Office of Inspector General

Audit Report

IMPROVEMENTS TO DOT'S GOVERNANCE PROCESSES ARE NEEDED TO ENHANCE OVERSIGHT OF MAJOR IT INVESTMENTS

Office of the Secretary of Transportation
Federal Aviation Administration

Report Number: ZA-2013-057
Date Issued: March 27, 2013

Memorandum

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

Subject: ACTION: Improvements to DOT's Governance Processes Are Needed To Enhance Oversight of Major IT Investments
Report Number ZA-2013-057
Office of the Secretary of Transportation
Federal Aviation Administration

Date: March 27, 2013

From: Mary Kay Langan-Feirson
Assistant Inspector General for Acquisition and Procurement Audits

Reply to Attn. of: JA-60

To: Deputy Secretary
Federal Aviation Administrator

The U.S. Department of Transportation's (DOT) fiscal year 2012 major information technology (IT) investment portfolio was just over $2.2 billion.[1] About 94 percent ($2.07 billion) of the portfolio is managed by the Federal Aviation Administration (FAA). FAA's major IT investments fund important aviation modernization programs, including the Next Generation Air Transportation System (NextGen), a multibillion-dollar effort to modernize the U.S. air traffic control system.[2] However, since 2005, FAA has experienced cost overruns, schedule delays, or both on 7 of its 14 major air traffic control IT programs, including 1 that exceeded original cost estimates by $2 billion and was delayed by 14 years.[3] Our office and the Government Accountability Office (GAO) have issued numerous audit reports and testimonies related to FAA's major IT investments that point to longstanding and significant concerns in the Agency's management and oversight of these critical programs (see exhibit B).

[1] OMB Circular A-130, "Management of Federal Information Resources," defines "major information system(s)" as those that require special management attention for reasons including importance to the agency's mission; high development, operating, or maintenance costs; or significant role in administering agency programs. The $2.2 billion represents DOT's major IT investments as reported on OMB's IT dashboard, as of September 2012. DOT's total portfolio including non-major IT investments is $3.0 billion.

[2] According to FAA's fiscal year 2012 enacted budget, 30 percent of its IT investment portfolio is devoted to NextGen programs.

[3] FAA's February 2012 Capital Investment Plan, Appendix D.

To improve oversight of major Federal IT investments, the Office of Management and Budget (OMB) called for agencies to establish executive investment governance processes. In response, DOT established a departmental Investment Review Board (IRB), effective December 4, 2009, to help ensure the Department realizes optimal value for its IT investments. DOT also required that individual IRBs be established within each of its 12 Operating Administrations that are responsible for overseeing their IT investments. The Joint Resources Council (JRC) serves as FAA's IRB to help ensure FAA's capital investments fulfill mission priorities and maximize resources.

Given the cost, complexity, and importance of major IT investments to the Department's mission, we assessed whether (1) DOT's investment governance practices meet Federal and statutory investment oversight requirements and best practices, and (2) FAA and DOT provide sufficient oversight of FAA's major IT investments.

In conducting this audit, we analyzed DOT's and FAA's investment review policies and practices, interviewed IRB and JRC members, surveyed Chief Information Officers (CIO) at all 12 of DOT's Operating Administrations, and reviewed all 15 key investment decisions that the JRC made in calendar year 2010 through November 2011, worth a combined value of over $2.6 billion. We conducted this review between September 2011 and January 2013 in accordance with generally accepted Government auditing standards prescribed by the Comptroller General of the United States. Exhibit A provides further details on our scope and methodology.

RESULTS IN BRIEF

DOT's investment oversight practices do not fully meet OMB requirements or DOT policies. Specifically, DOT does not have an active IRB or supporting boards to provide a comprehensive management framework. Until recently,[4] the Department had not held a senior management level IRB meeting in almost 2 years, despite OMB requirements to meet periodically and DOT's 2009 IRB Charter requirements to meet semiannually.[5] IRB meetings are intended to provide strategic oversight of DOT's entire IT investment portfolio. Instead, DOT relied solely on evidence-based TechStat accountability sessions, which are, by design,

[4] On December 14, 2012, DOT held its first IRB meeting since February 2011. The meeting did not include a review of DOT's IT portfolio. Instead, the Office of the CIO (OCIO) presented a proposed framework for departmentwide IT governance and a draft, updated IRB charter, which was dated October 23, 2012.
[5] OMB Circular A-130, "Management of Federal Information Resources," requires agencies to establish oversight mechanisms that require periodic review of information systems. Under DOT's IRB charter, dated December 4, 2009, the IRB is to meet semiannually to provide strategic direction, leadership, and alignment of IT investments and programs with DOT business needs and direction, budget objectives, goals, performance planning, and reporting to conduct investment oversight duties.

less comprehensive than IRB reviews because they focus on individual troubled or underperforming programs. OMB requires that agencies use TechStat sessions and specifies that the sessions should supplement rather than replace agency IRB reviews.[6] Additionally, DOT did not fully implement OMB's TechStat guidance. For example, DOT did not consistently hold program offices accountable for completing assigned action items, which, according to OMB, is a key objective of TechStat sessions. For the 8 TechStat sessions we reviewed, DOT did not track 56 percent of action items to completion. During our audit, DOT initiated actions intended to reform its IT investment oversight, such as issuing a high-level departmental IT governance policy[7] and proposing a new framework for IT governance. However, DOT has not yet developed comprehensive plans and procedures to implement this new framework.

FAA and DOT face challenges in providing sufficient oversight of FAA's major IT investments. FAA's JRC has a comprehensive framework for investment governance, yet the Agency does not always follow the JRC approval and oversight process. For example, program offices do not always submit critical investment information—such as program requirements and cost and schedule estimates—prior to JRC investment decisions, and the JRC Secretariat does not maintain a complete repository of investment information as FAA's Acquisition Management System (AMS) requires.[8] Consequently, the JRC risks making investment decisions with incomplete information, which could jeopardize the success of critical FAA programs. FAA has recently created a new Program Management Office (PMO) for its Air Traffic Organization (ATO) to oversee the execution of its IT programs and supplement the JRC; however, this group is not yet fully staffed and lacks processes needed to function effectively in this role. Finally, DOT's IT governance process provides only limited oversight of FAA's major IT investments—even though FAA's IT investments comprise 94 percent ($2.07 billion) of DOT's fiscal year 2012 major investment portfolio. Notably, DOT has only reviewed two FAA programs in the past 2 years.

We are making a series of recommendations to improve DOT's and FAA's oversight of major IT investments.

BACKGROUND

Since the 1990s, Federal initiatives have called for agencies to use rigorous governance processes to manage their investments. The Clinger-Cohen Act of 1996 establishes the CIO position in Federal executive agencies and requires each

---

[6] OMB guidance, *A Year in Review: Outcomes and Lessons Learned from Implementing Agency-Led TechStat Reviews Across the Federal Government*, states that TechStat reviews are to be integrated into the agency's broader IT management framework. OMB also states that TechStats should not be viewed as a separate investment review process.

[7] DOT Policy Order 1351.39, dated August 29, 2012.

[8] AMS Appendix A, Roles and Responsibilities.

agency to implement a management framework to optimize IT expenditures.[9] OMB's Circular A-130, "Management of Federal Information Resources," issued November 2000, requires the agency's CIO to (1) monitor and evaluate IT investment performance through a capital planning and investment control process, and (2) advise the agency head on budgetary implications of IT decisions. In response, DOT chartered its IRB in December 2009. In addition to the departmentwide IRB, the Department required each DOT Operating Administration to establish an IRB to select and manage their individual investments.

FAA's IRB is the JRC. Under FAA's AMS, the JRC is to help ensure FAA's capital investments fulfill mission priorities and maximize resources, and the JRC Executive Secretariat manages a Readiness Process intended to determine if its investments align with FAA's mission. FAA's Capital Investment Planning and Control Process prescribes key decision points to determine and prioritize investment decisions, implement solutions, and manage them over their lifecycle (see table 1).

Table 1. Key Decision Points in FAA's Lifecycle Management Process

Key Decision	Definition
Concept & Requirements Definition Readiness	Translates priority operational needs in the Enterprise Architecture (EA) into preliminary requirements and a concept of operations to improve service delivery. Identifies alternative solutions able to satisfy the service need.
Investment Analysis Readiness	The Investment Decision Authority (IDA) determines whether the concept of use, preliminary requirements, EA products, and alternatives are sufficiently defined to move to investment analysis.
Initial Investment	Enables the IDA to select the best alternative that meets the required performance and offers the greatest value.
Final Investment	Details planning for the alternative selected for implementation.
In-Service	Authorizes deployment of a solution into the operational environment.
Baseline Change	Replans the remaining schedule and/or reallocates the remaining budget.

Source: FAA

Recently, OMB has placed increased importance on sound agency capital planning and IT investment governance to improve the way Federal IT investments are

[9] Clinger-Cohen Act of 1996 (formerly the Information Technology Management Reform Act), Pub. L. No. 104-106, Division E (1996); codified at 40 United States Code (U.S.C.) § 11101, et seq. (2011). According to FAA, the Clinger-Cohen Act does not apply to the Agency because 49 U.S.C. § 40110(d) empowers the FAA Administrator to establish the AMS to address the unique needs of FAA without requiring compliance with most Federal acquisition laws or regulations, including the Clinger-Cohen Act.

managed. In December 2010, the Federal CIO issued an assessment of governmentwide IT governance and announced a plan for IT reform, which established the requirement for Federal agencies to conduct TechStat accountability sessions on troubled investments, and to turnaround or terminate poorly performing projects.[10] In August 2011, OMB required that agency CIOs be positioned with the authority to improve their agencies' operating efficiencies, take a lead governance role, and ensure IT portfolio analysis is an integral part of the annual budget process.[11]

In December 2011, the Federal CIO Council issued an assessment of agency-led TechStats after 1 year of implementation across the Federal Government. The Federal CIO Council's report reiterated that TechStat accountability sessions (1) provide a valuable accountability tool to supplement existing agency review processes and IRBs, and (2) are intended to be integrated into agencies' strategic, comprehensive performance management frameworks for their IT investment portfolios.[12]

DOT'S INVESTMENT OVERSIGHT PRACTICES DO NOT FULLY MEET OMB REQUIREMENTS OR DOT POLICIES

DOT does not have a comprehensive management framework for executive oversight of its $2.2 billion major IT investment portfolio. Instead of holding required senior management level IRB meetings, which focus on reviewing the Department's entire IT investment portfolio, DOT had, until recently, relied solely on TechStat accountability sessions, which are intended to only focus on individual troubled or underperforming programs. Further, DOT has not fully implemented OMB's TechStat guidance and has not held TechStats for several projects that DOT rates as "at risk." During our audit, DOT initiated some actions intended to reform its IT investment framework, but it has not yet developed comprehensive plans and procedures to implement them.

DOT Does Not Have a Comprehensive Framework for Executive Oversight of Its IT Investments

Until recently, DOT's IRB had not held required semiannual investment review sessions since February 2011. As a result, DOT has not complied with either OMB's requirements for investment oversight or DOT's 2009 IRB Charter, which outlines specific planning and oversight roles for the IRB. Officials from DOT's Office of the CIO (OCIO) explained that the Department placed the IRB process

---

[10] OMB, *25 Point Implementation Plan to Reform Federal Information Technology Management*, Dec. 9, 2010.
[11] OMB Memorandum, "Chief Information Officer Authorities," Aug. 8, 2011.
[12] OMB guidance, *A Year in Review: Outcomes and Lessons Learned from Implementing Agency-Led TechStat Reviews Across the Federal Government*, Dec. 8, 2011.

in “hibernation” because the meetings were ineffective at overseeing DOT’s investments. According to OCIO officials, IRB members frequently delegated meeting attendance to lower ranking officials, so the IRB could not make meaningful decisions needed to oversee DOT’s IT investments. We briefed DOT on our audit findings in September 2012, and the OCIO subsequently held an IRB meeting on December 14, 2012. However, this IRB meeting did not include a review of DOT’s IT portfolio or troubled programs. Instead, the OCIO presented a proposed framework for DOT’s IT governance and a draft, updated IRB Charter, dated October 23, 2012. The OCIO did not schedule the next IRB meeting or establish action items to finalize the IT governance framework and IRB Charter.

In addition, while DOT’s 2009 IRB Charter designated a subcommittee called the Executive Committee (ExComm) to oversee the individual IRBs of DOT Operating Administrations,[13] it too stopped meeting. In response to our survey, 9 of 11 CIOs—who oversee their Operating Administration’s IRBs—stated that the ExComm has not assessed their IRBs’ performance. As such, the ExComm and OCIO lack full insight and are not well positioned to advise on investments approved by the Operating Administrations’ IRBs.[14]

Finally, while DOT’s Office of the Chief Financial Officer (OCFO) collaborates with Operating Administrations when they submit their annual budgets, DOT does not have a process to monitor and oversee Operating Administrations’ programs after they have been appropriated funding.[15] This is contrary to OMB’s requirement that agency CIOs not only have the authority to improve their agencies’ IT program operating efficiencies but that they also take a lead management advisory role, to include recommending termination of underperforming programs, when necessary.

Strategic departmentwide oversight is especially important in a decentralized department like DOT, which has 12 Operating Administrations, each with unique investment portfolios. Without an active IRB and supporting boards, DOT does not have a comprehensive management framework to provide executive oversight or integrated portfolio management of its $2.2 billion major IT investment portfolio. As a result, DOT is not well positioned to meet Federal requirements for investment oversight, which is intended to enforce accountability and maximize the value of IT investments.

[13] DOT’s 2009 IRB charter also requires the ExComm subcommittee to meet quarterly to ensure Operating Administrations execute their responsibilities for planning, selecting, acquiring, securing, operating, and managing IT investments.

[14] DOT’s draft, updated IRB charter, dated October 23, 2012, would eliminate the ExComm’s role and establish an Executive Secretariat to monitor Operating Administrations’ IRB performance.

[15] DOT’s December 14, 2012, proposed framework for IT governance provides a conceptual model illustrating at a high level the intended relationships among DOT’s IRB, the Operating Administration’s IRBs, and their budget offices.

DOT Relied Solely on TechStat Reviews of Individual Programs in Place of Strategic Oversight of the Department's IT Portfolio

During our review, DOT relied solely on its TechStat accountability sessions for its IT management framework. However, TechStats are intended to review individual troubled programs rather than support portfolio-wide investment decisions. In 2010, OMB required all agencies to conduct TechStat accountability sessions, which are evidence-based reviews of troubled or underperforming IT programs. While DOT began its TechStat accountability sessions in March 2011, it did not until recently hold IRB meetings, which are intended to provide strategic IT oversight for the entire Department. As a result, TechStat sessions had replaced rather than supplemented DOT's IRB reviews, contrary to OMB guidance. As table 2 on the next page illustrates, TechStat reviews of individual programs serve a different purpose than IRB oversight of the Department's entire IT portfolio. Since March 2011, DOT has only reviewed 9 of 44 (20 percent) major IT programs using TechStat accountability sessions. Such minimal oversight weakens DOT's ability to effectively manage its entire IT investment portfolio.[16]

[16] The nine TechStat accountability sessions were held from March 2011 through April 2012. According to DOT OCIO officials, the OCIO cancelled two sessions scheduled in that timeframe because DOT did not want to review programs that OMB had already reviewed.

Table 2. Comparison of DOT's IRB Reviews and TechStat Sessions

	IRB Reviews (including ExComm)[a]	TechStat Sessions[b]
Purpose	• Provide strategic leadership • Align IT investments with DOT's needs • Establish budget goals as well as performance planning and reporting • Review programs to provide executive management oversight of large-dollar, major, cross-agency, or troubled IT projects • Review Operating Administrations' IRB performance and make specific project management recommendations	• Reduce wasteful spending by turning around troubled or risky programs, and terminating failed programs sooner • Identify lessons learned to better manage Federal IT Investments • Hold officials accountable for program success • Assign concrete actions to address weaknesses
Approach	• Semiannual IRB meetings • Quarterly ExComm meetings	• Monthly meetings
Voting Members/Attendees	• Deputy Secretary • DOT CIO • DOT CFO • Deputy General Counsel • Assistant Secretary for Administration • Under Secretary for Policy • Administrator from each DOT Operating Administration	• DOT CIO and staff • Program office of the troubled program

[a] According to the OCIO's draft, updated IRB Charter (dated October 23, 2012, and pending approval), several changes are to be made to the IRB. For example, (1) the ExComm will be eliminated and replaced with an Executive Secretariat, (2) IRB meetings will be held at least annually, and (3) the Senior Procurement Executive will become a voting member.

[b] DOT's proposed framework for IT governance, dated December 14, 2012, introduced the concept of an Investment Working Group (IWG), which would report to the IRB on its analysis and research of IT investments. A key responsibility of the IWG would include reviews of high-risk or underperforming investments, a role similar to DOT's TechStat.

Source: OIG analysis of DOT's December 4, 2009, IRB Charter; DOT's draft October 23, 2012, IRB Charter; and OMB's TechStat guidance.

DOT Did Not Fully Implement OMB's TechStat Guidance Resulting in Diminished Oversight of Its Troubled Programs

During our review, DOT held TechStat reviews as a substitute for a comprehensive IT management framework. Even though it held TechStat reviews, it did not fully implement OMB's TechStat guidance. DOT followed some of OMB's guidance on TechStat accountability sessions, such as providing subject matter expert reviews of investment documents and preparing decision memoranda that assign action items to program offices. However, DOT did not comply with OMB guidance to fully develop and institutionalize its TechStat process. Specifically, DOT did not (1) formalize its TechStat authority within its

IT management framework, (2) establish clear criteria to select and prioritize investments requiring TechStat reviews, (3) consistently hold Operating Administrations accountable for completing assigned action items, or (4) implement an effective means to document and share lessons learned and best practices.

DOT did not formalize TechStat authority within its IT management framework. DOT has not updated its 2009 IRB Charter to reflect OMB guidance, which states that an agency's IRB should be the primary governing body that enforces TechStat decisions. Without an updated charter, DOT's IRB did not have formal authority over the TechStat decision-making process. In addition, since no IRB meetings were held, senior management lacked the insight and ability to oversee troubled programs, as OMB had intended for a functioning and comprehensive IT governance framework.[17]

DOT does not have clear criteria to select and prioritize investments requiring TechStat reviews. According to OMB guidance, DOT should have a methodology and consistent metrics—such as cost, schedule, and program significance—to select investments for TechStat review. Because DOT does not have documented procedures for selecting and prioritizing programs for review, it may miss opportunities to turnaround underperforming programs. For example, DOT's TechStat has not yet reviewed three of seven programs that the DOT CIO currently rates as "at risk."[18] These three programs represent over $81 million in fiscal year 2012 spending.[19]

DOT does not consistently hold Operating Administrations accountable for completing assigned TechStat action items. According to OMB guidance, action items are a main feature of TechStat sessions and can help ensure the success of reviewed programs. We reviewed the meeting minutes for 8 TechStat sessions[20]—all that were available at the time of our audit—and found that DOT did not track 41[21] (56 percent) of 73 action items to completion, all of which are at least 6 months overdue. For example, at a TechStat session for the National Highway Traffic Safety Administration's (NHTSA) Modernization and Consolidation program—projected to spend $6.8 million through budget year 2013—DOT

---

[17] The DOT OCIO's draft updated IRB charter, dated October 23, 2012, would, if adopted, provide the IRB with the authority to enforce TechStat decisions.

[18] As of July 2012, DOT had seven programs rated as "medium risk" and no programs rated as "high risk." Two of the three programs not reviewed have been "at risk" or underperforming since September and November 2011, while the other has been "at risk" since January 2011.

[19] As reported on OMB's IT Dashboard.

[20] Although DOT held nine total TechStat sessions, the information for one of these sessions was unavailable at the time of our review.

[21] The 41 action items include 37 listed in DOT's action item tracking tool and 4 that were assigned during a TechStat session but not listed in the tracking tool. DOT did not have documentation explaining why these action items were not being tracked.

assigned seven action items to NHTSA program officials to improve cost consolidation, governance, program initiation, and business needs analysis.[22] Yet DOT only monitored three of the seven action items to ensure NHTSA completed them on time. This lack of accountability and follow up weakens the Department's management of troubled and underperforming programs, and may impede or delay decisions to redirect limited budget resources to other programs or agency priorities.

DOT lacks an effective means to document and share lessons learned and best practices for its TechStat process. According to OMB, an intended goal of the TechStat process is to document and share lessons learned and best practices. DOT's OCIO stated that DOT officials currently share best practices verbally at monthly CIO council meetings; however, they do not keep meeting minutes, so any best practices that may be discussed are not documented—a practice contrary to OMB guidance.[23] Consequently, DOT is missing opportunities to leverage knowledge management, information-sharing best practices, and approaches from Government and industry to ensure that investments produce high-quality products on time and within budget.[24]

DOT Has Initiated Actions To Reform Its Governance Structure But Does Not Have a Comprehensive Implementation Plan

During the course of our audit, DOT's OCIO initiated actions to reform its IT governance. These actions include proposing a new framework for DOT's IT governance; issuing a policy order pertaining to DOT's IT governance structure; and proposing a draft, updated IRB Charter. However, DOT does not have a comprehensive plan to implement the new policy order and to finalize the proposed framework and the draft, updated IRB Charter.

In March 2012, the OCIO shared with us a draft high-level proposal for a new departmentwide governance structure for major IT investments. The OCIO told us that the components of the proposed March 2012 structure would include a reinstatement of DOT's IRB as the highest level of reporting and a continuation of TechStat accountability sessions of troubled or underperforming programs.

---

[22] According to NHTSA, this program is intended to replace two of its core data collection, analysis, and reporting systems.

[23] OMB Circular A-123, "Management's Responsibility for Internal Control," Dec. 21, 2004. The Circular requires that appropriate internal control should be integrated into each agency system used to direct its operations. It also requires that agency management should have well-defined documentation processes that contain an audit trail, include verifiable results, and specify document retention periods so that someone not connected with the procedures can understand them.

[24] A knowledge-based approach to product development efforts enables developers to be reasonably certain, at critical junctures or "knowledge points" in the acquisition life cycle, that their projects are more likely to meet established cost, schedule, and performance baselines, and therefore provides them with information needed to make sound investment decisions. See GAO report, *NASA: Implementing a Knowledge-Based Acquisition Framework Could Lead to Better Investment Decisions and Project Outcomes* (GAO-06-218A) Dec. 21, 2005.

According to the OCIO, the goal of its new governance structure is to transform the role of the OCIO to that of a trusted advisor and consultant on the Department's major IT projects.

On August 29, 2012, the OCIO issued Policy Order 1351.39, "Departmental Information Technology Governance Policy," intended to serve as the overarching DOT policy pertaining to the governance structure for IT management investments and operations. The policy order delegates new oversight responsibilities to DOT's CIO, including (1) development and implementation of policies, guidance, standards, and tools to support implementation of the IT governance policy; and (2) management of oversight processes, including accountability reviews of IT investments and evidence-based reviews of IT portfolios. The policy order also calls for Operating Administrations to comply with the IT governance policy and for increased collaboration among stakeholders. For example, it requires DOT's CFO and Senior Procurement Executive (SPE)[25] to integrate the IT governance policy with their processes for making budget, financial, and acquisition management decisions.

However, Policy Order 1351.39 only provides a broad outline of DOT's IT governance structure and lacks details regarding day-to-day implementation and practices. For example, the policy order describes DOT's IT governance structure as "multiple groups, processes, schedules, roles, and responsibilities" with no mention of details of the OCIO's proposed governance structure. Instead, the DOT policy order acknowledges that the DOT OCIO needs to develop implementation guidance.[26] Further, the OCIO has not yet developed a comprehensive plan with milestones to implement the policy order, and the policy order does not clearly define the roles of critical agency stakeholders in DOT's governance processes. To illustrate, the policy order does not specify the SPE's role in key investment control and oversight bodies, such as the IRB or TechStat. OMB guidelines and GAO best practices state that failure to define roles and responsibilities can lead to missed opportunities to improve acquisition outcomes.[27]

In September 2012, we briefed DOT on our audit findings; in response, on December 14, 2012, DOT held its first IRB meeting since February 2011. At this meeting, the Deputy Secretary emphasized his commitment to strengthening the IRB's role and oversight of DOT's IT investments. The agenda for the December 14, 2012, IRB meeting consisted of the OCIO introducing the IRB members to (1) a proposed framework for IT governance at DOT[28] and (2) a draft, updated IRB

[25] The SPE's responsibilities include ensuring that DOT acquisitions help accomplish the Department's mission.
[26] DOT Policy Order 1351.39, Section 39.10.1, Aug. 29, 2012.
[27] OMB Memorandum, "Conducting Acquisition Assessments under OMB Circular A-123," May 21, 2008; GAO, *A Framework for Assessing the Acquisition Function at Federal Agencies* (GAO-05-218G), Sept. 2005.
[28] DOT's proposed IT governance framework, dated December 14, 2012, presented in a conceptual Microsoft PowerPoint presentation, reflects an evolution of an earlier draft proposal that the OCIO shared with us in March 2012.

Charter, dated October 23, 2012. The OCIO's proposed IT governance framework includes a conceptual model illustrating the intended roles of DOT's IRB, a new Investment Working Group, the Operating Administration's IRBs, and the DOT and Operating Administrations' budget offices. For example,

- The DOT IRB is intended to provide strategic direction and planning for departmentwide portfolio concerns and major investments, supply IT guidance in support of DOT's budget and acquisition processes, and ensure accountability reviews of IT investments are conducted.

- A new Investment Working Group (IWG), which would report to the IRB, is intended to implement cross-cutting initiatives throughout DOT in support of the IRB's priorities. For example, one of the IWG's key responsibilities would be to review high-risk or underperforming investments—a role similar to DOT TechStat sessions.

- The Operating Administrations' IRBs are intended to provide investment management—including selecting, controlling, and evaluating their investments.

- DOT's budget office and the Operating Administrations' budget offices would play a role in this new IT governance framework by providing input to the DOT IRB and the Operating Administrations' IRBs.

According to the OCIO, this new governance structure would offer benefits including cost savings from enterprise solutions, the setting of clear standards and repeatable processes for departmentwide initiatives, a focus on key priorities for managing DOT's IT portfolio, and the integration of IT governance with the budget formulation process and acquisition strategy and planning. However, while the OCIO's proposed structure acknowledged that DOT needs to be more accountable and efficient while implementing a sound governance process, the OCIO has not yet set a date to finalize the framework and has not implemented operating procedures to ensure that this framework is effectively institutionalized and consistently implemented departmentwide.

The OCIO's draft, updated IRB Charter presented at the December 14, 2012, meeting addresses some concerns we shared with DOT during our September 2012 briefing. For example, the draft, updated IRB charter (1) calls for the IRB to meet at least annually, (2) establishes DOT's SPE as an IRB voting member, and (3) assigns the IRB authority to execute management oversight of IT investment performance through accountability reviews. However, DOT has not finalized a date to approve the draft, updated IRB charter, and the IRB has not yet convened to review DOT's entire IT portfolio.

Until DOT fully implements its new policy order, finalizes its draft IT governance framework and draft, updated IRB Charter, and integrates these three efforts, the Department's $2.2 billion IT investment portfolio—including NextGen programs—is at risk of continued cost overruns and schedule slips due to insufficient oversight.

FAA AND DOT FACE CHALLENGES IN PROVIDING SUFFICIENT OVERSIGHT OF FAA'S IT INVESTMENTS

FAA's JRC has a framework for investment governance, yet the Agency does not always follow this JRC process. As a result, FAA risks making investment decisions with incomplete information, which could jeopardize the success of critical FAA programs. Moreover, FAA has recently created a new ATO PMO to oversee the execution of its IT programs and supplement the JRC, but it lacks documented policies and procedures to function effectively in this role. Finally, DOT's governance process provides limited oversight of FAA's major IT investments, which comprise the vast majority of the Department's investment portfolio.

FAA Does Not Always Follow Its JRC Process

FAA provides a structure for investment governance through its JRC, which includes a required approval and oversight process for key investment decisions. However, the JRC does not always hold program offices accountable for following this process, including (1) submitting critical investment information prior to investment decisions, (2) approving investment information prior to decisions, (3) completing action items on time, (4) meeting scheduled decision due dates, and (5) maintaining a complete investment decision repository. In addition, the JRC's official investment decision repository is incomplete.

Critical investment documents are not always submitted prior to decisions. The AMS and FAA guidance[29] require FAA program offices to provide the JRC with specific acquisition planning and control documents prior to key investment decisions. Without these documents—which contain critical investment data such as program requirements, detailed plans, cost and schedule estimates, and business cases—the JRC cannot ensure that it is fully informed on issues that may affect its investment decisions. However, the JRC made key investment decisions (valued at $23 million) for 2 of the 15 programs we reviewed without all of the required investment information—including the Implementation Strategy and Planning Document (ISPD). FAA describes the ISPD as the most critical, relevant, and meaningful information for investment decision making, as it contains plans for the investment's implementation and in-service management. In one case, the JRC

[29] FAA, *Investment Decision Authority Process Guidance,* Jul. 30, 2010.

approved an $8 million baseline change for FAA's Instrument Flight Procedures Automation program without the required Acquisition Program Baseline document.[30] In the other case, the JRC approved an initial investment decision for FAA's NextGen Facilities program and authorized $15 million to conduct final investment analysis without required documentation, including the ISPD and the Final Investment Analysis Plan.[31]

Critical investment documents are not always approved prior to decisions. FAA guidance also requires that the investment information documents be approved and signed by FAA approving officials prior to investment decisions.[32] However, 4 of the 15 programs we reviewed—including the En Route Automation Modernization program (ERAM) and Automatic Dependent Surveillance-Broadcast (ADS-B), which are both NextGen programs—lacked required approvals for some investment decision documents. Specifically, these programs lacked approvals for documents such as the final business case, program baseline, and ISPD. However, the JRC made over $1 billion in investment decisions for these programs without approvals in place.[33] Missing and/or late signatures may indicate that approving officials have unresolved concerns with the investment or that they simply did not review the investment documents. An FAA official said that the JRC and program offices discuss the risks associated with making investment decisions without approved investment information. However, FAA does not document these risk discussions and has not developed risk mitigation plans—contrary to AMS risk management policies. Further, we identified an instance in which FAA approving officials backdated approvals of an investment decision document. This practice calls into question the reliability of other investment documents that appeared to have timely approvals.

Controls are not in place to ensure action item due dates are met. The JRC assigns action items to resolve outstanding issues from investment decisions, often requiring program offices to finalize or obtain approval for investment documents. However, the JRC does not have adequate controls to ensure action item due dates are met. For example, the JRC did not hold the ERAM program office accountable for meeting an action item deadline to resolve open concerns about its ISPD. FAA had only given conditional approval for the ISPD because it had open concerns about whether ERAM's installation and maintenance activities complied with necessary standards. Rather than require the program office to resolve these concerns before the decision meeting, the JRC went ahead and approved a $330 million cost baseline increase in June 2011. The JRC also required the

---

[30] The Acquisition Program Baseline defines cost, schedule, and performance baselines for the investment program.
[31] The Final Investment Analysis Plan includes detailed cost and benefits estimates, detailed plans, and final requirements for the most promising alternative.
[32] FAA, *Investment Decision Authority Process Guidance*, Jul. 30, 2010.
[33] This includes documents that are either still completely missing signatures or were approved as much as 2 months after the decision date.

ERAM program office to resolve open concerns and submit an approved ISPD by the end of July 2011. Although the ERAM program office missed the deadline by 4 months, there is no evidence that the JRC followed up with ERAM program officials, nor did it suspend or reconsider its rebaseline decision. The JRC's practice of conditionally approving investment decisions without resolving existing technical program issues puts the schedule and cost for FAA programs at risk. These risks are magnified in already troubled programs.

Scheduled investment decision meeting dates are not always met. The JRC does not hold program offices accountable for missing scheduled investment decision meetings. For example, FAA's Aeronautical Information Management Modernization (AIM-M) program office postponed a final investment decision meeting three times over a 20 month period. The decision meeting concerned segment 1 (valued at $23 million) of the AIM-M program, which is intended to improve the capacity and efficiency of airspace usage while reducing safety incidents caused by out-of-date or confusing information. Although the JRC ultimately canceled the AIM-M final investment decision meeting, it authorized $6.5 million in funding for the program based on the program office's financial and technical analysis. This practice of postponing or canceling key investment decisions could also result in significant delays to interdependent programs. For example, FAA's Next Generation Air/Ground Communications (NEXCOM) shares interdependencies with AIM-M and could be affected by delays in AIM-M decisions.

The JRC's investment decision repository is incomplete. FAA has not identified what type of investment decision documentation should be maintained by the JRC Executive Secretariat, and this office has only kept partial records of investment decision documents in its official repository. According to the AMS, the JRC Executive Secretariat's office is to populate and maintain the repository to ensure it contains investment decision documentation, records of decision meeting minutes, assigned action items, and investment decision guidance documents and processes. However, the AMS does not specify which specific decision documents, such as the ISPD, should be maintained in the repository. Consequently, we found that critical investment information was sometimes dispersed among the JRC repository, program offices, and other FAA offices. Specifically, for the 15 FAA programs that had key investment decisions between 2010 and 2011, the repository lacked 14 of 53 investment decision documents—including investment analysis plans and final ISPDs. Secretariat officials stated that they did not consistently maintain documents in the repository because they believed the documents were available elsewhere, such as a program office. However, one Secretariat official said that maintaining all investment documents in the repository would be a good business practice. In the absence of a properly maintained investment repository, FAA is missing opportunities to leverage knowledge management and information-sharing best practices and approaches from Government and industry to effectively manage its investments, including the (1) consistent management of investment information, (2) tracking of program baselines, (3) identification of major IT cost and management trends and program risks, (4) application of knowledge-based acquisition principles, and (5) capturing of lessons learned.[34] Leading organizations in Government and industry have used such approaches to deliver high-quality products on time and within budget.

FAA Is Currently Implementing a New ATO Program Management Office To Enhance Program Oversight

In September 2011, Congress approved FAA's request to create a new ATO PMO[35] as part of the Agency's "Foundation for Success" initiative, which is focused on putting in place an improved organizational structure with the flexibility needed to keep pace with the growth and advancement of aviation worldwide. The ATO PMO is responsible for overseeing 26 of the Agency's 37 major IT programs. FAA estimated that it would spend $1.8 billion on these 26 programs in fiscal year 2012. According to the Secretary of Transportation, combining FAA's program managers under one organization will create a stronger program management community, provide greater transparency and accountability, and improve consistency and sharing of best practices. However, Congress noted that FAA's past efforts to streamline operations have met with limited success in controlling operating costs and executing major acquisitions, and warned that the new reorganization will be "hollow" unless FAA builds the necessary expertise and strengthens program management for NextGen.[36]

Within the ATO PMO, FAA established a Program Control Group, which is expected to provide another layer of review to supplement the JRC's investment approval and oversight processes.[37] However, the group is only about 55 percent staffed and lacks documented policies and procedures to function effectively in this role.[38] For example, PMO officials stated that the Program Control Group is responsible for assessing investment decision documents, yet the group lacks formal policies and procedures to evaluate whether decision documents will

[34] GAO, *Information Technology Investment Management: A Framework for Assessing and Improving Process Maturity* (GAO-04-394G), Mar. 2004.

[35] FAA PMO officials told us that the PMO was "stood up" in May 2012.

[36] Departments of Transportation, and Housing and Urban Development, and Related Agencies Appropriations Bill, 2013 (House of Representatives Report No. 112-541), Jun. 20, 2012.

[37] The Program Control Group's other functions include providing quality assurance, monitoring program metrics, tracking best practices, standardizing program reporting mechanisms, and serving as a direct interface to other lines of business (such as FAA's acquisitions, CIO, and finance offices). The Program Control Group meets biweekly.

[38] GAO's March 2004 report, *Information Technology Investment Management: A Framework for Assessing and Improving Process Maturity*, states that in order for an organization to develop a sound IT investment process, it must attain successful IT investment control techniques at the project level. The absence of predictable, repeatable, and reliable investment control processes will result in ineffective evaluation processes and contradictory efforts at process improvement.

provide the JRC with reliable and complete information on which to make investment decisions. PMO officials stated that process standardization will occur over time but could not provide dates by which it expected to complete this standardization. Without standardized operating processes, it may be challenging for the PMO to effectively manage FAA's ATO programs and achieve its goals for transparency, accountability, and consistency.

DOT's IT Governance Process Provides Limited Oversight of FAA Investments

FAA accounts for a significant portion of DOT's investments and, in fiscal year 2012, represented 94 percent ($2.07 billion) of DOT's total major IT investment portfolio. However, the DOT IRB provides limited oversight of these investments. FAA has agreed to take part in DOT's IRB investment planning and oversight processes—through actions such as signing DOT's 2009 IRB charter and agreeing to "voluntarily participate" in the IRB's ExComm reviews[39]—even though the Agency has been granted independent acquisition authority.[40] According to FAA, this authority exempts the Agency from most Federal procurement laws, including the Clinger-Cohen Act that mandated agency IRBs. Despite FAA's voluntary agreement to take part in DOT's IT investment management process, DOT's OCIO officials told us that FAA's independent acquisition authority could impede the Department's ability to oversee FAA investments.[41] Therefore, DOT has only reviewed two FAA programs in the past 2 years, even though FAA's investments make up the largest portion of DOT's IT investment portfolio. DOT's IRB reviewed FAA's ERAM program in February 2011, and DOT performed a TechStat review of FAA's NAS Voice System, a key enabling program for NextGen, in April 2012.

Improved oversight is especially important for FAA's NextGen transformational programs, given their mission criticality and significant cost. FAA plans to spend more than $2 billion on NextGen over the next 4 years; yet, as we reported in April 2012, FAA has not established reliable and comprehensive baselines for its six NextGen transformational programs and has made limited progress implementing them due to a lack of finalized requirements.[42]

---

[39] DOT Deputy Secretary Memorandum, "OA Investment Review Board (IRB) Requirements and Interaction with the Executive Committee (ExComm) of the DOT IRB," Nov. 4, 2008.

[40] 49 U.S.C. § 106(f) states that the FAA Administrator, rather than the Secretary of Transportation, has final authority over FAA Acquisitions; 49 U.S.C. § 40110(d) empowers the FAA Administrator to establish the AMS to address the unique needs of FAA without requiring compliance with most Federal acquisition laws or regulations.

[41] The FAA administrator has the final authority with respect to FAA acquisitions using the Agency's independent procurement authority once the final investment is approved by the JRC.

[42] *Status of Transformational Programs and Risks to Achieving NextGen Goals* (OIG Report No. AV-2012-094), Apr. 23, 2012.

CONCLUSION

Effective investment oversight and decision making are critical to the Department's IT modernization efforts—especially FAA's NextGen programs. However, governance structures, related plans, and procedures for implementation, as well as oversight processes are incomplete. Until DOT and FAA address these shortfalls, their ability to effectively manage major acquisitions and make well-informed investment management decisions remains at risk, as does the Department's ability to reap the benefits that accompany sound IT investment management and oversight strategies.

RECOMMENDATIONS

We recommend that the DOT Deputy Secretary require the OCIO to:

1. Develop a comprehensive implementation plan for its proposed IT governance framework, which includes all DOT Operating Administrations' IT investments and clearly assigns organizational responsibilities, accountability and authority, milestones to complete activities, and written policies and procedures. This implementation plan should integrate and coordinate Policy Order 1351.39, "Departmental Information Technology Governance Policy"; DOT's draft, updated IRB Charter; and any other documents integral to the framework.

2. Finalize DOT's draft, updated IRB charter to clarify organizational responsibilities, define IRB and TechStat roles and responsibilities, and establish the Senior Procurement Executive as a voting member.

3. Establish written policies and procedures for TechStat accountability sessions, or similar review sessions for troubled and underperforming IT investments. These policies and procedures should include criteria for selecting programs to review, accountability controls to ensure actions items are fully and timely implemented, and a method to share and document lessons learned across the Department.

We recommend that FAA's Federal Acquisition Executive:

4. Strengthen internal controls to ensure that required investment decision documents are reviewed and approved prior to JRC decision meetings as required by the Acquisition Management System.

5. Develop procedures to (a) document the JRC's discussions with program offices when JRC decisions are made without required investment documents, (b) identify the risks of moving forward without the documents, and (c) ensure

that these documented discussions are maintained in the JRC's information repository.

6. Establish procedures to ensure that the JRC Executive Secretariat effectively maintains the JRC's information repository, including all documents that support key investment decisions.

7. Update the Acquisition Management System to specify the investment documents that are required to be included in JRC's information repository and the location of those that should be stored elsewhere.

We recommend that FAA's Vice President of the ATO PMO:

8. Fully staff the ATO Program Control Group, and develop and implement standardized operating policies and procedures for use by the group.

AGENCY COMMENTS AND OFFICE OF INSPECTOR GENERAL RESPONSE

We provided OST and FAA with our draft report on January 22, 2013, and received its response on March 12, 2013, which can be found in its entirety in the appendix of this report. OST and FAA concurred with all recommendations and stated that they have already implemented corrective actions for recommendations 3 and 6, as of March 12, 2013. We consider these recommendations resolved but open pending our verification that these reported corrective actions are complete. OST and FAA have also provided sufficient planned actions with reasonable target dates for recommendations 1, 2, 4, 5, 7, and 8. Accordingly, we consider these recommendations resolved but open pending completion of the planned actions.

ACTIONS REQUIRED

We consider recommendations 1, 2, 4, 5, 7, and 8 resolved but open pending completion of the planned actions. We consider recommendations 3 and 6 resolved but open pending our verification of the completed actions cited by OST and FAA. For recommendations 3 and 6, we request that OST and FAA provide information that clearly indicates what actions have been taken. Specifically, for recommendation 3, we request that OST provide us the DOT OCIO's completed standard operating procedure for the TechStat process and the date of its implementation. For recommendation 6, we request that FAA provide us its procedures to ensure that the JRC Executive Secretariat effectively maintains the JRC's information repository and the date of their implementation. In accordance with DOT Order 8000.1C, we request that OST and FAA provide this information within 30 days.

We appreciate the courtesies and cooperation of OST and FAA representatives during this audit. If you have any questions concerning this report, please call me at (202) 366–5225; Tony Wysocki, Program Director, at (202) 493–0223; or Dana Short, Project Manager at (202) 366–2089.

#

cc: DOT Audit Liaison (M–1)
FAA Audit Liaison (AAE–100)

EXHIBIT A. SCOPE AND METHODOLOGY

We conducted this audit between September 2011 and January 2013 in accordance with generally accepted Government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

To assess whether the Department of Transportation's (DOT) investment governance practices meet Federal and statutory investment oversight requirements and best practices, we reviewed all of the Office of the Secretary's (OST) TechStat accountability sessions held from March 2011 through April 2012 to determine the extent to which OST follows the Office of Management and Budget's (OMB) TechStat model. In addition, we interviewed officials from DOT's Office of the Chief Information Officer (OCIO) and Office of the Chief Financial Officer (OCFO) and the Senior Procurement Executive (SPE). We also surveyed the 12 Operating Administrations' CIOs to collect information on OST's acquisition oversight and decision processes; 11 CIOs responded.

To assess whether the Federal Aviation Administration (FAA) and DOT provide sufficient oversight of FAA's major information technology investments, we reviewed 15 (100 percent) of the key investment decisions, with a total value of over $2.6 billion, that were made by FAA's Joint Resources Council (JRC) during calendar year 2010 through November 2011. We reviewed these decisions to determine if required documentation was received, approved, and signed at the time of the decision date. We also interviewed FAA's JRC Executive Secretariat, JRC members, FAA's Federal Acquisition Executive, an OCFO official, the Air Traffic Organization's Program Management Office (ATO PMO) officials, and FAA program managers.

In addition, we assessed FAA's and OST's investment approval and oversight, procurement practices, and compliance against criteria and best practices such as:

- FAA:
    - Acquisition Management System (AMS), including 1.2 Key Elements of Acquisition Management; 2.0 Lifecycle Acquisition Management Policy; 4.15 Post Implementation Review and Operational Analysis, Appendix A: Roles and Responsibilities, and Appendix B: Acquisition Planning and Control Documents.
    - FAA's Capital Investment Plan for FY 2012-2016 and FY2013-2017.

- OMB:
  - OMB Circulars: A-11, Part 7: "Planning, Budgeting, Acquisition, and Management of Capital Assets," August 2011; A-123, "Management's Responsibility for Internal Control," Dec. 21, 2004; and A-130, "Management of Federal Information Resources;" November 28, 2000.
  - OMB Capital Programming Guide V3.0 Supplement to OMB Circular A-11, Part 7: "Planning, Budgeting, Acquisition, and Management of Capital Assets," August 2011.
  - OMB Memorandum, "Conducting Acquisition Assessments under OMB Circular A-123," May 21, 2008.
  - OMB Memorandum, "Chief Information Officer Authorities," August 8, 2011.
  - OMB, *25 Point Implementation Plan to Reform Federal Information Technology Management*, December 2010.

- Government Accountability Office (GAO), *Information Technology Investment Management: A Framework for Assessing and Improving Process Maturity* (GAO-04-394G), March 2004.

- Clinger-Cohen Act of 1996 (formerly the Information Technology Management Reform Act).

- National Aeronautics and Space Administration (NASA):
  - NASA Policy Directive 1440.6H, "NASA Records Management," March 2008.
  - NASA Procedural Requirements 1441.1D, "NASA Record Retention Schedules," June 2009; 2800.1B, "Managing Information Technology," March 2009; 7120.6, "Lessons Learned Process," January 2010; and 7120.7, "NASA Information Technology and Institutional Infrastructure Program and Project Management Requirements," December 2011.

- Department of Defense (DoD):
  - DoD Directive 5000.02, "Operation of the Defense Acquisition System," December 2008.
  - DoD IT Defense Business Systems Investment Review Process Guidance, January 2009.
  - DoD Report to Congress, "DoD Investment Review Board and Investment Management Process for Defense Business Systems," March 2012.

Finally, to gain an understanding of IT investment best practices, we spoke with officials at GAO and OFPP.

EXHIBIT B. PRIOR OIG AUDITS RELATED TO FAA PROGRAMS

These OIG reports and testimonies are available on our Web site at www.oig.dot.gov.

Status of Transformational Programs and Risks to Achieving NextGen Goals (OIG Report No. AV-2012-094), Apr. 23, 2012.

DOT Does Not Have an Effective Enterprise Architecture for the Management of Information Technology Changes (OIG Report No. FI-2012-086), Apr. 17, 2011.

Progress and Challenges in Developing and Transitioning to the Next Generation Air Transportation System (OIG Congressional Testimony No. CC-2011-036), Oct. 5, 2011.

Actions Needed to Meet FAA's Long-Term Goals for NextGen (OIG Congressional Testimony No. CC-2011-016), Feb. 16, 2011.

Status of FAA's Major Acquisitions: Cost Growth and Schedule Delays Continue to Stall Air Traffic Modernization (OIG Report No. AV-2005-061), May 26, 2005.

EXHIBIT C. MAJOR CONTRIBUTORS TO THIS REPORT

Name	Title
Anthony Wysocki	Program Director
Dana Short	Project Manager
Angela Hailes	Analyst
David Lahey	Auditor
Kathryn Novicky	Analyst
Arnett Sanders	Project Manager
Amy Berks	Senior Counsel
Tanner Horton-Jones	Legal Intern
Christina Lee	Writer-Editor

APPENDIX. AGENCY COMMENTS

THE DEPUTY SECRETARY OF TRANSPORTATION
WASHINGTON, D.C. 20590

March 12, 2013

MEMORANDUM TO: Calvin L. Scovel III
Inspector General

FROM: John D. Porcari
Deputy Secretary

SUBJECT: Management Response to Office of Inspector General Draft Report on the Department's Information Technology Investment Governance Process

Information Technology Investments Are Thoroughly Scrutinized

The Department has provided thorough oversight of information technology (IT) investments in order to achieve the best possible outcomes using available tools and current processes. This has included consideration of systems from various perspectives, including technical, budgetary, and procurement. Oversight processes have been applied at the Operating Administration (OA) level and in the Office of the Secretary. These processes have been effective at identifying problem systems as well as identifying and implementing the measures necessary to get these systems back on track. While effective, we recognize that the Department would benefit from a more comprehensive approach that fully achieves the synergies available by refreshing the Investment Review Board (IRB) process to ensure the new governance process provides meaningful and effective oversight.

More Comprehensive Governance Structure for Major IT Investments

Substantive changes are underway to enhance the governance processes utilized by the Department. The Investment Review Board (IRB) is currently revising its charter to place a clearer focus on strategic leadership for all departmental IT investments. The IRB is planning to reconvene as the Department refines its IT governance and portfolio management policies and practices to improve the effectiveness of IT investment management while promoting efficient use of IT resources. The Department is working to ensure that its governance process effectively aligns the technical perspective of the CIO with the resource availability and efficiency perspective from the Chief Financial Officer and sound contracting practices through the Senior Procurement Executive. At the same time, DOT needs to accommodate sound IRB principles and practices in a manner that is consistent with its unique statutory requirements and maintaining effective interactions with the Federal Aviation Administration (FAA).

Central to enabling this strategic leadership, the departmental governance structure seeks to take a portfolio-based approach, tightly integrating the areas of Enterprise Architecture (EA) and Capital Planning & Investment Control (CPIC). EA provides authoritative data, used to conduct analysis that frames strategic opportunities for IT investments. CPIC is the manner by which we select our strategic IT investments, monitor their progress and ensure they achieve the intended business outcomes. This renewed focus is intended to provide not only compliance with the issues identified in the OIG draft report, but to give a clear picture of the Departments IT portfolio and how those investments are being developed and managed throughout their lifecycle.

Over the past year, the Department, including the FAA, has made significant progress in further improving IT capital investment processes and oversight of these investments. For example, the Acting Chief Information Officer, Senior Procurement Executive and the Chief Financial Officer are working closely on strategic sourcing and investments supporting the planning, acquisition, and management of information technology for the entire Department. In addition, in order to assure even greater transparency over FAA investments, the FAA has invited the Department's Office of the Chief Information Officer (OCIO) as well as a member of the Office of the Chief Financial Officer to attend the FAA Joint Resources Council (JRC) meetings.

RECOMMENDATIONS AND RESPONSE

<u>OIG offered the following recommendations to OST</u>:

Recommendation 1: Develop a comprehensive implementation plan for its proposed IT governance framework, which includes all DOT Operating Administrations' IT investments and clearly assigns organizational responsibilities, accountability and authority, milestones to complete activities, and written policies and procedures. This implementation plan should integrate and coordinate Policy Order 1351.39, "Departmental Information Technology Governance Policy;" DOT's draft, updated IRB Charter; and any other documents integral to the framework.

Response: Concur. The DOT OCIO is currently completing a comprehensive implementation plan for the new governance processes. We intend to complete this action by June 28, 2013.

Recommendation 2: Finalize DOT's draft, updated IRB charter to clarify organizational responsibilities, define IRB and TechStat roles and responsibilities, and establish the Senior Procurement Executive as a voting member.

Response: Concur. The DOT OCIO has sent a revised IRB Charter to all OA's, adjudicated and updated with appropriate comments, and will have a final signed version for use by the DOT IRB. We intend to complete this action by June 28, 2013.

Recommendation 3: Establish written policies and procedures for TechStat accountability sessions, or similar review sessions for troubled and underperforming IT investments. These policies and procedures should include criteria for selecting programs to review, accountability controls to ensure actions items are fully and timely implemented, and a method to share and document lessons learned across the Department.

Response: Concur. The DOT OCIO has completed a standard operating procedure (SOP) for the TechStat process, tailored to the needs of the Department, and will provide a copy to the OIG with our final response. This recommendation has been completed in full.

<u>OIG offered the following recommendations to FAA</u>:

Recommendation 4: Strengthen internal controls to ensure that required investment decision documents are reviewed and approved prior to JRC decision meetings as required by the Acquisition Management System.

Response: Concur. The FAA JRC Executive Secretariat will ensure required investment decision documents are reviewed and approved prior to JRC decision meetings by using the JRC Readiness System to track open checklist items that must be closed before the investment is placed on the JRC meeting agenda. The internal process calls for required documents to be provided to the JRC Secretariat one week prior to the investment decision meeting. The Secretariat has established a mailbox which is used as a drop box where the documents (with all the required signatures) are uploaded, extracted and placed in the official repository. This change in our internal controls was put into place in May of 2012. In the event an exception is granted, for example when an approving official requests a JRC discussion prior to final concurrence for good cause and there is no objection from the organization that has not yet signed, an action item will be formally assigned and tracked to closure using the JRC tracking system. Open action items are reviewed at each Acquisition Quarterly Program Review meeting by the JRC, which gives the members an opportunity to take the appropriate action to ensure action items are completed. These enhancements to our internal controls are being documented in the JRC Executive Secretariat's standard operating procedures. This recommendation is intended to be completed by April 30, 2013.

Recommendation 5: Develop procedures to (a) document the JRC's discussions with program offices when JRC decisions are made without required investment documents, (b) identify the risks of moving forward without the documents, and (c) ensure that these documented discussions are maintained in the JRC's information repository.

Response: Concur. The FAA JRC investment decision briefing templates will be revised to reflect that any investment program requesting approval from the JRC to be allowed to proceed to an investment decision without providing the required documentation prior to the decision meeting must identify the reason for the delay in providing the documents, the risks if allowed to move forward without them, and the planned date that the documents will be provided to the JRC Executive Secretariat. The Record of Decision (ROD) of the meeting will document the discussion held by the JRC, the assigned action item, the action item due date and organization responsible for completing the action. The briefing provided to the JRC along with the final approved ROD will be maintained in the JRC documentation repository. The briefing templates will be revised and posted to the JRC Executive Secretariat web site for use by investment programs by April 30, 2013.

Recommendation 6: Establish procedures to ensure that the JRC Executive Secretariat effectively maintains the JRC's information repository, including all documents that support key investment decisions.

Response: Concur. The aforementioned procedures that have been developed and executed related to the JRC Executive Secretariat internal controls will be used to ensure that the FAA JRC documentation repository both physical and virtual are effectively maintained. All documentation identified in the AMS as exit criteria for each key decision point is being obtained prior to the investment decision meeting or by the assigned due date established by the JRC and placed in the physical repository and uploaded in the virtual repository. This recommendation is considered complete.

Recommendation 7: Update the Acquisition Management System to specify the investment documents that are required to be included in JRC's information repository and the location of those that should be stored elsewhere.

Response: Concur. FAA will update the Acquisition Management System by April 30, 2013 to specify the AMS-required decision documents to be stored in the JRC's information repository, and the location of other related documents to be stored elsewhere.

Recommendation 8: Fully staff the ATO Program Control Group, and develop and implement standardized operating policies and procedures for use by the group.

Response: Concur. The FAA Air Traffic Organization's Program Management Organization (PMO) is adding staff to the Program Control Group and intends to have it fully staffed by September 30th, 2013. The PMO is currently developing and implementing several Standard Operating Procedures (SOPs) for the entire organization, including Program Control. For clarification, the PMO Program Control Group is not intended to be responsible for assessing investment decision documents in order to evaluate whether the documents will provide the JRC with reliable and complete information. Multiple organizations across the Agency are responsible for assessing decision documents, including the Office of Financial Management, NAS Systems Engineering Services, and ATO's Technical Operations Service Unit. The Program Control Group, once fully staffed, will perform assessments of PMO program planning documentation, to ensure consistency and accountability for the PMO leadership. The PMO plans to develop the SOP for these assessments by June 30th, 2013. Additional PMO Program Control SOPs are planned developed and implemented prior to June 30th, including the procedures for internal Program Reviews, PMO Business Planning, and various document control processes.