TREASURY INSPECTOR GENERAL FOR TAX ADMINISTRATION

The Sustaining Infrastructure Program Is Significantly Improved and a Comprehensive Information Technology Infrastructure Strategy Has Been Developed

December 30, 2010

Reference Number: 2011-20-006

This report has cleared the Treasury Inspector General for Tax Administration disclosure review process and information determined to be restricted from public release has been redacted from this document.

Phone Number | 202-622-6500
Email Address | inquiries@tigta.treas.gov
Web Site | http://www.tigta.gov

THE SUSTAINING INFRASTRUCTURE PROGRAM IS SIGNIFICANTLY IMPROVED AND A COMPREHENSIVE INFORMATION TECHNOLOGY INFRASTRUCTURE STRATEGY HAS BEEN DEVELOPED

Highlights

Final Report issued on December 30, 2010

Highlights of Reference Number: 2011-20-006 to the Internal Revenue Service Chief Technology Officer.

IMPACT ON TAXPAYERS

The Sustaining Infrastructure Program centrally funds the Internal Revenue Service's (IRS) information technology infrastructure investments primarily to replace computer hardware that has reached or surpassed its useful life. The Sustaining Infrastructure Program is significantly improved, and agreed-upon prior recommendations are being implemented. Taxpayers and IRS employees rely on the information technology infrastructure to ensure satisfaction of tax liabilities, quick resolution of any issues, and a high level of service to both taxpayers and the Federal Government.

WHY TIGTA DID THE AUDIT

This audit was initiated at the request of a Modernization and Information Technology Services organization executive. The overall objective of this review was to determine the effectiveness of the IRS's efforts to address the critical issue of sustaining the IRS information technology infrastructure.

WHAT TIGTA FOUND

The annual baseline amount allocated to the Sustaining Infrastructure Program is approximately $150 million, and the program is centralized to ensure the replacement of the IRS information technology infrastructure is addressed corporately. The Sustaining Infrastructure Program developed and implemented a process for identifying, reviewing, prioritizing, and making decisions on funding the replacement of aged computer hardware as well as other critical infrastructure needs. The Sustaining Infrastructure Program is significantly improved, and agreed-upon prior recommendations are being implemented. For example, monthly reports are generated showing the number and value of aged computer hardware. IRS management uses the reports to monitor their progress in replacing the aged computer hardware. The appropriate executive steering committee is overseeing the Sustaining Infrastructure Program. The IRS also approved the business case for a new tool called the Knowledge, Incident/Problem, Service Asset Management system which can associate information technology problem tickets with the aged hardware that caused the problem. The Knowledge, Incident/Problem, Service Asset Management system implementation involves replacing the current inventory and problem management system and is scheduled to be implemented by July 2011. The business case also reported potential benefits resulting from the Knowledge, Incident/Problem, Service Asset Management system implementation of $28,825,667.

In addition, the IRS developed a comprehensive information technology Infrastructure Strategy that will be used to improve access to data, access to information technology services, responsiveness to demand, optimization, and cost effectiveness in a sustainable manner.

WHAT TIGTA RECOMMENDED

TIGTA made no recommendations.

In their response to the report, IRS management was pleased with TIGTA's comments and observations acknowledging the Sustaining Infrastructure Program had significantly improved.

TREASURY INSPECTOR GENERAL
FOR TAX ADMINISTRATION

DEPARTMENT OF THE TREASURY
WASHINGTON, D.C. 20220

December 30, 2010

MEMORANDUM FOR CHIEF TECHNOLOGY OFFICER

FROM: For Michael R. Phillips
Deputy Inspector General for Audit

SUBJECT: Final Audit Report – The Sustaining Infrastructure Program Is Significantly Improved and a Comprehensive Information Technology Infrastructure Strategy Has Been Developed (Audit # 200920026)

This report presents the results of our review to determine the effectiveness of the Internal Revenue Service's (IRS) efforts to address the critical issue of sustaining the IRS information technology infrastructure. This review was part of our Fiscal Year 2010 Annual Audit Plan and addresses the major management challenge of Modernization of the IRS.

Management's complete response to the draft report is included as Appendix VII.

Copies of this report are also being sent to the IRS managers affected by the report. Please contact me at (202) 622-6510 if you have questions or Alan R. Duncan, Assistant Inspector General for Audit (Security and Information Technology Services), at (202) 622-5894.

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Abbreviations

IESC	Infrastructure Executive Steering Committee
IRS	Internal Revenue Service
ITAMS	Information Technology Asset Management System
KISAM	Knowledge, Incident/Problem, Service Asset Management
MITS	Modernization and Information Technology Services
SIP	Sustaining Infrastructure Program

Background

The core technology systems that the Internal Revenue Service (IRS) uses to manage taxpayer data and facilitate its service and enforcement work were groundbreaking when first created. However, they have not kept pace with rapid innovations in technology and the explosion in online interaction. This limits the new capabilities the IRS can deliver to its employees and taxpayers. One of the objectives of the IRS Strategic Plan for Fiscal Years 2009–2013 is to "Build and deploy advanced information technology systems, processes, and tools to improve IRS efficiency and productivity." One of the strategies to help achieve this objective is to continually monitor the technology portfolio to ensure it supports core operating needs, upgrading physical infrastructure[1] when appropriate. The management, maintenance, and ongoing enhancement of the information technology infrastructure are central to the successful accomplishment of the IRS's mission "to provide America's taxpayers top-quality service."

The management, maintenance, and ongoing enhancement of the information technology infrastructure are central to the successful accomplishment of the IRS's mission "to provide America's taxpayers top-quality service."

The Sustaining Infrastructure Program (SIP) centrally funds IRS information technology infrastructure investments primarily to replace computer hardware that has reached or surpassed its useful life. The annual baseline amount allocated to the SIP is approximately $150 million, and the program is centralized to ensure the replacement of the IRS information technology infrastructure is addressed corporately.

In addition, IRS executives saw a need for a more comprehensive Modernization and Information Technology Services (MITS) approach to defining the overall information technology infrastructure strategy. A MITS organization executive described the issue by stating, "The strategy should lay out guiding principles, establish a set of guard rails within which all parts of the MITS organization should operate, and do so in a manner that is aligned with other IRS business and technology strategy initiatives." Taxpayers rely on the infrastructure to ensure reliable satisfaction of their tax liabilities and quick resolution of any issues that might arise as they meet those obligations. IRS employees rely on the information technology infrastructure as they work to ensure a high level of service to both taxpayers and the Federal Government.

[1] See Appendix VI for a glossary of terms.

Our prior audit report[2] regarding aged computer hardware included five recommendations to improve the process for replacing the aged computer hardware. The IRS agreed to four of the five recommendations and reported that corrective actions for those four recommendations were complete. This audit followed up on the four recommendations the IRS agreed to implement.

- **Recommendation 1:** The Chief Information Officer should implement procedures to improve the accuracy and completeness of the inventory data on the Information Technology Asset Management System (ITAMS) and periodically prepare an updated aged computer hardware estimate, including current replacement cost, based upon reliable and current information. This audit reviewed the actions taken to prepare an updated aged computer hardware estimate. The accuracy and completeness of the inventory data will be reviewed in a future audit.

  IRS Corrective Action: The IRS stated it would identify discrepancies in the ITAMS database for correction and develop processes to improve and maintain the accuracy of the ITAMS data. It would also implement a process to produce quarterly estimates of the aged computer hardware based on ITAMS data, along with current estimates of the replacement costs.

- **Recommendation 2:** The Chief Information Officer should improve the integration of asset/inventory management with incident and problem management so problems related to old computer hardware issues can be readily identified and the IRS can report a more accurate assessment of the negative impact of aging computer hardware.

  IRS Corrective Action: The IRS stated it would develop a business case for using a software tool to improve the integration of asset/inventory management with incident and problem management. The business case would be presented to the appropriate MITS Governance Board for approval to implement.

- **Recommendation 4:** The Chief Information Officer should ensure the End of Life Equipment Replacement activity is included in the Infrastructure Executive Steering Committee (IESC) governance process.

  IRS Corrective Action: The IRS stated it would implement a governance model that includes oversight from the IESC.

- **Recommendation 5:** The Chief Information Officer should ensure a performance measurement process providing periodic monitoring and reporting of SIP accomplishments is established for current and future efforts to address the aging computer hardware issue.

[2] *Efforts to Update Aging Computer Hardware Are Underway, but Program Improvements Are Needed to Minimize Risks* (Reference Number 2008-20-002, dated November 6, 2007).

IRS Corrective Action: The IRS stated it would implement outcome measures and a monitoring process to report on the IRS's progress in reducing its aged asset inventory.

This review was performed at the MITS organization in New Carrollton, Maryland, during the period January through September 2010. We conducted this performance audit 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 objective. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objective. Detailed information on our audit objective, scope, and methodology is presented in Appendix I. Major contributors to the report are listed in Appendix II.

Results of Review

The Sustaining Infrastructure Program Is Significantly Improved, and Agreed-Upon Prior Recommendations Are Being Implemented

The SIP developed and implemented a process for identifying, reviewing, prioritizing, and making decisions on funding the replacement of aged computer hardware as well as other critical infrastructure needs. In Fiscal Year 2010, the SIP adopted a "strategic expansion" mission to begin implementing short- to medium-term improvements to the SIP process to solicit, review, and fund strategic investment requests that cover all infrastructure, not just aged computer hardware. The "strategic expansion" includes an Investment Management Plan for funding and a holistic plan for addressing key organizational priorities while moving the IRS's infrastructure along an agreed-upon strategic direction. In addition, the program improvements and the corrective actions to the prior recommendations have enabled SIP management to reduce the aged computer hardware inventory from 40.3 percent in Fiscal Year 2007 to 28.6 percent in Fiscal Year 2009 (see Appendix V).

Recommendation 1: The quantity of aged computer hardware is updated monthly

The IRS implemented a process to produce the Obsolescence Comparison Report, which groups aged computer hardware by inventory categories such as laptops, printers, and servers. The report also includes information on the hardware's years of useful life, unit replacement cost (hereafter, replacement cost will be referred to as value), number and value of items in use and in stock, and the ratio/percentage of aged computer hardware to total computer hardware in terms of the number and value of the items.

The quantities of all computer hardware and aged computer hardware are updated monthly and the report is provided to the IESC and the End User Equipment and Services organization for review. However, the aged computer hardware inventory value and the standards established for determining when computer hardware is considered aged (i.e., past its useful life) were last reviewed and updated in Fiscal Year 2006. Management stated they consider several factors in determining useful life standards, including book value, warranty, maintenance, contract upgrades, and updates cost. We compared the IRS useful life standards to industry useful life standards and determined the IRS useful life standards were comparable to the industry useful life standards.

In May 2009, SIP management initiated a review of the computer hardware inventory categories, values, and useful life standards to ensure the information is current and relevant. In June and July 2010, SIP management reported the status of their review to the IESC. Based on the results

of the review, IRS management decided there was no need to change the useful life standards in Fiscal Year 2010. The IESC is reviewing the results information to determine what, if any, actions are needed to revise the inventory categories, values, and useful life standards in Fiscal Year 2011.

Recommendation 2: The IRS is in the process of developing the capability to associate information technology problems with aged computer hardware

The IRS approved the business case for a new tool called the Knowledge, Incident/Problem, Service Asset Management (KISAM) system, which can associate information technology problem tickets with the aged hardware that caused the problem. The KISAM system implementation involves replacing the current inventory and problem management system and is scheduled to be fully implemented by July 2011.

The business case and the IESC stated that implementation of the new inventory and problem management system will address our prior recommendations. The business case also reported potential benefits resulting from KISAM system implementation of $28,825,667. Our analysis allocated the benefits as follows: $12,395,037 in Cost Operational and Run Savings and $16,430,630 in Revenue Collection Increases.

Recommendation 4: The Sustaining Infrastructure Program has executive oversight

In February 2008, the IESC began to and currently provides oversight of the SIP. The IESC meeting minutes document the SIP presentations, activities, and issues presented as well as decisions made by the IESC regarding the SIP. For example:

- The March 19, 2008, meeting minutes state that the Enterprise Services organization implemented the SIP (i.e., became responsible for the program) in the first quarter of Fiscal Year 2008.
- The July 30, 2009, meeting minutes state that the IESC requested that the SIP provide a list of projects for infrastructure that should come under the IESC for review.
- The June 17, 2010, meeting minutes show the status of the SIP activities continue to be reported to the IESC.
- The July 19, 2010, meeting minutes state that the Committee voted to require SIP projects whose status changed from green to red provide a mitigation plan and date for returning the project back to green status. A project considered to be in green status is on target and will probably meet scope, schedule, and budget objectives. A project considered to be in red status needs executive attention and will probably not meet scope, schedule, and budget objectives.

In addition to placing the SIP under the governance of the IESC, the IRS implemented an investment management process to review and prioritize investment requests for replacing aged computer hardware. All such investment requests must be approved by the IESC before they are implemented.

Approved investment projects are entered into an automated system called ProSight, which is used to document the status and key information of the project. We reviewed nine SIP projects and found the following:

- Two projects were not included in ProSight.
- Two projects had incomplete data in ProSight. For example, one project did not have any schedule information, but the status for this key performance indicator was green. IRS management stated that when data for key performance indicators is not entered, the ProSight system defaults the status for that indicator to green.
- Two projects had not been updated monthly in ProSight. For example, as of August 17, 2010, one project did not show when it was last updated and the other project was last updated April 13, 2010.

Management action: In July 2010, IRS management conducted a review of the information in ProSight and identified projects that were not in ProSight or were missing key data. As a result, management is in the process of scheduling meetings with each project team to discuss the project and to ensure project information in ProSight is updated monthly as required.

Recommendation 5: A performance measurement process has been implemented

IRS management established outcome measures and implemented the monthly Obsolescence Comparison Report to monitor and report on its progress in reducing its aged computer hardware inventory. The outcome measures established are the annual goals for reducing the aged computer hardware inventory in terms of number and value. The Fiscal Year 2010 goal is to reduce the number of items in the aged computer hardware inventory to 24 percent and the value of the aged computer hardware to 39 percent of the total computer hardware inventory. As of July 1, 2010, the actual quantity and value of aged inventory were 29.5 percent and 42.0 percent, respectively. See Appendix V for the number and value of the aged computer hardware inventory from Fiscal Years 2007 through 2010 (as of July 1, 2010).

Office of Management and Budget Circular A-50, *Audit Followup*, dated September 29, 1982, states that audit followup is an integral part of good management and that corrective action taken by management on findings and recommendations is essential to improving the effectiveness and efficiency of Federal Government operations. It also states that one of the principle provisions of this circular is to emphasize the importance of monitoring the implementation of resolved audit recommendations in order to assure that promised corrective actions are actually taken.

In addition, the Clinger-Cohen Act of 1996[3] requires each agency to ensure senior management is provided with timely, verifiable data as one of the elements in maximizing the value and assessing and managing the risk of information technology acquisitions. To have a successful information technology investment management process, the agency must ensure management decisions are based on complete and current information. In fact, informed management decisions can occur only if accurate, reliable, and up-to-date information is part of the decision-making process. The Government Performance and Results Act of 1993[4] was enacted by Congress to hold Federal Government agencies accountable for achieving business results by requiring agencies to adopt performance measures and set goals to assess performance.

A Comprehensive Information Technology Infrastructure Strategy Has Been Developed

In March 2010, the IRS developed a comprehensive information technology Infrastructure Strategy. The Infrastructure Strategy focuses on the core infrastructure technologies that are needed in order to support the current and future IRS goals and objectives. The Infrastructure Strategy will be used to improve access to data, access to information technology services, responsiveness to demand, optimization, and cost effectiveness in a sustainable manner. Its goal is to achieve a centralized Service Oriented Infrastructure through technology maturation, standardization, consolidation, and use of shared resources.

The Infrastructure Strategy includes the results of a gap analysis that identified the steps needed to achieve a centralized Service Oriented Infrastructure. Two projects supporting the Infrastructure Strategy have been implemented: Server Consolidation and Virtualization and Phase I Storage Refresh. The Server Consolidation and Virtualization project will enable the IRS to move away from replacing physical servers on a one for one basis to replacing multiple servers with one server. The goal of the Phase I Storage Refresh project is to replace, consolidate, and upgrade a significant portion of existing storage devices (many had reached their end of life in Fiscal Years 2006 and 2009). Both projects are expected to generate cost savings.

Office of Management and Budget Circular A-130, *Management of Federal Information Resources*, requires agencies to prepare and maintain a portfolio of major information systems that monitors investments and prevents redundancy of existing or shared information technology capabilities. Agencies must develop or use an Enterprise Architecture Framework. The

[3] Federal Acquisition Reform Act of 1996 (Information Technology Management Reform Act of 1996), Pub. L. No. 104-106, 110 Stat. 642 (codified in scattered sections of 5 U.S.C., 5 U.S.C. app., 10 U.S.C., 15 U.S.C., 16 U.S.C., 18 U.S.C., 22 U.S.C., 28 U.S.C., 29 U.S.C., 31 U.S.C., 38 U.S.C., 40 U.S.C., 41 U.S.C., 42 U.S.C., 44 U.S.C., 49 U.S.C., 50 U.S.C.).

[4] Pub. L. No. 103-62, 107 Stat. 285 (codified as amended in scattered sections of 5 U.S.C., 31 U.S.C., and 39 U.S.C.).

Framework must guide strategic and operational Information Resource Management Strategic planning. The Framework must also contain the relationship between mission needs, information technology capabilities, and information content. Agencies are also required to prioritize key systems.

Appendix I

Detailed Objective, Scope, and Methodology

The overall objective of this review was to determine the effectiveness of the IRS's efforts to address the critical issue of sustaining the IRS information technology infrastructure. To accomplish this objective, we:

I. Determined the efficiency and effectiveness of the SIP governance process.

A. Determined the governance process over the SIP and individual initiatives by interviewing Enterprise Services organization personnel and reviewing governance-related documentation (e.g., IESC meeting minutes, Executive Steering Committee charters, and briefing materials) to assess the actions of the IESC in overseeing the SIP and whether other governance bodies provided oversight of the SIP.

B. Determined the efficiency and effectiveness of the investment decision-making and project implementation process (i.e., project identification, prioritization, approval, and monitoring).

II. Determined the efficiency and effectiveness of the SIP's efforts to replace critical aged computer hardware.

A. Interviewed SIP personnel to discuss the aging infrastructure problem and the status of the overall SIP and the five current individual initiatives established to mitigate the IRS operational risks.

B. Interviewed SIP personnel to discuss their risk mitigation process and the risks they have identified (e.g., funding and staffing). We obtained documentation of their risk assessments.

C. Reviewed project documentation for the SIP and individual initiatives, including the current project schedule, key milestones, and planned completion dates to determine whether the program and initiatives are on schedule and within budget. Our review for this step and the next step was limited to the individual initiatives that were in the ProSight database and had an overall red status.

D. Reviewed status reports for the SIP and the individual initiatives.

E. Reviewed documentation for the planned funding for the SIP and individual initiatives for Fiscal Year 2008 through Fiscal Year 2010, including actual expenditures for each year.

F. Reviewed the controls over the procurement process to assess contracting fraud risk.

G. Interviewed SIP personnel to determine how they decided on the following: a) the useful life for each type of equipment and b) the acceptable percentage of aged inventory to carry annually.

H. Performed Internet research to determine whether private industry and the Federal Government have established average years of useful life for computer hardware and a standard acceptable percentage of aged computer hardware.

III. Determined the status of the Information Technology Infrastructure Strategy.

A. Interviewed SIP personnel and reviewed documentation to determine the status of the Information Technology Infrastructure Strategy projects and whether the 5-year goal will be met.

B. Interviewed SIP personnel and reviewed documentation to determine whether the process used to develop the Infrastructure Strategy was reasonable.

IV. Determined the reliability of the Obsolescence Comparison Reports as the mechanisms to report aged assets.

A. Interviewed IRS personnel to determine how the reports are used and who uses them.

B. Interviewed IRS personnel and obtained supporting documentation to validate the reasonableness of the process to gather the information needed for the reports.

C. Identified and trended the aged inventory for Fiscal Years 2007 through 2010.

V. Determined whether effective corrective actions have been implemented to address prior Treasury Inspector General for Tax Administration recommendations.[1]

A. Recommendation 1: Implement procedures to improve the accuracy and completeness of the inventory data on the ITAMS and periodically prepare an updated aged computer hardware estimate, including current replacement cost, based upon reliable and current information.

B. Recommendation 2: Improve the integration of asset/inventory management with incident and problem management so problems related to old computer hardware issues can be readily identified and the IRS can report a more accurate assessment of the negative impact of aging computer hardware.

C. Recommendation 4: Ensure the End of Life Equipment Replacement activity is included in the IESC governance process.

[1] *Efforts to Update Aging Computer Hardware Are Underway, but Program Improvements Are Needed to Minimize Risks* (Reference Number 2008-20-002, dated November 6, 2007).

D. Recommendation 5: Ensure a performance measurement process providing periodic monitoring and reporting of SIP accomplishments is established for current and future efforts to address the aging computer hardware issue.

Internal controls methodology

Internal controls relate to management's plans, methods, and procedures used to meet their mission, goals, and objectives. Internal controls include the processes and procedures for planning, organizing, directing, and controlling program operations. They include the systems for measuring, reporting, and monitoring program performance. We determined the following internal controls were relevant to our audit objective: the MITS organization's policies and procedures for implementing an effective SIP to address the critical issue of sustaining the IRS information technology infrastructure. We evaluated these controls by interviewing management and by reviewing policies and procedures such as the Internal Revenue Manual, Federal guidance such as the Clinger-Cohen Act of 1996[2] and Office of Management and Budget Circulars, and relevant supporting documentation.

[2] Federal Acquisition Reform Act of 1996 (Information Technology Management Reform Act of 1996), Pub. L. No. 104-106, 110 Stat. 642 (codified in scattered sections of 5 U.S.C., 5 U.S.C. app., 10 U.S.C., 15 U.S.C., 16 U.S.C., 18 U.S.C., 22 U.S.C., 28 U.S.C., 29 U.S.C., 31 U.S.C., 38 U.S.C., 40 U.S.C., 41 U.S.C., 42 U.S.C., 44 U.S.C., 49 U.S.C., 50 U.S.C.).

Appendix II

Major Contributors to This Report

Alan R. Duncan, Assistant Inspector General for Audit (Security and Information Technology Services)
Scott Macfarlane, Director
Danny Verneuille, Director
Tina Wong, Lead Auditor
George Franklin, Senior Auditor
Ashley Guthrie, Auditor
Anthony Morrison, Program Analyst

Appendix III

Report Distribution List

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Director, Office of Program Evaluation and Risk Analysis RAS:O
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Appendix IV

Outcome Measures

This appendix presents detailed information on the measurable impact that our recommended corrective action will have on tax administration. These benefits will be incorporated into our Semiannual Report to Congress.

Type and Value of Outcome Measure:

- Cost Savings – Funds Put to Better Use – Potential; $12,395,037 over a 6-year period (see page 4).
- Increased Revenue – Potential; $16,430,630 over a 6-year period (see page 4).

Methodology Used to Measure the Reported Benefit:

The business case for the KISAM system reported a potential return on investment of $28,825,667 (shown as net present value and excluded expenses) over 6 years. The return on investment was attributed to two factors: 1) Cost Operational and Run Savings and 2) Revenue Collection Increases due to improved system availability. The 6-year benefit for each factor prior to subtracting the expenses is shown in Figure 1, Column B. The business case did not breakdown the return on investment by the two factors. Therefore, we used the benefits of the two factors to determine a ratio to be applied to the $28,825,667 return on investment to determine the amount of each outcome measure (see Figure 1, Column E).

Figure 1: Computation of Outcome Measures

A. Benefits	B. Total Benefits by Type for Fiscal Years 2009–2014	C. Percentage of Total Benefits*	D. Total Return on Investment (Net Present Value)**	E. Distribution of Return on Investment by Benefit Type (Columns C x D)
Cost Operational and Run Savings	$43,718,600	43%	$28,825,667	$12,395,037
Revenue Collection Increases	$58,358,800	57%	$28,825,667	$16,430,630
Total Benefits Flow (before expenses)	$102,077,400	100%	—	—
Total Return on Investment (Net Present Value)**	—	—	—	$28,825,667

Source: Our calculations are based on data from the IRS Information Technology Service Delivery Management KISAM Return on Investment Model Overview, dated June 5, 2008.
***** *Percentages were rounded.*
** *Total benefits less total expenses.*

Appendix V

Aged Computer Hardware Inventory Trends

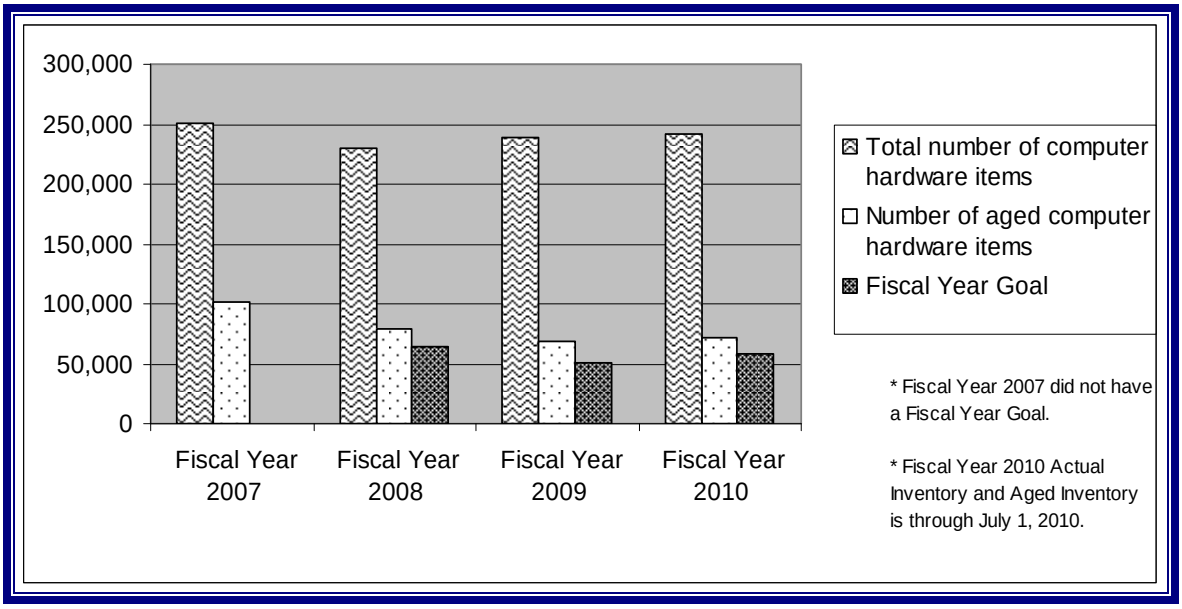
The IRS tracks its aged computer hardware inventory by both the number and value (i.e., replacement cost) of the aged hardware compared to fiscal year goals (Figure 1). Figures 2 through 5 present the information in a chart format that shows the trends. The fiscal year goals are established each year by the SIP based on the number and value of computer hardware that are or will become aged during the fiscal year and the available budget to purchase new computer hardware. The fiscal year goals are approved by the IESC.

Figure 1: Aged Computer Hardware Compared to Fiscal Year Goals

Fiscal Year	Total Ending Inventory	Aged Ending Inventory	Aged Ending Inventory (Percentage)	Fiscal Year Goals (Number)	Fiscal Year Goals (Percentage)
Fiscal Year 2007	(as of September 30, 2007)				
Obsolescence % (Number of items)	250,076	100,821	40.3%	N/A	N/A
Obsolescence % (Value)	$1,035,349,580	$414,215,388	40.0%	N/A	N/A
Fiscal Year 2008	(as of September 2, 2008)*				
Obsolescence % (Number of items)	229,382	78,940	34.4%	63,768	27.8%
Obsolescence % (Value)	$982,725,574	$348,920,115	35.5%	$307,593,105	31.3%
Fiscal Year 2009	(as of September 30, 2009)				
Obsolescence % (Number of items)	238,573	68,297	28.6%	50,816	21.3%
Obsolescence % (Value)	$922,539,286	$314,288,473	34.1%	$294,290,032	31.9%
Fiscal Year 2010	(as of July 1, 2010)				
Obsolescence % (Number of items)	242,308	71,377	29.5%	58,154	24.0%
Obsolescence % (Value)	$946,690,851	$397,663,028	42.0%	$369,209,432	39.0%

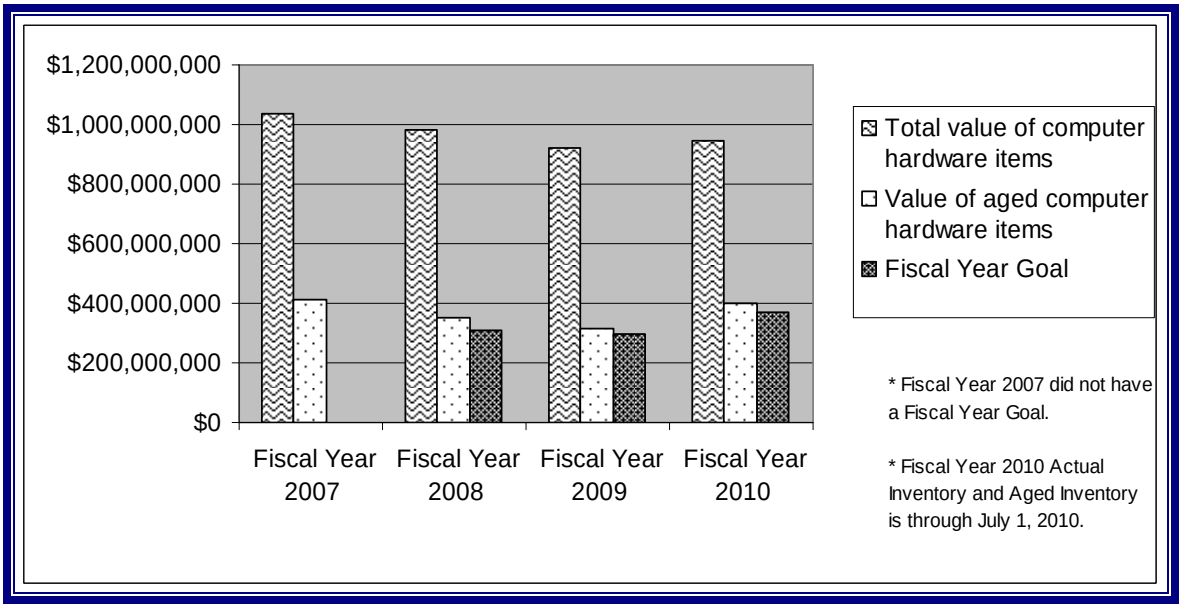
Source: Our analysis of the Obsolescence Comparison Report.
** September 2, 2008, is the latest date used in the Obsolescence Comparison Report to monitor and track aged asset progress in Fiscal Year 2008.*

Figure 2: Number of Aged Computer Hardware Items Compared to the Fiscal Year Goal (presented as a number)



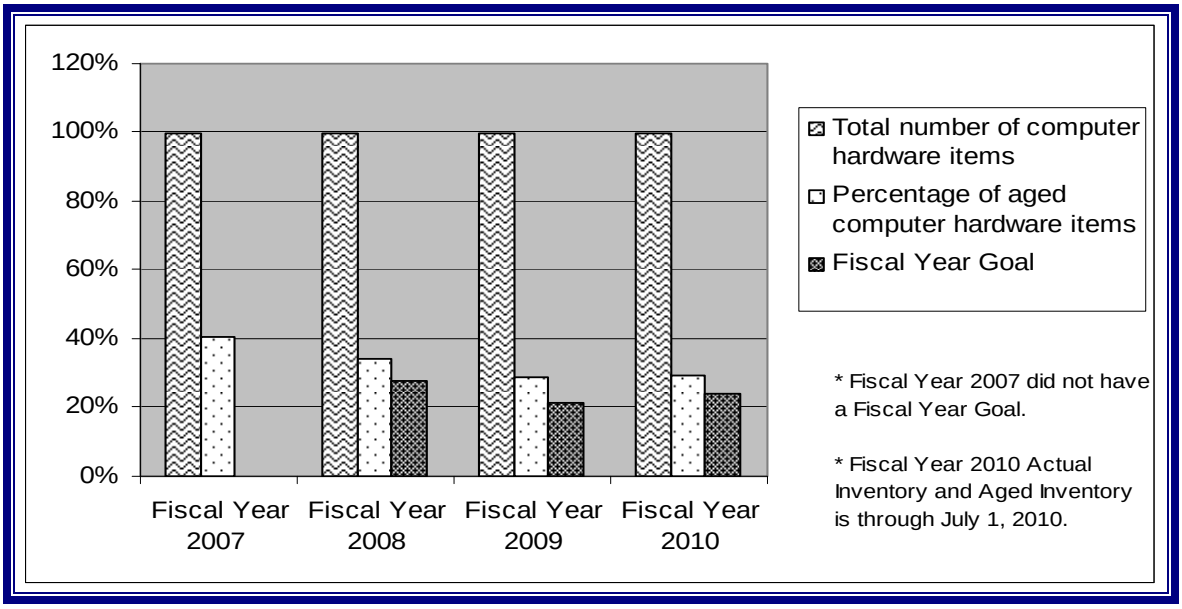
Source: Our analysis of the Obsolescence Comparison Report.

Figure 3: Value of Aged Computer Hardware Items Compared to the Fiscal Year Goal (presented in dollars)



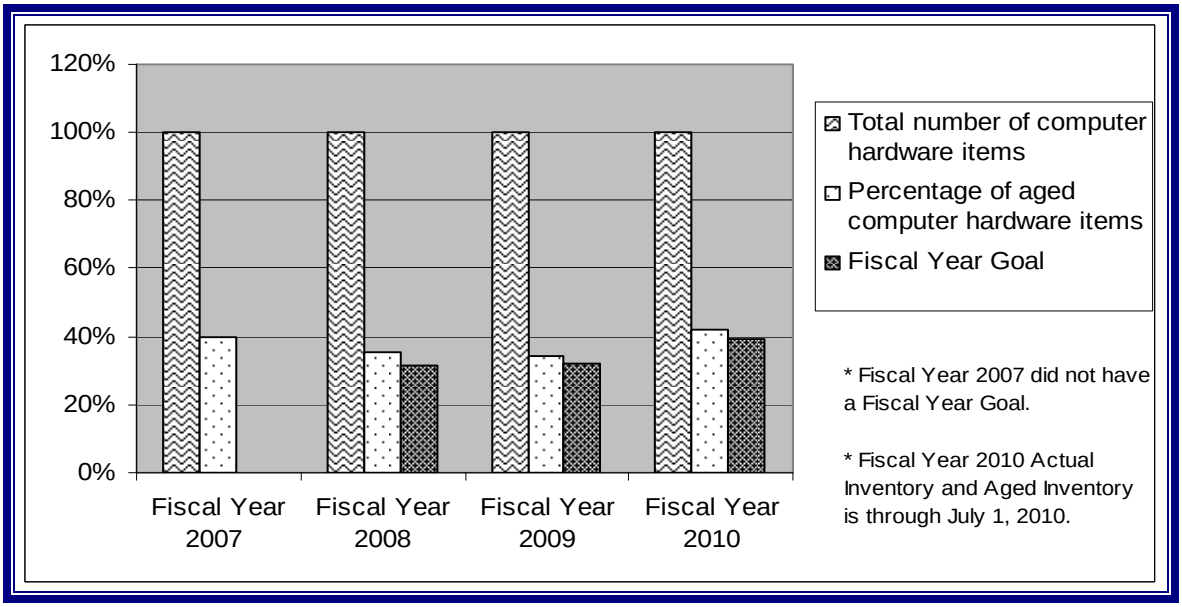
Source: Our analysis of the Obsolescence Comparison Report.

Figure 4: Number of Aged Computer Hardware Items Compared to the Fiscal Year Goal (presented as a percentage)



Source: Our analysis of the Obsolescence Comparison Report.

Figure 5: Value of Aged Computer Hardware Items Compared to the Fiscal Year Goal (presented as a percentage)



Source: Our analysis of the Obsolescence Comparison Report.

Appendix VI

Glossary of Terms

Term	Definition
Client	Software that allows the user to access a service from a server computer (e.g., a server computer on the Internet).
Information Technology Asset Management System	The official IRS inventory system that enables tracking, reporting, and management of computer equipment.
Infrastructure	The fundamental structure of a system or organization. The basic, fundamental architecture of any system (electronic, mechanical, social, political) determines how it functions and how flexible it is to meet future requirements.
Knowledge, Incident/Problem, Service Asset Management	The system that will maintain the complete inventory of information technology and non-information technology assets. It will also be the reporting tool for problem management with all IRS-developed applications.
ProSight	A database tool designed with specific tracking, reporting, and decision-making features used to monitor projects.
Server	A network device that provides service to the network users by managing shared resources.
Service Oriented Infrastructure	A service-driven infrastructure that provides a common and shared set of technologies that enable business processes to be added and changed readily.
Virtualization	Software that separates an application from the underlying physical hardware on which it runs. It allows a single piece of hardware such as a server to support many applications, thereby running the software more efficiently and at lower cost.

Appendix VII

Management's Response to the Draft Report

CHIEF TECHNOLOGY OFFICER

DEPARTMENT OF THE TREASURY
INTERNAL REVENUE SERVICE
WASHINGTON, D.C. 20224

DEC 10 2010

RECEIVED
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MEMORANDUM FOR DEPUTY INSPECTOR GENERAL FOR AUDIT

FROM: Terence V. Milholland
Chief Technology Officer

SUBJECT: Draft Audit Report – The Sustaining Infrastructure Program Is Significantly Improved and a Comprehensive Information Technology Infrastructure Strategy Has Been Developed (200920026)

Thank you for the opportunity to review your draft audit report and to discuss earlier draft report observations with the audit team.

I was pleased to read your comments and observations acknowledging the Sustaining Infrastructure Program has significantly improved. I am pleased that the report recognizes the IRS has effectively developed and implemented a process for funding and replacement of aged computer hardware as well as other critical infrastructure needs; and that the appropriate executive steering committee is overseeing this program.

Further, I appreciate you acknowledging the approved business case for the Knowledge, Incident/Problem, Service Asset Management (KISAM), and the development of our comprehensive information technology Infrastructure Strategy to support the current and future goals of the IRS.

The IRS acknowledges that the information provided by the Gartner study was one consideration in our decision to implement KISAM as replacement for the obsolete ITAMS (the Gartner study was provided to TIGTA in the course of the audit). It is important to qualify any expectation of return on our investment in KISAM with two considerations:

- As a matter of policy the strategy of the service is not focused on revenue targets and is therefore never committed to an increase in collection targets per se. While the implementation of KISAM was (and is) expected to result in increased capacity to support the collection of revenue, there are a multitude of external factors that influence actual revenue - all of which present significantly greater influence on revenue collection than the mere availability of capacity. Therefore we would propose replacing the articulated expectation of an increase in revenue collection with an acknowledgement that the capacity to support such an increase will be in place.

- Operational costs and run rate savings as outlined in the Gartner report largely reflect cost avoidance opportunities and were predicated on the infrastructure in place at the time of the study. The IRS recognized that some of the defined opportunity would likely be eliminated through other investments made while the KISAM project was underway, but concluded that the overall benefits in process improvement and residual cost savings provided adequate justification for moving forward.

We are committed to continuously improving our information technology systems and processes. We value your continued support and the assistance and guidance your team provides. If you have any questions, please contact me at (202) 622-6800 or Karen Mayr at (202) 283-0015.