U.S. DEPARTMENT OF THE INTERIOR

FY2008
Office of the Chief Information Officer (OCIO)
ACCOMPLISHMENTS REPORT

U.S. DEPARTMENT OF THE INTERIOR
Office of the Chief Information Officer (OCIO)

The Office of the Chief Information Officer (OCIO) is pleased to present the Department of the Interior's (DOI) Fiscal Year (FY) 2008 OCIO Accomplishments Report. This report highlights the many successes realized across the divisions within the OCIO. In many cases, these successes resulted in significant mission area improvements that benefited personnel, other federal agencies, and the public.

OCIO MISSION

The OCIO mission is critical to the overall health and ongoing success of DOI. The OCIO is responsible for the design, acquisition, maintenance, use, and disposal of information technology by Interior bureaus and offices. The OCIO also monitors the performance of Interior's information technology programs and projects and ensures that Interior's information management is consistent with the principles in legislation such as the Clinger-Cohen Act of 1996, E-Government Act of 2002, Government Paperwork Reduction Act, Government Paperwork Elimination Act, Federal Information Security Management Act, Freedom of Information Act, Privacy Act of 1974, as well as the Federal Records Act.

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This report is divided by division offices to demonstrate the unique accomplishments in areas that reside within the OCIO. The OCIO division offices and areas of focus include: Enterprise Architecture, IT Portfolio Management, Enterprise Infrastructure, Cyber Security, Information Management, as well as Business and Administration. The following successes demonstrate the range and depth of OCIO activities and reveal the significance of OCIO impact on the mission of the Department of the Interior.

Enterprise Architecture Division
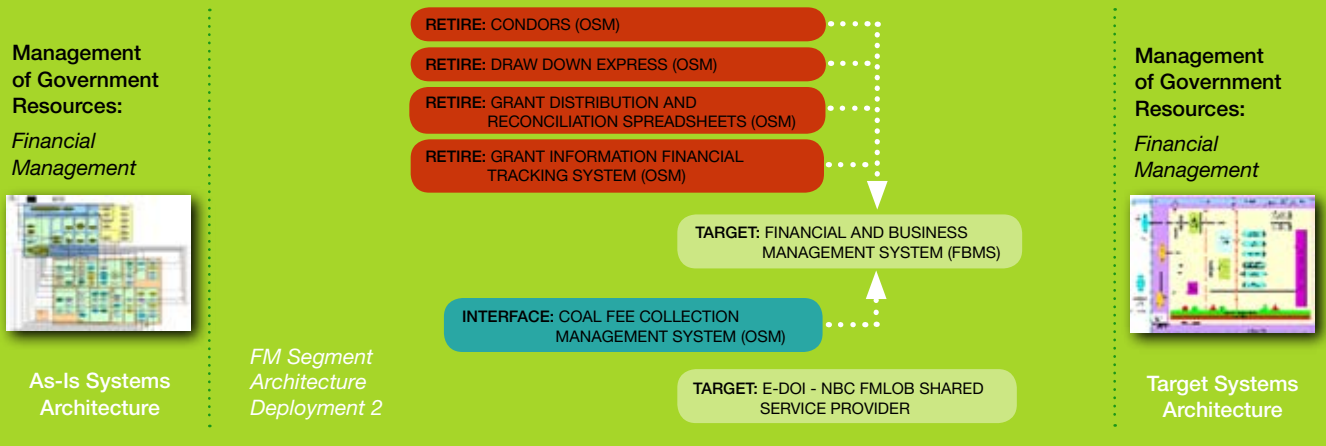
Focused on Improving the Mission

The Interior Enterprise Architecture (IEA) program concentrated on obtaining measurable results from its investment in enterprise architecture. The following are some highlights of the measurable results that have helped to strengthen the EA division's impact within DOI.

DOI's Financial Management Modernization Blueprint features the target state Financial and Business Management System (FBMS). FBMS went live with Deployment 3 which spans over 1,000 users and has included the retirement of multiple legacy systems. With this deployment, the FBMS acquisition module was launched for Minerals Management Service (MMS) and the Office of Surface Mining (OSM).

DOI realized cost savings and avoidance from its architecture driven hardware and software enterprise license agreements (ELA) that were developed in partnership with the Administration and Business Division. Through standards included in the DOI Technical Reference Model, ELAs allowed DOI to realize significant cost savings/avoidance, with over $26M in FY2007 alone.

DOI's Recreation Modernization Blueprint features Recreation.gov, a President's Management Agenda (PMA) e-gov success story. DOI retired multiple legacy services and systems to consolidate on this one-stop shopping for the tourist public.

Sequencing Visual for Modernization of DOI Financial Management Line of Business: Deployment 2

Management of Government Resources:
Financial Management

RETIRE: CONDORS (OSM)

RETIRE: DRAW DOWN EXPRESS (OSM)

RETIRE: GRANT DISTRIBUTION AND RECONCILIATION SPREADSHEETS (OSM)

RETIRE: GRANT INFORMATION FINANCIAL TRACKING SYSTEM (OSM)

TARGET: FINANCIAL AND BUSINESS MANAGEMENT SYSTEM (FBMS)

INTERFACE: COAL FEE COLLECTION MANAGEMENT SYSTEM (OSM)

TARGET: E-DOI - NBC FMLOB SHARED SERVICE PROVIDER

Management of Government Resources:
Financial Management

As-Is Systems Architecture

FM Segment Architecture Deployment 2

Target Systems Architecture

Actively Engaged in Federal Initiatives

The IEA program staff actively served in leadership roles within the federal enterprise architecture community throughout FY2008. IEA representatives led several working groups on behalf of the Federal Chief Information Officers Council.

For example, DOI's Chief Architect was the Chair of the Federal Segment Architecture Working Group (FSAWG). This was a sub-team of the Architecture and Infrastructure Committee (AIC) of the Federal CIO Council that was responsible for producing the Federal Segment Architecture Methodology (FSAM). The FSAM is a step-by-step process for developing and using segment architectures that was developed by distilling proven best practices from across the government. Use of the FSAM results in more complete and consistent segment architecture products and allows for greater reuse of segment architectures by providing key information that informs downstream processes for capital planning, security (e.g. certification and accreditation), and the system development lifecycle.

FSAM Federal Segment Architecture Methodology

Completed and Approved

Partnered with US Geological Survey (USGS) on the Geospatial Blueprint –

The Geospatial segment architecture included recommendations centered on creating a strategic shift in the delivery of DOI's future geospatial data and services. These recommendations provide the foundation for a sustainable migration to a service delivery model to improve DOI's business efficiency, focusing on optimizing and standardizing geospatial programs, systems, and data assets to achieve an integrated "enterprise services" model.

Completing and Approved

Partnered with the Bureau of Indian Affairs (BIA) on the Indian Trust Blueprint –

The Indian Trust segment architecture development effort jointly worked by the IEA program and BIA, built on previously completed analyses of the Indian Trust business area, incorporating the modernization efforts already underway or planned, and promoting unifying information technology across similar business processes for both federally-owned lands and Indian Trust lands.

Blueprints In Progress

Information Technology (IT) Infrastructure Blueprint –

The IT Infrastructure segment architecture aims to maximize re-use/sharing of key infrastructure assets and improve service delivery to DOI's end users by establishing uniform performance metrics throughout the department for end user systems, telecommunications systems, and mainframe and server services. In 2008 the IT Roadmap was developed to focus IT resources throughout the department on key tactical infrastructure projects, improve overall project management and coordination, and reduce risk with consistent project monitoring visible to DOI executives.

Shared Best Practices

The IEA program held information sharing sessions with five foreign governments designed to explain DOI's EA best practices. For example, the IEA program provided information sharing sessions to representatives from Singapore and South Korea on DOI's Methodology for Business Transformation (MBT), EA Repository, the Authoritative Data Source Framework, and the Data Quality Management Guide.

Received Federal Recognition

DOI has a mature Enterprise Architecture (EA) program that is providing tangible results to DOI's mission community. DOI has focused its investment in EA to result in value creation and increased efficiencies for DOI business areas. During FY2008, the Interior Enterprise Architecture program again exceeded the Office of Management and Budget's (OMB) Enterprise Architecture (EA) Assessment Framework thresholds to achieve a green rating on the President's Management Agenda E-Gov Scorecard.

Q2 FY2008 Overall EA Assessment Rating: GREEN

Summary Data:	DOI Self Assessment Q2 FY2008	OMB FEA PMO Assessment Score Q2 FY2008	Rating Indicated by Score
Completion	5.0	4.7	
Use	5.0	4.8	GREEN
Results	5.0	5.0	

The IEA program has achieved a strong EA assessment rating of "GREEN" consistently over the past four years.

The Government Accounting Office (GAO) also assesses the maturity of federal EA programs. This office uses a separate maturity framework, the GAO Enterprise Architecture Management Maturity Framework (EAMMF). According to these criteria, the IEA program has met all GAO evaluation criteria with a maximum level five rating.

Served as Government-wide Model Program

Throughout the federal community, the IEA program is recognized as an industry best practice in the following areas:

Segment Architecture Leadership
DOI was cited by the OMB Federal Enterprise Architecture (FEA) Program Management Office (PMO) as a best practice for developing segment architectures and leading an inter-agency initiative to develop federal-wide practice guidance.

Speaking Engagements
DOI's Chief Architect and members of the Enterprise Architecture Division staff spoke about DOI's EA program at the Federal Enterprise Architecture Certification Institute, National Defense University's CIO and EA certification courses, and the Graduate School at U.S. Department of Agriculture.

Outreach
DOI advanced the knowledge of the EA community with best practice information sharing sessions with numerous federal, state, and local government agencies, as well as five foreign governments.

Updated the Business Model

In FY2008, DOI's business model was updated to reflect DOI's core mission and support functions and to map to the Federal Enterprise Architecture (FEA) Business Reference Model (BRM). This business model helped prioritize and align segment architecture work to mission functions and major processes. In partnership with the Office of Financial Management, DOI's business model was adapted to provide a functional structure for the categorization and prioritization of the DOI Chief Financial Officer's Green Plan initiatives.

Completed Three Modernization Efforts in Partnerships with USGS, BIA, and BLM

DOI's bureaus led three modernization blueprint efforts during FY2008. The USGS led the department-wide development of the Geospatial Blueprint. Additionally, BIA led and coordinated partnerships to develop the Indian Trust Blueprint while management planning and the National Environmental Policy Act (NEPA) Blueprint was led by the Bureau of Land Management.

Supported the Dissemination of Valuable Geospatial Information

Through the Geospatial Modernization Blueprint, DOI achieved outcomes that benefit its citizen stakeholders. The public frequently requests maps and other geospatial data from DOI, particularly during emergency response situations when using the best available data is crucial and can be used to save lives. The Geospatial One-Stop portal provided an integrated environment to coordinate requests for data, making a response from DOI more efficient. These portal services continue to be available as a result of work performed on Interior's Geospatial Modernization Blueprint.

Approved Enterprise Transition Plan

In addition to providing concise findings and management recommendations, IEA blueprints identified gaps and redundancies in Interior's existing IT portfolio that have hampered successful achievement of strategic and programmatic goals. Modernization blueprint milestones are represented in the Enterprise Transition Plan (ETP) and annually updated. ETP entries define the sequencing for all modernization efforts across Interior. The annual ETP submission was approved by the Deputy Secretary.

Developed Policy & Guidance

In support of the blueprint efforts, IEA developed policy and guidance for determining authoritative data sources, data quality improvement, and system decommissioning.   These documents support consistency in data management and IT operations thus improving overall services while reducing risks. In efforts to further formalize data standardization, IEA implemented performance measures for data quality for the Department Enterprise Architecture Repository. These guidance documents have undergone departmental review and are being finalized for release.
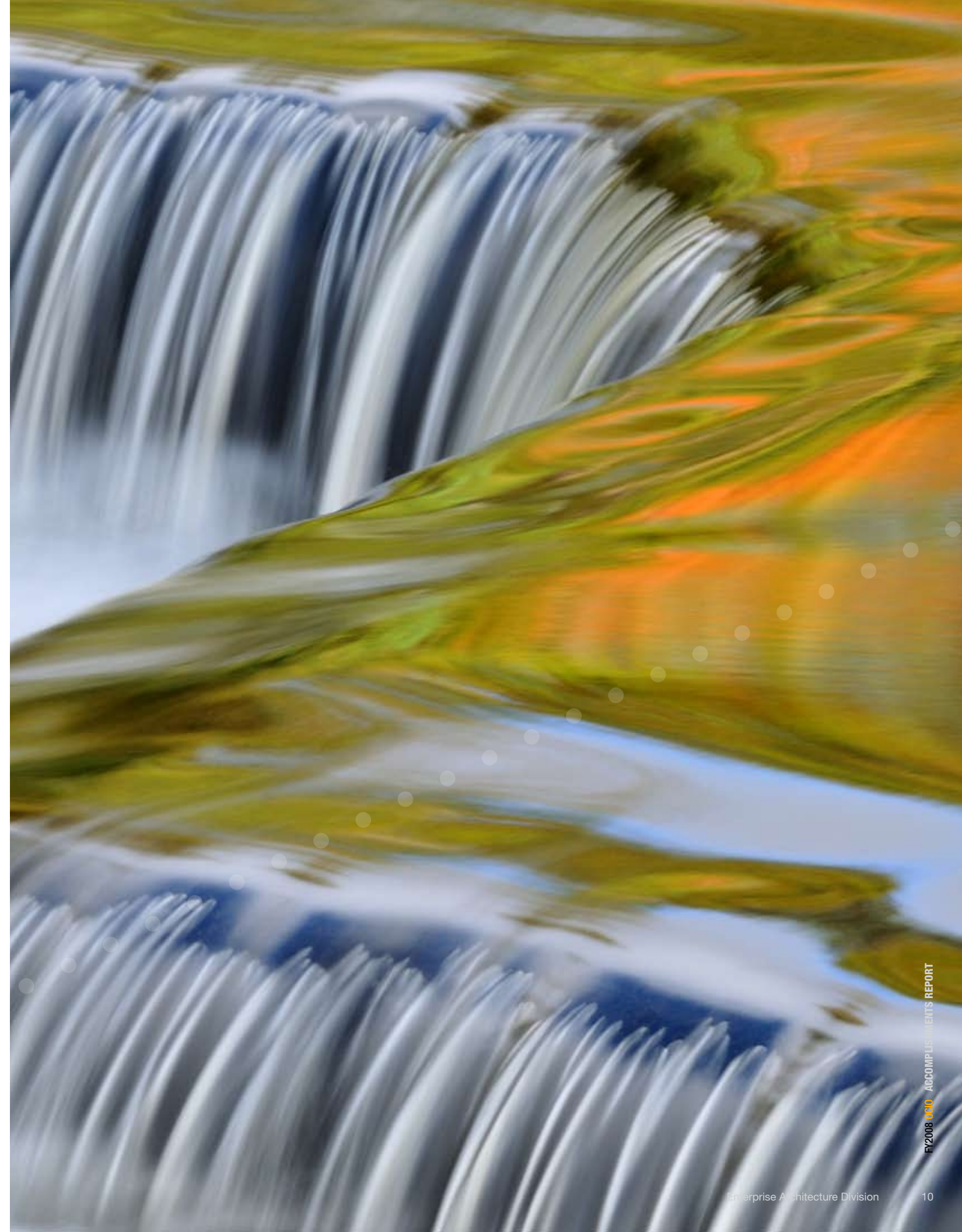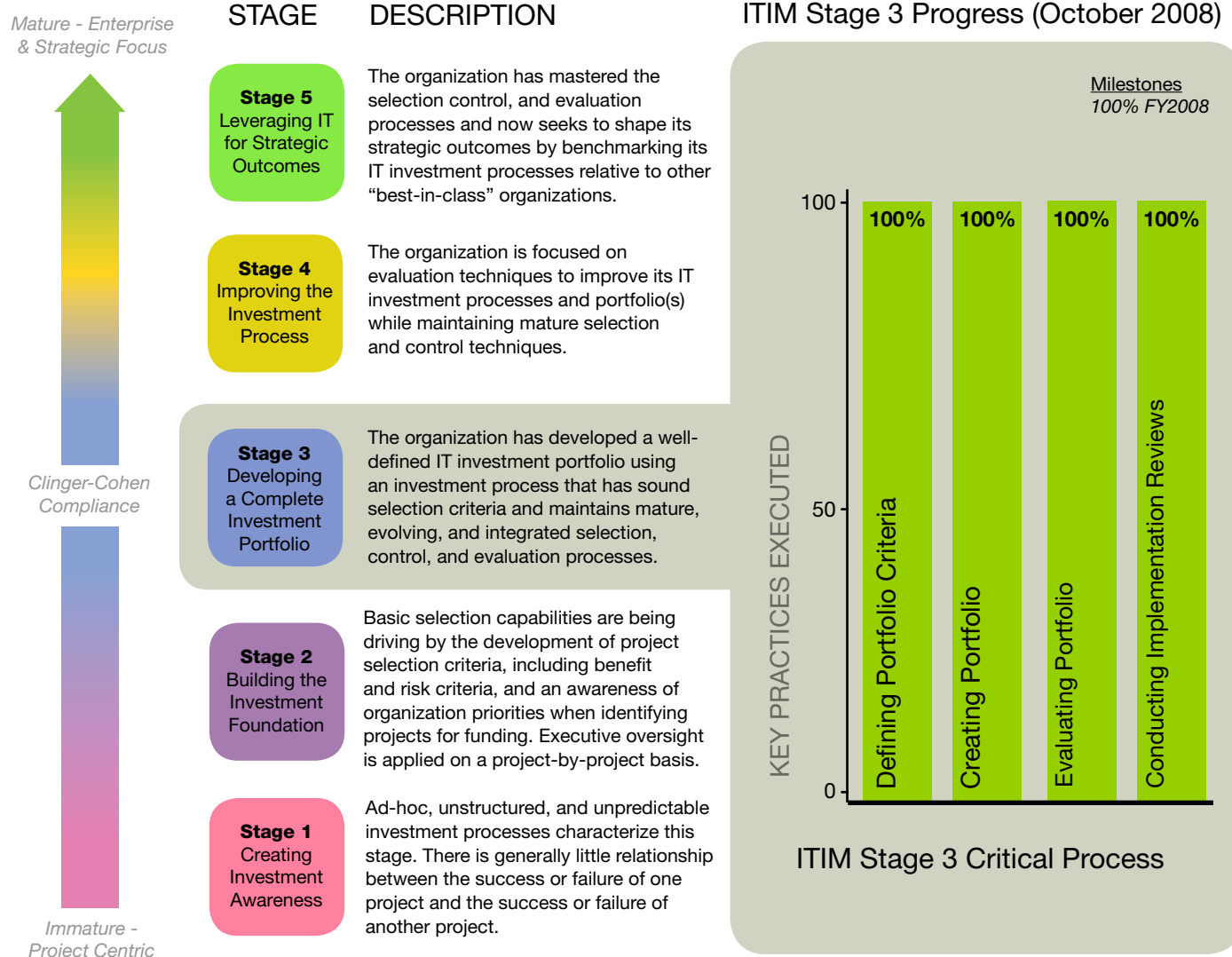
IT Portfolio Management Division

Recognized as an Exceptional Program

The OCIO's IT Portfolio Management Division maintained a strong government rating with respect to progress on the President's Management Agenda (PMA) E-Government (E-Gov) Scorecard in FY2008. This consistent demonstration of excellent performance contributed significantly to DOI maintaining its high rating in PMA progress. At the request of OMB, the division hosted international delegations from Denmark and Singapore to share best practices as well as Interior's approach to capital planning and investment control.

Matured IT Investment Management Across DOI Bureaus

During FY2008, the bureaus and offices achieved all of the key practices for IT Investment Management maturity at a stage three level. GAO defined stage three as the point whereby an organization moves from project-centric processes to portfolio-based processes and addresses potential investments by the support provided to agency missions, strategies, and goals.

STAGE	DESCRIPTION
Stage 5 Leveraging IT for Strategic Outcomes	The organization has mastered the selection control, and evaluation processes and now seeks to shape its strategic outcomes by benchmarking its IT investment processes relative to other "best-in-class" organizations.
Stage 4 Improving the Investment Process	The organization is focused on evaluation techniques to improve its IT investment processes and portfolio(s) while maintaining mature selection and control techniques.
Stage 3 Developing a Complete Investment Portfolio	The organization has developed a well-defined IT investment portfolio using an investment process that has sound selection criteria and maintains mature, evolving, and integrated selection, control, and evaluation processes.
Stage 2 Building the Investment Foundation	Basic selection capabilities are being driving by the development of project selection criteria, including benefit and risk criteria, and an awareness of organization priorities when identifying projects for funding. Executive oversight is applied on a project-by-project basis.
Stage 1 Creating Investment Awareness	Ad-hoc, unstructured, and unpredictable investment processes characterize this stage. There is generally little relationship between the success or failure of one project and the success or failure of another project.

Mature - Enterprise & Strategic Focus

Clinger-Cohen Compliance

Immature - Project Centric

ITIM Stage 3 Progress (October 2008)

Milestones
100% FY2008

KEY PRACTICES EXECUTED

Defining Portfolio Criteria	Creating Portfolio	Evaluating Portfolio	Conducting Implementation Reviews
100%	100%	100%	100%

ITIM Stage 3 Critical Process

Implemented OCIO Interim Observations

The division continued to successfully implement its quarterly OCIO Interim Observations that led to bureaus routinely implementing corrective actions that enhance their E-Gov performance. As a result, DOI continued to maintain a green rating in PMA progress as well as demonstrate improved performance toward its goal of overall evaluation in both status and progress.

OCIO Interim Observation

This "unofficial" review process (during Q1 and Q3) is intended to provide bureaus with notification of their E-Gov performance –well in advance of the official rating periods.

The OCIO/Department officials will continue to provide the items listed below.

- **An assessment** of each bureau's PMA E-Gov performance

- **An assessment** of each bureau's OCIO E-Gov requirements performance

- **Key feedback** to communicate information within a time-frame that can "potentially" lead to the implementation of corrective actions (if applicable) and enhanced bureau performance

Opportunity
A good chance for advancement or progress

Communication

Collaboration

Requirements

Results

Successful Piloting within the National Park Service

The OCIO successfully conducted its pilot program (in Q3 2008) with the National Park Service. Q3 2008 was the first time an overall Green PMA E-Gov rating had been achieved by NPS since Q1 2007. Moreover, NPS received an overall Green PMA rating again in Q4 2008.

E-Gov: Peer Observations

Observer: Bureaus that have expressed an interest in lessons learned activities …and that have clearly demonstrated excellence **(GREEN)** with regard to E-Gov implementation (on both the PMA Scorecard and the OCIO E-Gov requirements) would be recommended by the OCIO to perform as an observer.

Target Group

Requester: The OCIO would recommend a peer observation to a bureau that has a quarterly performance indicator identified below.

- An overall PMA rating of **RED** in either status and/ or progress for one or more quarters

- Ongoing issues (**RED** rating) with a scorecard component(s)

- A **RED** rating in a specific component of the PMA Scorecard of the OCIO E-Gov requirements for two or more consecutive quarters

Managed E-Gov Collaborative Events

The division conducted a series of collaborative events in FY2008 to further promote bureau and departmental communications. These events ensured that the bureaus have the appropriate understanding of PMA E-Gov performance requirements.

Oversight of E-Gov Initiatives and Eight Lines of Business

DOI served as the Managing Partner, Shared Service Provider, and a Supporting Partner for citizen-centric E-Gov initiatives as well as Lines of Business (LOBs) designed to develop a more strategic, coordinated, and leveraged approach to managing E-Gov services across the government. DOI contributed to integrating government-wide operations and IT investments to improve the quality of E-Gov services to citizens and businesses. A complete description of each of the E-Gov and LOB initiatives is accessible at: http://www.whitehouse.gov/omb/egov/.

Lines of Business

- Geospatial, DOI, Managing Partner
- Financial Management, DOI, Shared Service Provider
- Human Resources, DOI, Shared Service Provider
- Grants Management, HHS/NSF
- Case Management, DOJ
- Budget Formulation and Execution, ED
- IT Security, DHS
- IT Infrastructure Optimization. GSA

Government to Citizen
Recreation One-Stop, DOI
GovBenefits.gov
USA Services

Government to Business
Federal Asset Sales, GSA
E-Rulemaking, EPA
Business Gateway, SBA

E-Authentication, GSA

Government to Government
Geospatial One-Stop, DOI
Disaster Management, DHS
SAFECOM, DHS
Grants.gov (Find & Apply), HHS

Internal Effectiveness & Efficiency
E-Training, OPM
Recruitment One Stop, OPM
EHRI, OPM
E-Clearance, OPM
E-Payroll, OPM
E-Travel, GSA
Integrated Acquisition Environment, GSA
E-Records Management, NARA

Provided Project Guidance and Assistance

The OCIO Project Management Office (PMO) established two contracts to assist programs with completing IT project plans, and in completing independent, integrated review of project plans as required by OMB. These contracts are the Project Management Planning Services (PMPS) and Integrated Baseline Review (IBR) Services.

Project Management Planning Services (PMPS)

The PMPS contract provides projects with easy access to project planning expertise and capabilities (eliminating the program having to staff these specialty functions). Five vendors were pre-certified to provide quality project planning, adhering to federal and best practice standards. Their expertise includes: project planning, architecture/systems engineering, earned value management and performance baselining (costs and schedule). All pre-certified vendors are accessible via the BPA-like firm fixed price contract.

Integrated Baseline Review (IBR) Services

The IBR provides projects with easy access to completing integrated baseline reviews upon completion of a mature project plan. As required by OMB, an IBR must be completed and approved prior to beginning development. The four IBR vendors have been pre-certified to provide independent reviews of project plans, their baseline, and adherence to Federal Acquisition Regulations (FAR). The service successfully eliminates time consuming IBR contracting; all pre-certified vendors are accessible via the BPA-like firm fixed price contract.

Enterprise Infrastructure Division

Supported the Land Mobile Radio Program

DOI leads the federal government in achieving radio communications interoperability across federal and non-federal agencies through its Land Mobile Radio (LMR) program. A significant advance was achieved through a Memorandum of Understanding (MOU) established with the States of Wyoming and Nebraska. The MOU details DOI's participation and frequency allocation contributions to the states to build a state-wide interoperable trunk system for emergency response, border protection and federal asset protection. The MOU established state, federal, and tribal participation and use of the state's systems allowing organizations with dissimilar communications and like missions to integrate their radio telecommunications, significantly strengthening their capability to support their mission and protect life and resources.

DOI established the Joint Program Operations Technical Service Center providing consolidated multi-bureau radio support services. This center increases the capability for sharing of resources, cross-bureau support, and holistic support such as a common radio help desk, asset management, equipment refurbishment and retrofit. Additionally, the service center is undergoing National Institute of Science and Technology certification testing to provide Association of Public-Safety Communications Officials (APCO) P25 certification of equipment.

DOI, through the National Radio and Spectrum Program Management Office, led technical efforts and project implementation providing encrypted communications capability with the U.S. Customs and Border Protection for 156 law enforcement officers along the entire southwest border.

## Enterprise Wide Area Network Services

A major milestone in the transformation of the department's networking capability was achieved through the completion of the connection of all bureaus to the department's consolidated wide area network service, Enterprise Services Network (ESN). Included was a complex implementation of a major science organization, USGS.

Strong perimeter security was implemented and the management of all of the bureau networks was consolidated and transferred to an enterprise Network Operations and Security Center. The Center provides around the clock monitoring and maintenance support for the network.

All major ESN backbone nodes and circuits were upgraded to support increases in demand. Network capacity was increased fourfold, while costs were held constant. In addition, ESN improved its service delivery by implementing a change management system and processes for enabling bureau requesters, vendor representatives, security and engineering staff and ordering officials to completely automate the requesting and tracking processes for services.

Internet Protocol Version Six

DOI completed transition to the implementation of Internet Protocol Version Six (IPv6) for the Enterprise Services Network by the required deadline.
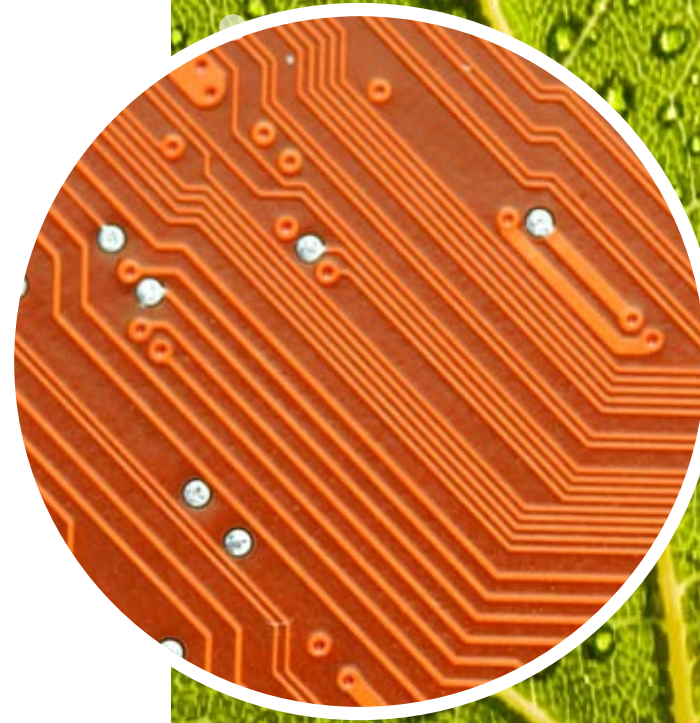
Trust Bureaus and Offices Reconnected

The division completed the internet reconnection of the Bureau of Indian Affairs, Office of the Solicitor, Office of the Special Trustee, Office of Historical Trust Accounting and Office of Hearings and Appeals. Significant engineering and security planning and design work was required to accomplish this task in a reliable and secure manner. Enterprise Infrastructure Division (EID) developed the architecture and led the design effort for the reconnection.

Transition to Networx

The division pursued an aggressive program for transitioning to the Networx contract. The evaluation and selection of the Networx vendor and development of the overall and bureau-specific transition project plans was completed. Networx is an important part of the department's strategy for transformation of DOI networking to a consolidated enterprise wide service delivery model. To support this new model, a more efficient and standardized governance structure addressing investment prioritization, project management, financial tracking and control, and communications processes was implemented.

Contributed to the Trusted Internet Connection

DOI contributed to the OMB Trusted Internet Connection initiative designed to optimize external connections to the internet and incident response capability. The architecture developed by DOI was adopted by Homeland Security as the template for the federal architecture.

Supported Enterprise Identity Management

DOI delivered solutions providing significant process improvements in response to the Homeland Security Presidential Directive (HSPD-12) establishing a mandatory, government-wide standard for secure and reliable identification. DOI participated in a shared government infrastructure for enrollment services, as one of several agencies participating in the General Services Administration (GSA) USAccess program. During FY2008, the division delivered an intranet collaboration portal service allowing the HSPD-12 program office to update card issuance progress statistics allowing on-demand access to up-to-date graphical reports.

EID also extended the collaboration portal to provide new capabilities supporting the card issuance process; providing significant labor savings and allowing the program to issue cards at a significantly greater rate, with fewer data errors, and improved data security. The long term vision is an agency-wide identity management repository, authoritative for all aspects of logical and physical access.

DOI standardized the operation of directory services across the entire department to address the misalignment of the certification and accreditation (C&A) security boundary with best practices for operational functions of the Windows 2003 Domain. Alignment was required to achieve compliance with federal, DOI, and Designated Accrediting Authority (DAA) policies and requirements.

Piloted Commercial Wireless Services

DOI developed a successful pilot to determine the effectiveness of a department-wide contract to acquire cellular commercial wireless services. As a result of the successful pilot, an enterprise contract, acquisition and deployment process will be implemented producing savings on wireless devices across the department.

Managed Information Assurance and Vulnerability

DOI successfully completed the implementation of an enterprise vulnerability management solution that greatly reduced the risk exposure of internet-facing and internal assets. DOI completed the implementation of full internet content filtering blocking access to prohibited internet sites representing inappropriate use or considered a risk to DOI.

The division implemented an enterprise threat management capability to assess all traffic through its internet connections including forensic capabilities for this traffic. In cooperation with the Department of Homeland Security, EID installed software tools at its internet connections to monitor data traffic in real time to identify malicious traffic so that attacks can be identified and remediated.

Supported Network Infrastructure Management and Control

The delivery of services today and the positioning of the department for planned future state infrastructure services were improved through significant changes in management processes and operational controls. Information Technology Infrastructure Library (ITIL) best practices and control processes based on International Organization for Standards (ISO) 20000 foundations were implemented.

Efficient change management processes and tools implemented through the Change Advisory Board (CAB) resulted in a significantly higher level of availability and reliability to network operations. The change process ties directly to DOI's capital planning and investment control (CPIC) process. A service catalog was also developed to document the operational services available to department customers.

Strong departmental standards were established for project planning as well as audit and review. Standardized project management procedures were implemented for projects. The application of these standards resulted in significant improvement and consistent performance of development projects.

Exceeded CPIC Requirements

The Enterprise Service Network (ESN) capital asset plans and business case analysis met or exceeded all applicable DOI capital planning and investment control requirements as well as all applicable OMB standards. The Exhibit 300 reporting to OMB met the required deadlines and ESN earned value performance met the required DOI and OMB earned value management standards.

Improved Business Management

The division relocated all its employees and contractors from Herndon to the new Enterprise Service Center in Reston, VA to consolidate the data laboratory and management oversight activities for enterprise services. The move was conducted with no interruption of services to bureau customers.

The division executed a rigorous billing analysis and dispute process resulting in the recovery of $373,233 in billing disputes in FY2008. In addition, approximately $1,932,007 in cost avoidance was achieved by billing analysts preventing billing errors.

The division participated on the Interagency Management Council (IMC) Networx Billing Advisory Team (BAT) as part of the mission to review and improve the systems, processes, and information associated with billing and invoicing under General Services Administration's Office of Integrated Technology Services (ITS) telecommunications contracts, including Networx.

DOI also implemented a department-wide federal relay service contract to provide services to the deaf and hard of hearing, resulting in significant savings and enhanced video over IP capabilities.

Cyber Security Division

Improved Security for DOI Computers

The Cyber Security Division established, and bureaus and offices substantially implemented, DOI's Windows XP Operating System Baseline Security Technical Implementation Guide (STIG) IT security configuration standard for desktop and laptop computers. This activity vastly improved security for end-users computers and provided a more manageable environment. The department's bureaus and offices are now actively engaged in activities to implement the Federal Desktop Core Configuration (FDCC) security configuration standards issued by the National Institute of Standards and Technology (NIST) consistent with OMB requirements.

Supported Enhanced Protection of Sensitive Agency Information Across DOI

The Cyber Security Division tested and evaluated the Enterprise Data-at-Rest (DAR) encryption solutions for the standardization of encryption methodologies across all of the department's bureaus and offices. This activity supported the secure storage and transport of sensitive data on laptops, thumb drives, remote workstations, portable devices and removable media. The standardized solution helps to ensure interoperability across the department's bureaus and offices for the secure encrypted exchange of sensitive agency information, including personally identifiable information (PII). The results of the testing and evaluation resulted in approval of a standardization decision by DOI enabling the acquisition and implementation of the solution that is scheduled for early in FY2009.

Developed the IT Security Defense-in-Depth Strategic Plan

The IT Security Defense-in-Depth Strategic Plan, established in FY2008, contains recommendations to reduce information security risks that are posed by internal users of DOI information systems as well as addressing information technology security needs throughout the department. The implementation of the plan was prioritized and many elements were already integrated with the agency's IT Roadmap projects and other IT security improvement initiatives. Examples of initiatives resulting from the recommendations under consideration for prioritization include an enterprise continuous monitoring program to consistently monitor the effectiveness and implementation status of IT security controls to enable an enterprise view into risks and vulnerabilities to Interior's mission and business functions, and associated information and information systems; Data Loss Prevention (DLP) solutions to protect the department's sensitive information from intentional or unintentional unauthorized disclosure or compromise as it leaves the department's IT environment through the internet; enterprise rights management (ERM) solutions to protect DOI's sensitive information at the source by applying configurable security controls directly to the information at the time of its creation or when it is initially accessed; and, two-factor smart card public key infrastructure (PKI) based authentication for remote access and authentication to the network and associated computing resources.

Implemented an IT Security Policy Handbook

The IT Security Policy Handbook, established in FY2008, aligns agency policy with the National Institute of Standards and Technology (NIST) Special Publication (SP) 800-53 families of controls. The alignment of agency policy with NIST standards improves integration with C&A and annual internal control review (ICR) processes for the identification, selection, implementation, testing and integration of required management, operational and technical security controls needed to protect Interior's information and information systems. The policy handbook was posted by NIST within the Federal Agency Security Practices (FASP) section of their web site as a model for other agencies to consider emulating.

Significantly Improved IT Security Management and Reporting Processes

DOI established a Memorandum of Agreement with the Department of Justice (DOJ), a Shared Services Center (SSC) provider under the OMB's Information Systems Security Line of Business (ISS LoB). This initiated a project to deploy the Cyber Security Assessment and Management (CSAM) Federal Information Security Management Act (FISMA) automated reporting solution. This solution, now fully implemented, supports improvements in DOI's C&A, plans of action and milestones (POA&Ms), and ICR processes. This capability provides bureaus and offices greater simplicity in entering and managing their information security control documentation and reporting requirements. This implementation is expected to result in substantial improvements to the C&A reporting process. It will bring increased standardization and quality of documentation as the department's bureaus and offices begin to fully utilize the CSAM solution for C&As in FY2009. As reported by the Office of Inspector General (OIG), in their FY2008 annual FISMA evaluation report to OMB, DOI's C&A process has now achieved a satisfactory rating demonstrating Interior's progress and continuing commitment towards improving IT security across the agency.

Conducted Extensive IT Security Training

DOI's bureaus and offices provided annual IT security awareness training to DOI's employees and contractors. The role-based IT security education and training program was designed for individuals having significant IT security roles and responsibilities. It was further standardized in FY2008 which enabled the department to more accurately identify and provide training to all individuals requiring specialized training. Through this program, a higher degree of security awareness, education and training was attained with the expected result of improving the degree to which Interior's sensitive agency information and information systems are safeguarded. Bureaus and offices collaboratively developed DOI specific web-based courses for computer incident reporting, response, and handling delivered through DOI LEARN. Bureaus and offices worked in concert with the OIG Computer Crimes Investigation Unit to provide instructor led classes on those topics along with techniques to obtain forensics copies of computer disk images and preservation of "chain-of-custody" techniques necessary to support investigations and analysis of cyber incidents.

Information Management Division

Established Federal Government Standards for Records Management

DOI serves at the forefront of the federal records management program through its development of the first Records Management Capability Maturity Model (RM3). The use of technology to assist records management within an organization defines and determines whether an organization possesses the necessary process maturity to effectively and efficiently use the technology. RM3 defined and detailed critical records management maturity levels necessary to predict and support an agency's use of advanced records management tools. DOI worked with the National Archives and Records Administration (NARA) to incorporate RM3 into related records management enterprise architecture initiatives including service oriented architecture, records management service components, and the Federal Segment Architecture Methodology. The combined effort of these initiatives provides remarkable improvements within records management throughout the entire records lifecycle and the government.

Developed First Working Models for Improved Records Management

A necessary and sustainable step in improving records management was simplifying the current disposition schedules. Simplifying records schedules required a complete review and restructuring of the current schedules and a review of current business processes. This was a significant undertaking that was necessary and critical to improving records management. While NARA proposed an approach to simplification of disposition known as "Big Bucket," no other agency besides DOI has implemented this approach. As such, DOI's implementation of "Big Bucket" now serves as a model for other federal agencies.

Established the Electronic Records Management Initiative

The Electronic Records Management (ERM) initiative provided DOI with policies and guidance in the maintenance of electronic records. DOI's ERM initiative protects DOI's electronic records, supports E-Gov initiatives, and meets eDiscovery requirements while

- reducing operating costs;
- safeguarding vital information;
- preserving institutional history;
- increasing the ability to preserve information throughout its life cycle; and,
- providing consistent management of information in both electronic and non-electronic formats.

DOI and NARA have formed an alliance to collaborate on DOI's ERM project.

Increased Availability of DOI Information

Respect for the power of information is a cornerstone of information stewardship, accountability, and mission performance. DOI's Freedom of Information Act (FOIA) program conducted a comprehensive review of the department's Electronic Reading Rooms and provided certification to the Department of Justice and OMB that its final opinions, specific agency policy statements, administrative staff manuals, and frequently requested documents are available to the public electronically consistent with FOIA.

Enhanced FOIA Customer Service

Consistent with Executive Order 13392, "Improving Agency Disclosure of Information," DOI's FOIA program developed an electronic customer comment forum. The public may send inquiries and/or FOIA program suggestions to DOI's FOIA office. This greatly enhanced DOI's FOIA program's ability to address the public's needs and feedback in a timely manner.

Established Core Competencies and Personnel Standards

DOI's FOIA program developed FOIA core competencies and consistent personnel standards. These standards ensure individuals in FOIA positions have the skills and knowledge to perform their jobs effectively in compliance with Executive Order 13392, "Improving Agency Disclosure of Information" (December 2005).

Simplified FOIA Processing

Under the FOIA, 5 U.S.C. 552, the public is allowed to receive copies of agency records unless they are protected by one of the nine exemptions under the law. In accordance with federal regulations set forth at 43 C.F.R. Part 2, FOIA requests must be submitted in writing to the FOIA Officer. DOI's new electronic FOIA request form has greatly simplified access to information and FOIA processing by providing the public with the capability to submit FOIA requests via the web, effectively ensuring that nothing impedes access to information.

Developed a Departmental Strategy for Safeguarding Personally Identifiable Information (PII) and Reduced the Collection and Use of Social Security Numbers

This strategy provided bureaus and offices maintaining information on individuals with guidance for minimizing the use of personally identifiable information (PII) in paper, electronic and all other formats, safeguarding such information, and addressing incidents involving potential breaches of PII. This strategy required bureaus and offices to establish Information Reduction Teams (IRTs) to address the reduction of PII and Social Security Number (SSN) collection and use.

Developed a Privacy Loss Mitigation Strategy

The privacy loss mitigation strategy addressed ways in which the department can reduce the potential for harm from breaches involving PII and steps that must be taken if a breach occurs. The breach notification policy incorporated the existing privacy and security requirements regarding PII that apply to all federal information and information systems. This strategy further outlined the existing and new requirements for reporting and handling incidents of breach involving PII. Additionally, the strategy addressed the responsibilities and duties of departmental personnel who are authorized to access PII.

Conducted Training on Section 508

On November 6, 2007, OMB issued a memorandum to Chief Acquisition Officers and Chief Information Officers suggesting activities and tools to help agencies fulfill their responsibilities in implementing Section 508 requirements. In response, the Information Management Division (IMD) developed the "Section 508 Awareness" computer-based training (CBT) module. Completion of this training module educates DOI employees on the importance of developing, procuring, maintaining, or using accessible electronic and information technology (E&IT). Through this training initiative, DOI meets the statutory Section 508 requirements and assumes a best practice and leadership role in this arena.

Administration and Business Division

Enabled Reliable Communications

The Administration and Business Division successfully maintained all communication vehicles throughout DOI, including AT&T, Verizon and GlobarStar cellular phones. This effort ensures effective support as well as around the clock accessibility. The ongoing reliability of DOI communications is the cornerstone of the department's contingency preparedness.

Educated OCIO Personnel on GovTrip Software

The division successfully coordinated OCIO's participation in GovTrip software education. This effort improved knowledge and understanding of the system that will ultimately increase the efficiency and effectiveness of all travel that is handled by the OCIO.

Supported Human Resources Tracking Activities

In response to the growing need for monitoring, the division rapidly developed a new human resources status tracking method to monitor all vacancies and their current status. Subsequently, the division completed the relocation of over 30 employees from Herndon, Virginia to Reston, Virginia which allowed for a smooth transition of all human resources activities. During FY2008, the division also successfully completed the modernization move of over 36 employees with minimal disruption to critical operations.

Collaborative and Effective Enterprise Resource Management

The department realized cost efficiencies by leveraging DOI's buying power using Enterprise Licensing Agreements (ELA). The use of ELA's resulted in lower unit prices that were well below GSA standards. ELA supported the standardization of DOI's technical infrastructure through Technical Reference Model (TRM) products.

As an additional effort to effectively manage resources, the Enterprise Resource Management (ERM) group operates within the Administrative and Business Division. Through the use of central purchase hardware contracts, DOI was able to achieve a cost avoidance of $6.7 million for the department compared with GSA schedule pricing. DOI also achieved a cost avoidance through central purchase software contracts totaling $8.52 million compared with GSA schedule pricing. Therefore, the total cost avoidance realized by the department from all central contract purchases was $15.22 million in FY2008.

In FY2008, technical refresh efforts were completed for all hardware contracts to ensure that available products continue to meet DOI needs. Consensus was also reached by bureau representatives on the schedule for future technical refresh activities. The software contracts were also enhanced to include additional products that could be ordered to take advantage of the cost avoidance benefits.

In FY2008, the Hardware Acquisition Team (HAT) Working Group initiated work on a central contract for ultralight notebook computers. This contract is expected to be available in FY2009.

Closing

Many of the accomplishments shared in this report are not only ground breaking for the Department of the Interior, but also across the federal landscape. Through extensive analysis and diligence, Interior's commitment to improving information technology programs and activities is not only visible, but in many cases, tangible to our customers.

DOI's Enterprise Architecture program served as a pioneer and model in the federal space. Meanwhile, the Portfolio Management Division maintained a strong government rating consistently demonstrating excellent performance that led to high ratings in PMA progress.

The Enterprise Infrastructure Division made significant progress on improving the Land Mobile Radio program in FY2008, particularly within the states of Wyoming and Nebraska. In addition, the Cyber Security Division supported the improvement of security for DOI computers by developing DOI's Windows XP Operating System Baseline Security Technical Implementation Guide (STIG) IT security configuration standard for desktop and laptop computers. The Information Management Division focused on improving DOI records management through collaboration with the National Archives and Records Administration. Through this effort, DOI focused on using the records management capability maturity model in combination with the federal records management service oriented architecture as the records management approach for the government. Lastly, the Administration and Business Division works tirelessly to maintain reliable communications vehicles for the department.

As these successes reveal, the Department's Enterprise Architecture, IT Portfolio Management, Enterprise Infrastructure, Cyber Security, Information Management, and the Administration and Business Division are all driven by the goal to provide information resources that are unparalleled in the federal environment. Continued diligence and focus ensures that the OCIO and it's divisions will continue to provide high quality support to the vast array of missions that exist within the Department of the Interior.

All of the bureaus and offices contributed through cooperative and collaborative partnerships to achieve these successes and advance the level of maturity of Interior's IT programs. DOI benefited from the dedication, commitment, and support of highly skilled and talented individuals who contributed to the representative sample of accomplishments highlighted in this report.