at a high level of generalization and do not specify the activities to be undertaken or the benefits expected. Further, because many of the terms used, like architecture and E-Government, are not self-defining, the budget justification needs to better translate technical terms for the lay reader.

Internal OCIO documentation supporting its budget request also did not include specific activities, milestones, and resources that would be undertaken. For example, neither the OCIO's FY 2005 budget request nor supporting documents described the specific activities the OCIO planned to improve IT management practices. In one case, we identified an overlapping IT security investment between OCIO and the Federal Aviation Administration (FAA).

The Department has made significant progress in implementing IT Investment Management, IT Security, and E-Government services; however, much more needs to be done to ensure that it manages its information resources efficiently and effectively. The OCIO needs to focus its efforts on continuing to improve in each of the three key areas, and its budget requests should clearly support these improvement efforts. To accomplish this, the OCIO budget requests should be closely linked to a multi-year plan that depicts not only the long-term goals but also the interim activities, milestones, and resources needed to ensure continued improvement in each area. Equally important is that when OCIO and OAs request funds for similar activities, the budgets need to be coordinated to eliminate overlap and duplication.

## OCIO Budget Request Did Not Adequately Describe Its Investment Management Efforts

The funding request for IT investment management represents the largest requested OCIO budget increase in FY 2005—from \$2 million (FY 2004 enactment) to \$5.4 million. This increase is largely due to additional contractor costs for supporting the Department's enterprise architecture (a blueprint for IT modernization efforts) implementation, as well as capital planning tools. However, we found that the OCIO's budget support documentation did not describe the specific activities planned to improve IT management practices in the Department. Instead, the supporting documentation described only broad areas, such as implementing the enterprise architecture. This lack of specificity also made OCIO's cost estimates questionable.

For example, OCIO requested funding to hire three contractor employees (each costing over \$300,000) to help implement the Department's enterprise

architecture, but the budget support did not specify any activities requiring such highly skilled help. Without defining specific activities for contractors, OCIO is unable to effectively oversee them because there are no performance measures.

In addition to providing more detailed support for its budget estimates, the OCIO also needs to ensure that it provides adequate oversight to contracts it awards. We found one instance where inadequate oversight of a contract to an individual consultant led to excessive charges. About \$700,000 was obligated over 20 months for work that was not competed and largely lacked measurable products. While obtaining expert help is a legitimate use of contract services, management should be mindful that it needs to seek competition and effective use of resources. In this case, because management did not identify specific requirements the contractor was to meet, it was not in a position to ensure that it received the best value from the services provided by the contractor.

As a result of a series of contract oversight lapses, the Department awarded approximately \$700,000 for the individual's services without competition. The OCIO avoided competition by directing an existing contractor to hire the individual as a sub-contractor. The Statement of Work for this individual's services was also broadly worded and did not define specific task-oriented deliverables. For example, the individual was asked to advise the OCIO on ways to improve the IT capital planning and enterprise architecture development process. However, instead of delivering reports identifying improvement opportunities, the individual was only required to provide undefined weekly status reports. Consequently, the Department could not objectively evaluate the individual's performance.

Also, the contract was allowed to grow to excessive levels without competition. The OCIO issued a series of 22 modifications to the task order that extended the service period from 6 months to 20 months and increased the cost of the individual's services from \$77,000 to approximately \$700,000. Eight of these modifications were issued retroactively after the services had been performed. Using such high-priced consulting personnel to perform broadly defined work on a nearly full-time basis for almost 2 years was excessive.

This inappropriate use of contract service is related to the lack of specific action plans in the budget submission. Future budget requests should be supported by more detailed plans describing needed activities, milestones, and resource requirements. These plans should then be used to award contracts with clearly defined product deliverables. In addition, both the OCIO and the Office of Acquisition, which is responsible for contract administration, need to develop an action plan to strengthen oversight of contract services.

# Greater Disclosure and Coordination Is Needed To Prevent Overlapping IT Security Requests

The funding request in the IT security area increased from \$3.7 million (FY 2004 enactment plus reprogramming) to \$4.8 million. In addition, the OCIO is expecting to receive about \$800,000 of WCF reimbursements from the OAs for providing IT security services. While OCIO's direct budget was supported by documentation containing specific work plans, there was no supporting work plan in the OA or OCIO budget documents describing how the \$800,000 OA reimbursement would be used. The IT security services the OCIO plans to provide through its direct appropriation and those to be provided through reimbursements from the WCF overlap. Both requests were justified on the basis that the OCIO would help protect the Department's IT infrastructure through activities such as incident detection and vulnerability monitoring.

Under the OCIO's leadership, the Department has strengthened IT security protection significantly in two areas—protection of IT infrastructure against attacks from the Internet and increasing the percentage of IT systems certified as having adequate security to support OA missions. Specifically, one of the planned activities in the OCIO's FY 2005 budget request was to install advanced vulnerability remediation and patch management software (estimated to cost \$2 million) to protect the Department's IT infrastructure. About 90 percent of the installation will be on FAA network computers. We found that FAA is pursing a similar solution, and the two requests had not been properly coordinated. The OCIO stated that its request is necessary to ensure consistent oversight of all OA infrastructure. However, considering today's tight budget environment, the OCIO should avoid duplicate funding requests between OCIO and OAs by ensuring OAs coordinate with OCIO for performing similar tasks, such as evaluating and remediating network vulnerabilities with different software tools.

During FY 2004, the Congress approved the Department's reprogramming request of \$2.5 million to augment OCIO's budget for protecting the IT infrastructure and doing system certification reviews. Our review of OCIO's FY 2005 budget request indicated a shift from doing security certification reviews of agency systems to performing quality assurance reviews of OA security work. We view this as a step in the right direction for maintaining clear division between OCIO's and the OAs' responsibilities because it more closely aligns the CIO oversight role with the Clinger-Cohen Act.

## OCIO Needs To Provide Additional Information To Support E-Government Services

The OCIO's funding request for supporting OMB's E-Government initiatives increased from \$1.3 million (FY 2004 enactment) to \$2.1 million. Two of the

major initiatives are to consolidate the Department's fragmented IT infrastructure and to convert the Department to another agency's payroll system as part of the Government-wide E-payroll effort. We found that the Department has not performed adequate analysis to identify the full cost-saving potential for consolidating the IT infrastructure and to reflect the anticipated savings in future budget submissions. We also noted a need to enhance project management oversight of the E-payroll conversion effort to avoid further delays and cost overruns.

**The IT Infrastructure Consolidation Is Limited to the Department's Headquarters.** Currently, each departmental OA is responsible for managing its own IT infrastructure, such as desktop computers, networks, and e-mail services. Based on the FY 2005 budget submission, the Department requests about \$192 million annually to maintain all of these separate IT infrastructures.

The OCIO has initiated an effort to replace these fragmented infrastructures at the departmental Headquarters. It will merge 10 separate IT operating environments, thousands of computers, and dozens of networks into a single, common operating environment. The OCIO expects an 18 percent to 26 percent reduction in costs from the consolidation, based on industry averages. While we agree that such consolidation presents a cost-saving opportunity, we are concerned that the OCIO has not tailored the industry cost-saving average to the Department's needs and has not determined how the anticipated savings would be reflected in future-year budget submissions.

Also, the benefits of the current consolidation are limited because Headquarters operations account for only about 15 percent of the Department's annual \$192 million investment in IT infrastructure, as is shown in Table 6.

Non-FAA OAs	Cost	Percentage
Headquarters	\$28M	15%
Field Offices	53M	27%
FAA	111M	58%
Total	\$192.M	100%

Table 6. The Department's Cost of OperatingSeparate Networks

Currently, each OA is responsible for requesting funds to operate its own network computers. As a result, duplicate IT infrastructures exist not only at the departmental Headquarters but also at FAA Headquarters and OA field offices. For example, FAA uses about 10 separate network infrastructures to support its Headquarters operations. Four OAs with field offices co-located in San Francisco use separate networks to stay connected with the departmental Headquarters. Integrating these fragmented networks could result in immediate and substantial cost savings to the Department. The Department, however, has not performed a study to determine the full potential cost saving for consolidating the entire departmental IT infrastructure.<sup>8</sup>

To address these issues, the OCIO needs to work with the OAs to perform a thorough analysis of the savings that can be expected from the current limited consolidation and the savings that could be achieved by consolidating the IT infrastructure Department-wide. The OCIO should make appropriate proposals in future budget requests based on this analysis.

**OCIO** Needs To Complete an Action Plan To Deal With the Delayed **E-Payroll Project.** The Department is participating in 15 of the 24 E-Government services initiated by OMB. The Department is on, or slightly behind, planned implementation schedules for all E-Government projects except the E-payroll initiative. Under the E-payroll initiative, OMB initially required the Department to use the Department of the Interior's payroll services and discontinue its own payroll system operations by October 2004.

This initiative has proven to be more complicated than originally envisioned. First, since the Interior's system provides integrated payroll and personnel services, the Department decided to migrate both operations. Second, converting FAA operations requires system modifications because FAA is exempted from Title 5 of the United States Code. Also, the Department had to make arrangements for continued payroll support of employees transferred to the Department of Homeland Security. As a result, OMB agreed to revise the target completion date to October 2005. This change has caused a cost increase estimated by the Deputy Chief Financial Officer of at least \$2 million.

The E-payroll project is managed by the Office of the Assistant Secretary for Administration with support from the OCIO and the Assistant Secretary for Budget and Programs/Chief Financial Officer under the direction of an executive steering committee. An internal review indicated that the E-payroll initiative was not properly planned and may lack the necessary resources to meet the stated completion dates. The Department is assessing the review results and formulating a plan to address weaknesses and budget implications within the project. We would expect that a primary focus in FY 2005 would be to improve oversight of this project. The OCIO needs to work with the executive steering committee in completing and implementing a detailed action plan that addresses weaknesses in

<sup>&</sup>lt;sup>8</sup> OMB also asked for clarification on the extent to which the FAA network could be used to support the Departmentwide network infrastructure in its review of the FY 2006 budget submission. The Department has agreed to further examine this issue.

the E-payroll project and submit the plan to the House and Senate Committees on Appropriations, as directed by the Senate.

## The Department Needs To Implement a Robust and Consistent Management Review Process for IT Investments

The Department, with an annual IT budget of about \$2.7 billion, is responsible for one of the largest IT investment portfolios among civilian agencies. The Clinger-Cohen Act requires the Department to appoint a CIO responsible for ensuring cost-effective IT investments, including proper security protection. In FY 2003, we reported that the Department appointed a CIO and it increased the CIO's influence over IT decisions by forming the departmental Investment Review Board (the Board). The Board, chaired by the Deputy Secretary, has the authority to approve, modify, or terminate major IT investments.

However, we concluded that it was too early to judge whether these changes would substantially improve the Department's oversight of IT investments. Specifically, we were concerned that the Board had focused its reviews on Department-wide IT projects, such as implementation of a new departmental accounting system, and had provided little oversight of OA-specific IT investment projects. This was inadequate, considering that over 90 percent of the Department's IT budget is appropriated directly to OAs and a number of their investments had experienced significant cost overruns and schedule delays in recent years. We were also concerned with the lack of substantive, in-depth review of OA IT budget submissions and poor communications between the Board and the OAs.

During FY 2004, the Department took corrective actions to enhance the management review process. However, more needs to be done.

# The Departmental Investment Review Board Needs Better Information To Review IT Investments

The Board needs better information to perform more substantive and proactive reviews of IT investments. The Board has reviewed 10 major projects, with a total life-cycle cost of \$7.5 billion through September 2004. However, we determined that for 3 of the 10 projects, known management problems were not presented to the Board. A further review of minutes from Board meetings showed that the Board raised substantive questions about the status of only one project. The Board allowed 9 of the 10 projects to continue without modification. Overall, the Board was not being presented with the information it needed to make informed decisions about whether to approve, modify, or terminate projects.

We also found that the Board did not include for review key FAA projects with a history of trouble. In recent years, we have issued audit reports on FAA's major acquisitions involving extensive software development work that required senior management level attention.<sup>9</sup> We reported that of 20 major acquisitions reviewed, 13 projects had experienced schedule slips of 1 to 7 years, and 14 projects had experienced cost growth of over \$4.3 billion (increasing from \$6.8 billion to \$11.1 billion). Yet, the list of projects reviewed by the Board in FY 2004 did not include many of those we reported as having cost and schedule problems. In response to our work, the Board added three of FAA's major acquisition projects to its watch list—the Wide Area Augmentation System, the Standard Terminal Automation Replacement System, and the Integrated Terminal Weather System.

Reviewing troubled projects is important, but the Board also needs to monitor projects that have not yet become troubled—exceeding target costs and schedule by more than 10 percent. A key objective of the Board should be to prevent projects from breaching the threshold (10 percent overruns) and becoming troubled. This is especially important considering that FAA is beginning a new, costly, and complex acquisition program, the En Route Automation Modernization Program, which will cost billions of dollars to implement and will provide new hardware and software for facilities that manage high-altitude traffic.

In response to concerns we raised, the Department has taken corrective actions to strengthen the IT investment management review. In September 2004, the OCIO updated its criteria for selecting at-risk projects for the Board's review, including projects with revised baselines and projects showing a negative trend. In October 2004, the Board also decided to consider a project's original baseline in evaluating project risks. We will monitor the progress of implementing this new guidance and keep senior management and oversight officials informed of the outcome.

## Better OA Review of IT Investment Projects Is Needed

Communication between the Board and the OAs has improved significantly. During FY 2004, the Board expanded its membership to include OA representatives. The FAA Administrator has joined the Board in reviewing and approving major IT investment projects. In addition, the Board created three additional members who will come from the remaining OAs on a rotating basis. Although the Board benefits from the OAs' input when reviewing major IT investment projects, more needs to be done to ensure that OA investment review boards operate effectively.

<sup>&</sup>lt;sup>9</sup> OIG Report Number PT-2004-006, "The Department's Top Management Challenges," December 5, 2003, and OIG Report Number AV-2003-045, "Status of FAA's Major Acquisitions," June 26, 2003.

The Department's guidance authorizes each agency to establish its own management board to review IT investment projects. The departmental Board reviews only major investments-projects exceeding certain dollar thresholds or those deemed to have a significant impact on departmental missions. IT investment projects not meeting these criteria are deemed non-major. These investment projects, totaling \$600 million, should have been reviewed by OA management boards in accordance with the Department's policy. However, we found that less than 10 percent of non-major investments were reviewed by OA management boards during FY 2004. In September 2004, the OCIO issued specific guidance addressing the need for OAs to review non-major IT investments as part of the OA investment management review. This needs to be enforced throughout the Department. Since we recommended corrective actions for this issue in another audit report,<sup>10</sup> we are not making additional recommendations.

## RECOMMENDATIONS

To provide adequate information to oversight organizations so they can make informed budget decisions, we recommend that the Department's CIO:

1. Disclose in future budget submissions the full range of OCIO responsibilities and sources of funding, including the IT services provided to and reimbursements expected from OAs through the Working Capital Fund.

To prepare for the departmental Investment Review Board's review of the FY 2007 budget submission, we recommend that the Department's CIO:

- 2. Complete analyzing performance gaps among duplicate systems in the 11 common business areas and, by June 2005, recommend to the Investment Review Board how consolidating these systems should be funded and managed.
- 3. Keep the House and Senate Committees on Appropriations informed of the planned actions and ensure the FY 2007 and future-year budget submissions reflect the planned use of anticipated cost savings from these consolidation initiatives.

To enhance future IT budget submissions and increase the effectiveness of its oversight of contractors' work, we recommend that the Department's CIO:

<sup>&</sup>lt;sup>10</sup> OIG Report Number FI-2005-001, "DOT Information Security Program," October 1, 2004.

- 4. Develop a multi-year plan for continued enhancement of IT investment management, IT security, and E-Government services in the Department. The plan should contain interim activities, milestones, and estimated resource needs and be used in estimating annual budget requests.
- 5. Work with the Office of Acquisition to develop an action plan to strengthen oversight of contract services and to ensure the Department obtains the best value of services through competition.
- 6. Avoid duplicate funding requests between the OCIO and OAs by ensuring OAs coordinate with OCIO for performing similar tasks, such as evaluating and remediating network vulnerabilities with different software tools.

To implement the E-Government initiatives, we recommend that the Department's CIO:

- 7. Refine its cost-saving estimate (18 percent to 26 percent based on industry average) for the planned IT infrastructure consolidation at the departmental Headquarters and reflect the anticipated cost savings in the Department's FY 2007 and future-year budget submissions.
- 8. Estimate the savings that can be achieved through a Department-wide IT infrastructure consolidation, including FAA and OA field offices, for the departmental Investment Review Board's consideration.
- 9. Work with the E-payroll steering committee to develop and implement an action plan to strengthen project management and correct the weaknesses identified for the conversion to the Department of the Interior's payroll system and submit the plan to the House and Senate Committees on Appropriations, as directed by the Senate committee.

# AGENCY COMMENTS AND OFFICE OF INSPECTOR GENERAL RESPONSE

We provided the OCIO with a draft of this report on March 1, 2005, and the OCIO provided a written response on March 30, 2005. The OCIO concurred with all nine recommendations and provided corrective action dates for recommendations 4 and 7. The OCIO requested we modify page ix of our report to read "the OCIO stated that its request is necessary to ensure consistent oversight of all OA's infrastructure. However, considering today's tight budget environment, the OCIO should have insisted that the FAA coordinate their activities to determine the most cost effective way to meet the DOT requirement." We have modified our report to reflect the intent of this requested change.

Specific comments by the OCIO and its planned actions on our recommendations are provided below.

**Recommendation 1:** The OCIO concurred. The OCIO agrees that it should more clearly outline its total financial profile by linking both salaries and expenses and the WCF requests. The OCIO noted the FY 2006 budget request defined in more detail the lines of business. In the future, the OCIO intends to include a more detailed explanation of the full range of sources available to the OCIO.

**<u>OIG Response:</u>** The OCIO's planned actions meet the intent of our recommendation. However, we request that the OCIO provide us with a timeframe for the proposed corrective action.

**<u>Recommendation 2</u>**: The OCIO concurred. The OCIO agreed that a more complete gap analysis among duplicate systems is necessary, including documented funding and management strategies.

**<u>OIG Response:</u>** The OCIO's planned actions meet the intent of our recommendation. However, we request that OCIO provide us with a timeframe for the proposed corrective action.

**Recommendation 3:** The OCIO concurred. The OCIO will keep the House and Senate Appropriations committees informed of planned actions and ensure the FY 2007 and future year's submissions reflect the planned use of anticipated cost savings from these consolidation initiatives.

**<u>OIG Response:</u>** The OCIO's planned actions meet the intent of our recommendation. However, we request that the OCIO provide us with a timeframe for the proposed corrective action.

**Recommendation 4:** The OCIO concurred. The OCIO agrees that a multi-year plan for continued enhancement of IT investment management, IT security, and E-Government services in the Department is necessary and that it should contain interim activities, milestones, and estimated resource needs used in estimating annual budgets. The OCIO will update and refine the existing Departmental Information Resources Management Plan by September 2005 to address this recommendation.

**<u>OIG Response:</u>** The OCIO's planned actions meet the intent of our recommendation.

**<u>Recommendation 5:</u>** The OCIO concurred. The OCIO agrees that it must work with the Office of Acquisition to improve competition, strengthen oversight of contractors' work, and more clearly define specific activities and deliverables.

**<u>OIG Response:</u>** The OCIO's planned actions meet the intent of our recommendation. However, we request that the OCIO provide us with a timeframe for the proposed corrective action.

**<u>Recommendation 6</u>**: The OCIO concurred. The OCIO agrees that OAs must improve coordination with the DOT OCIO to avoid duplicate funding requests for performing similar tasks, such as evaluating and remediating network vulnerabilities.

**<u>OIG Response:</u>** The OCIO's planned actions meet the intent of our recommendation. However, we request that the OCIO provide us with a timeframe for the proposed corrective action.

**Recommendation 7:** The OCIO concurred. The OCIO agrees that it must refine cost-savings estimates for the planned IT infrastructure consolidation at the departmental Headquarters and reflect the anticipated cost savings in the Department's FY 2007 and future-year budget submissions. A cost-benefit analysis is expected to be completed by August 2005.

**<u>OIG Response:</u>** The OCIO's planned actions meet the intent of our recommendation.

**<u>Recommendation 8:</u>** The OCIO concurred. The OCIO agrees that it must estimate the savings that can be achieved through a Department-wide IT infrastructure consolidation, including FAA and OA field offices, and that it should present these estimates to the departmental Investment Review Board for consideration.

**<u>OIG Response:</u>** The OCIO's planned actions meet the intent of our recommendation. However, we request that the OCIO provide us with a timeframe for the proposed corrective action.

**Recommendation 9:** The OCIO concurred. The OCIO agrees that it must work with the E-payroll steering committee to develop and implement an action plan to strengthen project management and correct the weaknesses identified for the conversion to the Department of Interior's payroll system. A report of these actions has been provided to the Congressional committees.

**<u>OIG Response:</u>** The OCIO's planned actions meet the intent of our recommendation. However, we request that the OCIO provide us with a timeframe for the proposed corrective action.

## **ACTION REQUIRED**

In accordance with Department of Transportation Order 8000.1C, we request that you provide specific corrective action dates for recommendations 1, 2, 3, 5, 6, 8, and 9 within 30 days.

## EXHIBIT A. SCOPE AND METHODOLOGY

This report addresses the results of our audit of the FY 2005 departmental OCIO IT budget requests for enhancing IT security, E-Government services, and IT investment management. We conducted this audit in response to a request by the Senate Committee on Appropriations.

Our review included evaluating the OCIO's and OAs' budget documentation and interviewing officials from the OCIO, the OAs, and the Office of the Secretary Office of the Assistant Secretary for Administration. We reviewed documents supporting OCIO-appropriated funds to determine their adequacy in supporting planned activities for IT investment management, IT security, and E-Government service.

We also reviewed documents transferring funds through the WCF to the OCIO. In evaluating documents from the WCF, we focused on determining the full funding levels available to the OCIO through the WCF compared to the direct funds OCIO received.

In evaluating whether overlapping or duplication existed in the Department's budgets, we reviewed the FY 2005 budget request for the Department with emphasis on the Department's IT Investment Portfolio (Exhibit 53) and the Business Cases (Exhibit 300) being submitted by the Department to OMB. We also reviewed documents and minutes of meetings for the Department's Investment Review Board to determine whether substantial and proactive reviews were being performed. We met with members of the Senate Committee on Appropriations to give them a status report on our audit and obtain their input.

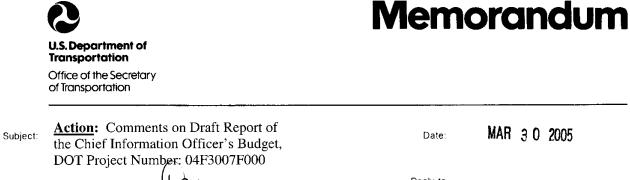
Our audit work was performed between March 2004 and December 2004 at the Department's Headquarters in Washington, DC. The audit was conducted in accordance with <u>Government Auditing Standards</u> prescribed by the Comptroller General of the United States and included a review of internal management controls over the budget process and such tests as we considered necessary to provide reasonable assurance of detecting abuse or illegal acts.

## **EXHIBIT B. MAJOR CONTRIBUTORS TO THIS REPORT**

### THE FOLLOWING INDIVIDUALS CONTRIBUTED TO THIS REPORT.

Name	Title
Rebecca Leng	Deputy Assistant Inspector General for IT and Computer Security
Phil deGonzague	Project Manager
Michael Marshlick	Computer Scientist Advisor
Brad Kistler	Information Technology Specialist
Aaron Nguyen	Computer Scientist

## **APPENDIX. AGENCY COMMENTS**



- an Daniel P. Matthew From: DOT Chief Information Officer
  - TO: Theodore P. Alves Assistant Inspector General for Financial and Information Technology Audits

MAR 3 0 2005

Reply to Attn. of:

This office appreciates the opportunity to review the draft report on its budget. Attached are

comments which we provide for your consideration. Should you have questions, please

contact me at x69201.

Attachment

### Office of the CIO Comments on Draft IG Audit Report 04F3007F000

The following comments are provided on 2 Findings and the 9 Recommendations made in the draft report.

**Requested correction**: On page ix, OCIO requests the following change: "The OCIO stated that its request is necessary to ensure consistent oversight of all OA's infrastructure. However, considering today's tight budget environment, the OCIO should have insisted that the FAA coordinate their activities to determine the most cost effective way to meet the DOT requirement."

### Specific management comments

### **Recommendation #1**

The OCIO agrees that this office should more clearly outline its total financial profile by linking or referencing both Salaries and Expense (S&E) and the Working Capital Fund (WCF) requests. The current budget process separates the S&E and WCF budget requests. It should be noted that the services provided to the OAs and the amount of expected reimbursement are specifically outlined in the Working Capital Fund (WCF) section of OST's FY 2005 budget submission. Although limited detail is provided for all of the individual business lines and services that the OCIO provides through the WCF, there is a general description of the role of the WCF and the OCIO's responsibilities including consolidation of IT assets and related maintenance, telephone services and IT support department-wide. Estimated WCF reimbursement figures are provided for both DOT and non-DOT activities for FY 2003, 2004 and 2005. The FY 2006 WCF Budget request defined in more detail, the Lines of Business. The Lines of Business include the top CIO services including e-mail, network services, the telephone system, IT security, and desktop services. In the future, OCIO intends to include a more detailed explanation of the full range of sources available to the OCIO in its S&E request. OCIO also plans to submit an annual financial report for the OCIO consistent with the detailed report submitted as part of the FY 2006 budget.

### **Recommendation #2**

The OCIO agrees that a more complete gap analysis among duplicate systems is necessary, including documented funding and management strategies. DOT has begun working with the process owners on specific actions to control overall management and funding for all systems within each of the common business areas. These actions will ensure compliance with Departmental IRB requirements.

#### **Recommendation #3**

The OCIO will keep the House and Senate Appropriations informed of planned actions and ensure the FY 2007 and future-year budget submissions reflect the planned use of anticipated cost savings from these consolidation initiatives.

### **Recommendation #4**

The OCIO agrees that a multi-year plan for continued enhancement of IT investment management, IT security, e-government services in the Department is necessary and that it should contain interim activities, milestones, and estimated resource needs and that are used in estimating annual budget requests. The OCIO will update and refine the existing Departmental Information Resources Management (IRM) Plan by September 2005 to address this recommendation. The updated IRM Plan will be part of the FY 2007 Budget submission.

### **Recommendation #5**

The OCIO agrees that it must work with the Office of Acquisition to improve competition, strengthen oversight of contractors' work, and more clearly define specific activities and deliverables. The OCIO has begun instituting procedures to address this recommendation.

### **Recommendation #6**

The OCIO agrees that OAs must improve coordination with the DOT OCIO to avoid duplicate funding requests for performing similar tasks, such as evaluating and remediating network vulnerabilities. This particular finding arose from the FY 2005 budget request whereby both the OCIO and FAA requested similar amounts in order to fund automated vulnerability remediation (patch management) software. In this particular situation, the OCIO worked with all operating administrations and procurement officials to issue a blanket purchase order for automated vulnerability remediation software in January 2005. By issuing this blanket purchase agreement, OCIO has achieved cost efficiencies for the entire department while preserving the autonomy of the each OA and their individual budget requests. The OCIO agrees that OAs must coordinate with the DOT OCIO on budget requests where there are convergences and shared interests or objectives.

### **Recommendation #7**

The OCIO agrees that it must refine cost-savings estimates for the planned IT infrastructure consolidation at the departmental Headquarters and reflect the anticipated cost savings in the Department's FY 2007 and future-year budget submissions. The OCIO is currently conducting a full cost benefit analysis that will be used to support the consolidation business case and future budget submissions. The cost benefit analysis is expected to be completed by August 2005.

### **Recommendation #8**

The OCIO agrees that it must estimate the savings that can be achieved through a Department-wide IT infrastructure consolidation including FAA and OA field offices, and that is should present these estimates to the Departmental Investment Review Board for

consideration. The FAA and OA Field Offices are currently consolidating IT infrastructure. The OCIO is coordinating with FAA and FHWA (the lead for the OA field activities).

### **Recommendation #9**

The OCIO agrees that it must work with the E-payroll steering committee to develop and implement an action plan to strengthen project management and correct weaknesses identified for the conversion to the Department of Interior's payroll system and submit the plan to the House and Senate committees on Appropriations as directed by the Senate Committee. The OCIO developed a plan, and actions are now being taken based on recommendations in an internal assessment chartered by the FPPS steering committee. A report of these actions has been provided to the Congressional committees.