

CHAPTER 3. IMPROVING FINANCIAL MANAGEMENT SYSTEMS

***GOAL:** Achieve and maintain a single, integrated financial management system that complies with federal government policy.*

The Department shares the view of the governmentwide CFO Council that a key to improved financial and program management is improved financial management systems. Improving financial management systems will provide for and strengthen our decisionmaking capabilities and enable Interior program and financial managers to more effectively carry out the Department's missions. The Department recognizes the importance of its financial management systems as a part of its capital assets portfolio, and uses sound information technology investment management principles to plan and monitor these systems. Interior's goal is to achieve and maintain the objective stated in OMB Circular A-127 for each agency to establish a single, integrated financial management system. In pursuing this goal, the Department will follow the information technology investment management practices and principles identified in the Clinger-Cohen Act of 1996.

History

The Department continues to move toward the objective stated in OMB Circular A-127 for each agency to establish a single, integrated financial management system. Since the mid-1980s, Interior has improved its financial systems and eliminated duplicative and redundant systems. By 1984, the number of personnel/payroll systems used by Interior had been reduced from five to one. All bureaus within the Department were converted from the PAY/PERS personnel/payroll system to the Federal Personnel/Payroll System (FPPS) by the end of 1998. The FPPS is a new, agency-developed system maintained by the National Business Center. The FPPS is a fully integrated, on-line system that services 22 agencies, including the Social Security Administration, in addition to the Department.

By FY 1992, the number of existing bureau core financial systems had been reduced from ten to two, with off-the-shelf software, Federal Financial System (FFS), being used in six bureaus which account for over 95 percent of Interior's annual accounting transaction volume. One additional bureau, the Office of the Secretary, converted to FFS during FY 2000. The remaining two smaller bureaus use ABACIS, an in-house developed core accounting system.

Overall, Interior's financial management systems represent a combination of governmentwide systems, departmental systems, and bureau managed systems. Increasingly, Interior is becoming reliant on technology as the enabling agent for meeting management's need for more timely and comprehensive financial management information for streamlining underlying financial and administrative processes, and improving the efficiency of transaction processing. Moreover, Interior is fully aware of the importance of information technology as a financial investment and of the necessity to manage this investment wisely.

Financial Management Systems Improvement Strategy

The Department’s goal is to continue to improve financial transaction processing and to enhance the financial management systems support through an effective partnership of program, information system, and financial managers.

The Department relies on a unified set of financial management systems planned for and managed together, and operated in an integrated fashion to collectively support program and financial managers. These systems are managed at various levels within the Department. Some of these systems are managed on a departmental level, others are maintained at a bureau or local level, and some are governmentwide systems that the Department relies on. Collectively, they represent the Department’s financial management systems architecture. The current financial system architecture is shown in *Exhibit 3-1*, arrayed by the different types of management approaches being used. *Exhibit 3-2* lists the Department’s financial management systems and applications.

Exhibit 3-1

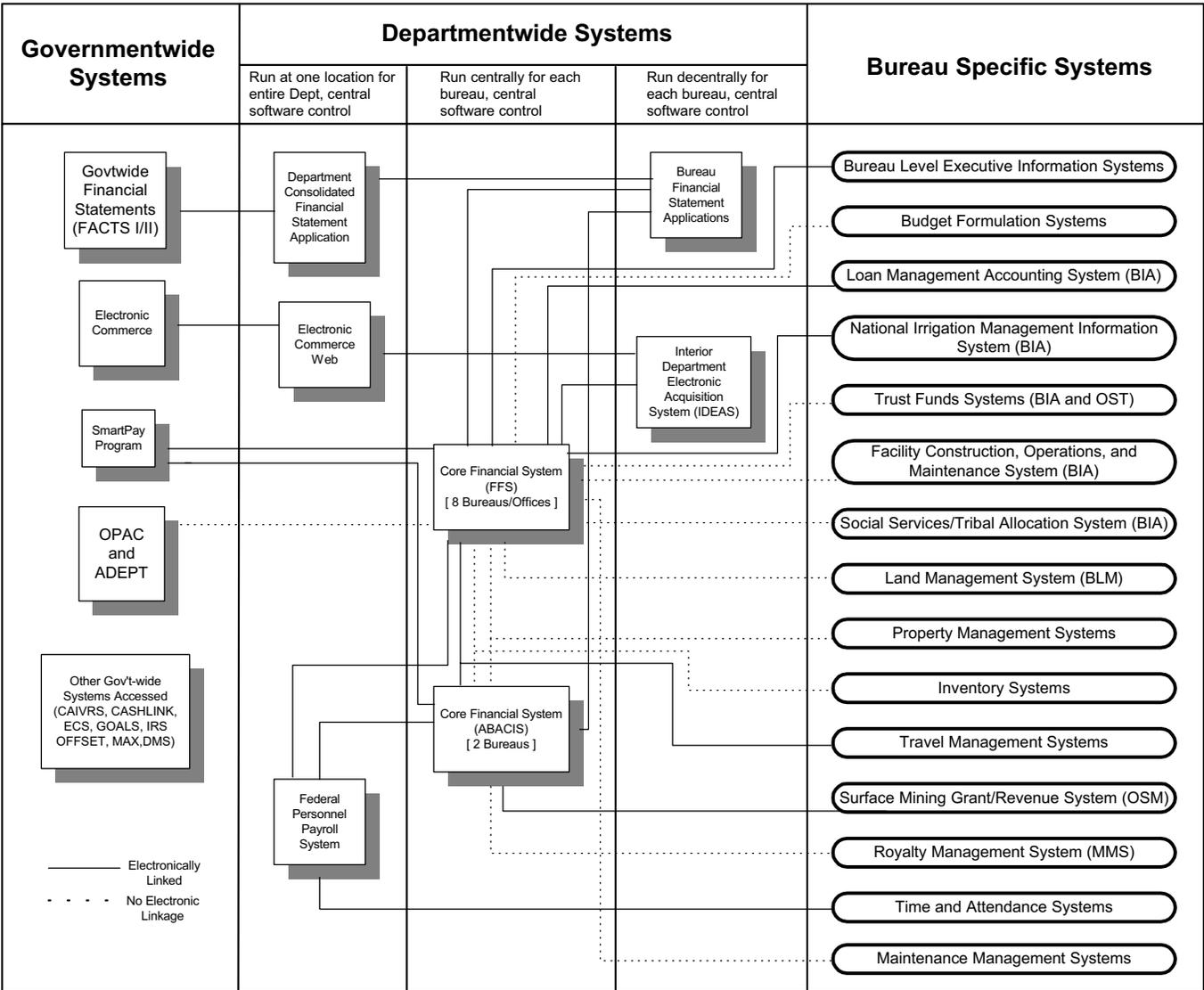


Exhibit 3-2

**Department of the Interior
Financial Management Systems Supporting Exhibit 3-1
System/Applications**

DEPARTMENTWIDE SYSTEMS

Core Financial System (FFS)

- Federal Financial System (8 Bureaus/Offices)

Payroll Personnel System

- Federal Personnel/Payroll System (FPPS)

Core Financial System

- Advanced Budget/Accounting Control and Information System (2 Bureaus)
- Accounting and Aircraft System (OAS)

Interior Department Electronic Acquisition System

BUREAU SPECIFIC SYSTEMS

Bureau Level Executive Information Systems

- Management Information System (BLM)
- Administrative Information System (GS)
- Administrative Financial System II (NPS)
- Federal Aid Information Management System (FWS)
- TABS (GS)
- Financial Reporting and Reconciliation System (NPS)
- Budget and Science Information System (GS)
- TSC Management Information System (BOR)
- Administrative Management Information System (GS)

Property Management Systems

- FFS Fixed Assets Subsystem (BIA, BLM, GS, NPS)
- Moveable Property System (BOR)
- Property Management System (MMS)
- Property Management Web (New System Being Developed by MMS)
- Personal Property Management Information System (FWS)
- Real Property Inventory (FWS)
- Federal Real Property Management (GS)
- Property Accountability Ledger System (OSM)

Budget Formulation Systems

- Budget Allocation System (FWS)
- Program and Budget System (BOR)
- Budget Formulation System (NPS)

Inventory Systems

- FEDSTRIP System (BOR)
- DORRAN (GS)
- Inventory Subsystem (GS)
- Peachtree 2000 Inventory System (GS)
- Production Tracker (OS)

Loan Management Accounting System (BIA)

Travel Management Systems

- Travel Manager Plus

National Irrigation Management Information System (BIA)

Royalty Management System (MMS)

- Production Accounting and Auditing System
- Auditing and Financial System

Trust Funds (BIA, OST)

- Trust Funds Accounting System
- Integrated Resources Management System

Surface Mining Grant/Revenue System (OSM)

- Grant Information Financial Tracking System
- Fee Billing and Collection System
- Audit Fee Billing and Collection System
- Civil Penalty Accounting Control System

Facility Construction, Operation, and Maintenance System (BIA)

Social Services/Tribal Allocations System (BIA)

- Tribal Allocation Priority System
- Social Services Automated System

Maintenance Management Systems (Various)

Land Management System (BLM)

- Payment in Lieu of Taxes
- Collection and Billing System

The Department has viewed the movement toward a single, integrated financial system as encompassing four interrelated elements: (1) migrating to and enhancing standard departmentwide systems; (2) improving or replacing financial and mixed systems to take advantage of new technological capabilities (e.g., Internet browser and smart card technology); (3) effectively interfacing or integrating financial management systems through electronic transfer of data and establishing standardized financial data classifications for movement of data to support finance and program managers; and (4) following sound investment principles in selecting and evaluating its financial management systems and recognizing those systems as part of the Department's portfolio of capital assets.

Over the past five years, the Department's financial management systems strategy was to target systems improvements to adjust to changes brought about by organizational rightsizing, streamlining, and reengineering efforts. These efforts focused on completing seven major financial management systems improvement efforts: (1) enhancing current core accounting systems; (2) implementing FPPS; (3) implementing a departmentwide procurement system (IDEAS); (4) maximizing opportunities for utilizing Electronic Commerce (EC) and other Electronic Data Interchange (EDI) applications; (5) improving property systems through the use of the FFS Fixed Assets module; (6) improving the American Indian Trust Funds systems; and (7) implementing the Minerals Revenue Management Reengineering Initiative. The last two efforts are still underway.

The Department's current financial management systems improvement efforts involve four major thrusts:

- *Current Systems:* Maintain current financial management systems to support administrative and program managers, update these systems where necessary for regulatory compliance requirements, and manage these systems in a manner consistent with the Department's information systems investment management policies and procedures.
- *Financial Management Systems Migration Project:* Define, carefully plan, and implement a new generation of financial management systems to take advantage of new technology and processing opportunities.
- *Federal Human Resources Information System (FHRIS):* Define, carefully plan, and implement the system functionalities needed in the Human Resources community.
- *Critical Programmatic Management Systems:* Re-engineer and/or replace certain critical bureau-based programmatic/financial management systems supporting critical programs: Minerals Revenue Management; Indian Trust Funds Systems; and Facilities Management System.

The target architecture for the next five years will be determined by the results of the Financial Management Systems Migration Project. Therefore, an illustration of the target architecture is not included in this financial management plan.

FY 2001 Accomplishments

During FY 2001, the Department continued financial systems enhancements, which included successfully completing systems improvement efforts begun in previous years and expanding the use of outside services to support transaction processing.

Significant FY 2001 accomplishments include the following:

- ***SmartPay Program:*** (Commonly called the DOI Integrated Charge Card Program)
Through a partnership between the Interior travel, acquisition, and property programs with Bank of America, the Department increased electronic management and oversight of the program. Five new management control reports were bought online, with five additional reports expected to be fully operational in late FY 2001 to further improve management control over the program.
- ***Implement a Departmentwide Procurement System:*** IDEAS is a steady-state system, with implementation having been completed in FY 1999. In FY 2001, the Department maintained the Interior Department Electronic Acquisition System (IDEAS) across all major buying offices of the Department, and continued implementation in additional smaller offices. A total of more than 350 locations are using the software for requisitioning, purchasing, contracting, and contract administration. IDEAS consists of American Management Systems, Inc.'s Procurement Desktop software, supplemented with in-house functionality for electronic commerce and procurement data collection.

Enhancements were made to the system to further implement electronic commerce. IDEAS has provided for EC in simplified acquisitions (below \$100,000) for several years; in FY 2001 this capability was expanded to EC in contracts, including pilot efforts for construction solicitations with extensive drawing packages as part of the Request for Proposals. At the end of FY 2001, IDEAS will meet the Administration's deadline to post all synopses of solicitations required by the Federal Acquisition Regulation, and their related solicitation packages, on the new FedBizOpps governmentwide point of entry (GPE).

At the request of customers, the system was also enhanced to respond to changes to governmentwide procurement regulations and data reporting requirements. Interfaces to bureau financial management system databases are complete and all bureaus are using the interfaces except two (Minerals Management Service and Office of Aircraft Services). The Minerals Management Service completed interface testing in August 2001 and plans to implement IDEAS in October/November 2001.

- ***Improving Property Systems:*** Interior continues to encourage the property management community (personal, real, and museum property managers) to demonstrate the economies that can be realized through the proper control of government property based upon sound business practices. Through the DOI Property Management Partnership and bureau-specific activities, linkages among bureaus and between administrative activities and mission programs have been cultivated. The Property Management Partnership provides a structure through which bureau officials develop common strategies and agreements to improve systems, operations, services, and information on property in order to achieve efficiencies and cost effectiveness.

Current systems are using outdated technology, are not integrated, and do not have the necessary security capabilities to facilitate open access through the Internet. Interior is working toward continuous improvement by establishing an integrated property system, as a module of the Financial Management Systems Migration Project, for use by all bureaus. The Partnership continues to address needed enhancements with the objective to migrate as quickly as possible to a system that incorporates new technologies that will eliminate duplicate data entry and allow for easy and timely access to data. An integrated property system will allow users in the field and senior managers to manage their assets better, reduce unneeded inventories, and to improve accountability.

- *Current Core Accounting Systems:* The Department continues to maintain the existing core accounting systems until a replacement core accounting system is identified, acquired, and implemented. A new release of the FFS core accounting system software was implemented in July 2001.
- *Improved the Consolidated Financial Statement System:* In FY 1997, the Department began using Hyperion Enterprise software for collecting financial statement information to support the preparation of consolidated financial statements. Since FY 1999, each bureau finance office has also used Hyperion Enterprise to prepare bureau-level audited financial statements. The Consolidated Financial Statement (CFS) application is fed by the respective bureau applications and is the single source of data used in preparing the Department's consolidated financial statements and governmentwide reporting. The CFS and bureau applications collect summary financial data by Treasury Fund Symbol and Standard General Ledger codes from the core accounting systems that process financial transactions for each bureau of the Department. The Department uses a Citrix server to support the Hyperion applications and financial statement preparation process. The Citrix environment allows each bureau to have direct ownership of their portion of the financial statement data, allows bureaus to post journal entries directly into the system, and provides open access to financial data used in preparing financial statements by the bureaus, the Department, and financial statement auditors. The benefits of the CFS and bureau Hyperion applications include facilitating consistent financial statement reporting through the Department and its bureaus, direct access to financial statement data by the financial statement auditors, and the preparation of interim financial statements. The CFS is also the basis of data provided to the Department of the Treasury for the governmentwide consolidated financial statement through the FACTS I process and supports certain parts of the FACTS II budget execution reporting process.
- *GPRA Performance Tracking System:* The Government Performance and Results Act (GPRA) requires agencies to submit strategic plans to the Office of Management and Budget and Congress identifying measurable goals that define what will be accomplished during the fiscal year and reflect a level of accomplishment commensurate with the resources required and subsequently funded. The Department has implemented an Access based system to capture GPRA performance information to meet the GPRA reporting requirements on a departmental basis. The Department's Access database is being used to collect quarterly performance measurement information. This approach recognizes the need to be compatible with bureau level systems that are being built or planned to support GPRA requirements. The system is being used to report on performance measurement date; support data collection requirements for the Annual Accountability Report; and support the requirement to report on performance against the annual performance plan.

Planned Actions

FY 2002 Planned Activities

- ***SmartPay Program:*** (Commonly called the DOI Integrated Charge Card Program)

- Provide new web accessible Approving Official training with emphasis on management controls. Continue to decrease delinquencies on individually billed transactions. Increase accountability by making more information readily available to managers and auditors through online reports.

- Publicize increased management controls as a preventative measure to inhibit misuse/abuse of the card. Increase outsourcing of record keeping to the Bank, decrease paper records on hand, and improve real time management reviews by providing Bank of America's EAGLS (Electronic Account Government Ledger System) training.

- ***Implement a Departmentwide Procurement System:***

Maintain and further develop IDEAS through:

- (1) Identifying opportunities to award departmentwide contracts for items frequently bought with purchase cards. Establish tools for purchase cardholders to place orders against these contracts, keeping a simple ordering and payment process while leveraging the Department's buying power.

- (2) Working toward full electronic commerce capabilities, including not only the posting of synopses and solicitations on the web using FedBizOpps but also receiving quotes/offers and making awards, including electronic signatures;

- (3) Assisting bureaus in any additional IDEAS implementations at smaller field units, including implementing financial interfaces and electronic commerce;

- (4) Continuing to work with other federal agency users of the Procurement Desktop product, including the Patent and Trademark Office, the U. S. House of Representatives, the Library of Congress, the State Department, franchise client agencies, and others to coordinate and spread the costs of software enhancements; and

- (5) Continuing to provide (as an OMB authorized franchise effort) procurement system support to other agencies.

- ***Improving Property Systems:***

Continue to address needed enhancements for a standardized property system by providing strong support for the Financial Management Systems Migration Project, in collaboration with the Property Management Partnership (PMP). The objective is to migrate as quickly as possible to a system that incorporates new technology that will eliminate duplicate data entry and allow for easy and timely access to data. These enhancements include the following:

1. The PMP will expand efforts to standardize and streamline personal and real property systems by including each bureau/office in determining the extent of common requirements that will interface with the Department's planned financial management systems migration project initiative. As requirements for an integrated property system are defined, funding will be necessary to support system development.
 2. The PMP has implemented, and continues to modify and improve the Screen Available and Exchange-Sale (SAVES) system, which is a standardized, departmentwide Web-based system to share and report information on personal property available for reuse within Interior. The Bureau of Land Management serves as the lead bureau on SAVES, with the assistance of the National Business Center.
 3. The Oregon State Agency for Surplus Property (ORSASP) has developed an efficient and practical online asset disposal service and the Department has a need to dispose of property in a cost effective manner. Rather than develop a system of its own, the Department will enter into an agreement with ORSASP to use their efficient online asset auction service. The Agreement will provide for Interior bureaus/offices to access the ORSASP's Electronic Commerce and Marketing resources (online auctions/sealed bids) for the public sale of vehicles, equipment, and personal property items.
 4. Interior established an agreement with the Department of Defense (DOD) to address the environmental concern over the disposal of unserviceable electronic assets, including computers and peripherals. Through this agreement, the National Business Center, using a DOD contractor, began a new service within Interior to recycle and de-manufacture unserviceable computer equipment in a safe and environmentally compliant way. Included in this service is the proper disposal of the many hazardous materials contained in the equipment. A Memorandum of Understanding between the Department and the Federal Prison Industries is currently being developed to establish a nationwide recycling and de-manufacturing program for Interior's unserviceable electronic assets.
- ***Travel Manager System:*** Many of Interior's bureaus currently process travel transactions manually or with limited automated support. Travel processes (from the perspective of the finance offices and travelers) needs to be improved and streamlined with the implementation of an automated travel management system. The Finance Officers' Partnership has long recognized the need for an automated travel management system to improve the travel processes. Three bureaus/offices (U. S. Geological Survey, Bureau of Indian Affairs, and Office of the Secretary) either have implemented, or are planning to implement, an automated travel management system (GELCO Travel Manager).

During recent system demonstrations associated with the Request for Information (RFI) for the Financial Management Systems Migration Project, various vendors demonstrated their travel management system's capabilities. Based on the observations offered by the RFI participants, Travel Manager was the best of the travel management systems that were demonstrated during the RFI process.

The Financial Officer Partnership addressed Travel Manager implementation and felt that consideration of implementing Travel Manager across the Department was important enough to help to coordinate efforts among the bureaus and the NBC that can provide the service under a special arrangement with GELCO, the provider of the Travel Manager software. In addition, the effort would also look at improving linkages to other systems

such as FFS, the Bank of America SmartPay program, and in the future, the Travel Management Center contractor systems.

The National Business Center has offered to provide the Travel Manager capability on a departmentwide basis. By taking a departmentwide approach, we would eliminate duplication of effort by providing a single point of entry and having data flow through and update the financial system resulting in quicker payments to bureau travelers. Individual bureaus are reviewing the NBC proposals and will individually make decision on whether to participate in this departmentwide approach.

- *Consolidated Financial Statement System and GPRA Performance Tracking System:* These systems will continue to be maintained and updated to accommodate any new/revised requirements from whatever source.

Financial Management Systems Migration Project

In February 1998, the Interior Chief Financial Officers (CFO) Council established the Financial Management Systems Migration Steering Committee, which is composed of bureau CFOs/Deputy CFOs and co-chaired by Interior's Deputy CFO and the Director of Interior's Office of Acquisition and Property Management. The purpose of establishing the Steering Committee was to provide for senior level leadership in the planning, acquisition, and implementation of replacements for existing Interior financial management systems. An integrated approach to systems replacement is greatly needed since a number of the Department's financial management systems must be replaced within the next few years. For example, both of the Department's core accounting systems (FFS and ABACIS) are nearing the end of their useful lives. FFS is a mainframe system based on outdated technology that was first implemented in Interior in October 1988. The FFS vendor has already developed and is marketing its new generation of core accounting system software, and will eventually discontinue support of the old version of FFS. Consequently, Interior must replace FFS with a system that complies with a contemporary "open system architecture" environment within the next five or so years. The development of a migration strategy will ensure that any new replacement systems adhere to the Department's information systems architecture and allows for full integration among the Department's financial management systems.

The Interior CFO Council endorsed the Steering Committee recommendation that the Department engage in a coordinated cross-functional financial management streamlining effort that encompasses the following business functions: budget formulation and execution; personnel and payroll management; acquisition, receipt, accounting, maintenance, and disposition of property and services; managerial cost accounting; and travel management. This effort provided the basis for developing a comprehensive strategy for implementing a new integrated financial management system within an Interior information systems architecture that adheres to the Joint Financial Management Improvement Program's "*Framework for Federal Financial Management Systems*." Thirteen cross-functional teams were established which assessed each financial management business process and identified both process improvements and outlined the data used in each process; the information required by each process; and the system requirements to support the streamlined processes.

Utilizing the direction of the Clinger-Cohen Act of 1996, this proposed financial systems improvement strategy will include reengineering processes, where necessary, and building a business case for making investments in financial management systems replacement. The current effort has completed the initial three phases:

Phase I - Functional Analysis Phase: Defined/refined the requirements of the individual systems/modules (by function) that comprise the integrated financial management systems and identified and documented interactions/transactions/data exchanges with other financial management systems/modules to identify potential business process improvements.

Phase II - Business Process Review: Reviewed individual and cross-functional processes to identify business process improvements that are automation related that should be incorporated into any new financial management systems architecture. The goal was to identify what the integrated systems environment should be to meet the Steering Committee's goals to be paperless to the extent possible, require only a single user logon for access, allow one-time initial data entry, and provide easy access to common data.

Phase III - Business Case Development: Prepared a business case for acquiring software to meet the requirements of the re-engineered processes defined in Phase II. This business case is needed to meet the requirements of the Information Technology Management Reform Act (Clinger-Cohen Act), satisfy "Rainey Rules" for justifying major information technology investments, and receive departmental approval from the Executive Review Committee. Following the streamlining efforts, the migration effort will replace existing system modules within the defined architecture on a schedule determined by Interior's CFO.

Interior's strategy is to establish and maintain an integrated financial management system for use by all bureaus that will: (a) allow users in the field and senior management to access common financial data when they need it to perform their functions effectively and efficiently, (b) enable processing necessary to record underlying transaction data and the infrastructure to provide easy access to the data will be handled in the background with limited or no human intervention, and (c) provide a secure integrated systems information environment that will support e-government initiatives, be paperless, require only a single user logon for access, allow one-time initial data entry, and provide easy access to common data. This will replace Interior's current financial management systems that are old and cannot support current and planned e-Government opportunities. The core accounting system (FFS) used by most bureaus is based on a mainframe system using outdated technology; two bureaus are using an internally developed system (ABACIS) that is difficult to support; the procurement system (IDEAS) is a client-server system that does not support multi-bureau contracting initiatives and is expensive to maintain; and current financial management systems are not integrated and do not have the necessary security capabilities to facilitate more open access through the Internet.

The scope of the effort will include the following critical functions of the Department: core financial, acquisition, personal property/fleet management, travel, budget, financial assistance, real property and enterprise management information. The strategy for implementing the new systems will be to implement the system capabilities in phases by designing the systems to be implemented across the Department but implementing the new systems capabilities in two bureaus first (OSM and MMS) before implementing the systems capabilities in the other bureaus.

The strategy has been developed to support e-Government initiatives to improve government to customer, government to business, and government to government interaction by: (1) supporting secure electronic connections with outside parties purchasing services or obtaining information from the Department; (2) supporting electronic procurement and payment infrastructure for vendors doing business with the Department; and (3) supporting business process changes necessary to link electronically to state and other federal agencies for grants and intergovernmental activity. The strategy will provide value to senior level officials by improving decisionmaking through more accurate and more timely access and analysis of critical management information, improving integrity in data through better integration and control over information processes, and reducing risk of systems collapse due to old technology. Value will be added for line managers by providing better administrative support for employees to improve the quality of the work environment and ability to hire and retain high quality staff and improving the ability to take advantage of Internet capabilities. Value will also be added to administrative operating personnel by improving internal efficiency and effectiveness through streamlining processes, improving efficiency, and reducing reconciliation efforts between critical systems to allow for more analytical activities, supporting increased security over applications and data, and potentially reducing cost of systems maintenance and allow for less expensive enhancement to functionality in the future.

The Department acquisition and implementation investment is to set up the applications to support the functions within the scope of the project of departmentwide implementation and to implement the new systems capabilities in the first two bureaus (Minerals Management Service and the Office of Surface Mining) to ensure the approach works before implementing in the rest of the Department. The initial investment has been included in the Department's FY 2003 budget request to the Office of Management and Budget. The total systems acquisition and implementation investment for all bureaus is planned over an 8 year period.

FY 2001 Accomplishments

- Completed the Request for Information (RFI) process by conducting vendor software demonstrations. The purposes of the RFI process were to:
 - Determine if commercial-off-the-shelf software was available to meet the Department's financial management needs;
 - Gain a better perspective on the information technology environment within which these systems operate;
 - Provide more specifics on how much it may cost in the long term to implement and operate these systems; and
 - Determine the time frame to install and implement these systems.

The RFI process was successful in providing needed information in each area.

- Developed the FY 2003 Capital Asset Plan (Exhibit 300).

- Obtained contractual assistance in developing the Statement of Work for the software acquisition Request for Proposals (RFP).

Planned Actions

FY 2002 Planned Activities

- Complete the preparation of the RFP describing Interior's needs.
- Issue the RFP for the acquisition of financial management software.
- Evaluate and test the financial management software proposed by the vendors responding to the RFP.
- Obtain FY 2003 funding to carry out the migration strategy established to replace existing financial management systems within an integrated information technology architecture.

FY 2003 and Beyond Planned Activities

Depending on funding availability:

- Award contract for financial management software.
- Implement the Financial Management Systems Migration strategy in phases as defined in the long-term strategic plan for the migration to an integrated financial management system for the Department.

Federal Human Resources Information System

In 1998, the Department enlisted Booz, Allen & Hamilton to do an analysis of the Federal Personnel/Payroll System (FPPS) and private sector vendors to assist in determining how best to provide additional system functionalities needed in the Human Resources (HR) community. These additional needed system functionalities include:

- Applicant Tracking
- Priority Placement Program
- Electronic Rating and Ranking of Applicants
- Reduction-in-Force Processing
- Labor/Employee Relations Case Tracking
- Complaint Tracking, including EEO
- Position Classification
- Training/Employee Development
- Skills/Competencies Management
- Workforce Planning

The recommendation of Booz, Allen & Hamilton was to continue the use of FPPS for payroll and payroll-related HR functions and to select a commercial-off-the-shelf product to provide the additional HR functionalities.

On February 2, 2000, the Department signed an agreement with an 8A Native Alaskan Corporation to add SAP human resources software functionality to complement FPPS, in accordance with the recommendations contained in the 1998 Booz, Allen & Hamilton report.

The Federal Human Resources Information System (FHRIS) Project resulting from the above referenced contract has three objectives:

- Determine what areas in the SAP HR product need modification to meet federal requirements and help SAP understand the requirements so they can be added to the SAP product.
- Configure and pilot test three areas of functionality (applicant tracking, skills bank, and training and event management) at bureau test sites.
- Develop a business case for a long-term, departmentwide implementation of a federalized SAP HR system.

The FHRIS prototype pilot project was a success and the Department again contracted with Booz, Allen & Hamilton to assess the pilot project and develop a business case for departmentwide implementation of FHRIS. The resulting assessment and business case indicated:

- The pilot test proved the effectiveness of the SAP software and the business processes supported.
- An implementation of a federalized SAP software product had lower risk than other potential Enterprise-Resource-Planning (ERP) vendors.
- Projected costs for departmentwide implementation of FHRIS were virtually the same for all three major ERP vendors considered (SAP, Oracle, and Peoplesoft).

A subsequent return-on-investment (ROI) calculation showed a 313 percent ROI for a SAP implementation.

FY 2001 Accomplishments

- Conducted a demonstration pilot of HR functionality in the National Business Center.
- Developed a Business Case for FHRIS, including funding requirements for future years.

Planned Actions

FY 2002 Planned Activities

- Obtain departmental approval for the full project, based on the Business Case.
- Incrementally implement demonstrated functionality in several additional bureaus.
- Begin change management activities in all bureaus.

FY 2003 and Beyond Planned Activities

- Depending on availability of funding, commence the implementation of all the functional areas listed above in all bureaus.
- Develop interfaces between FHRIS and other Interior financial management systems.

Improve the Information Technology Infrastructure Supporting Financial Systems

The information technology (IT) infrastructure is critical to maintaining quality financial management systems that are secure. Two major efforts are underway to improve this infrastructure.

Interior Information Architecture Program

Historically, mission requirements have been isolated in focused organizations within Interior serving their specific purposes. Although these needs often overlapped among Interior's bureaus, they were often acquired, managed, and supported independently. The result is a variety of unconnected, repetitive, or inconsistent information systems on a variety of technical platforms. Rapid advancements in the maturity of information technology, such as networking, the World Wide Web, data warehousing, and application sharing have eliminated many of the barriers formerly impeding the sharing and integration of data, information, and resources. This sharing can ultimately provide the ability to enhance or recreate business processes. These enhancements, in turn, improve management of IT requirements, total cost of ownership, and service delivery. It is precisely these improvements that enables Interior to take an agency view of financial management related systems, as well as other departmental administrative systems. These same principles are being applied across all business systems within Interior.

Recognizing these factors and the absolute need for change, the Clinger-Cohen Act of 1996 requires each Agency Chief Information Officer to develop and implement an Enterprise Information Architecture. Interior's implementation is designated the Interior Information Architecture (IIA). Statutory requirements supporting the development and implementation of an information architecture include, but are not limited to, the Government Performance and Results Act (GPRA), Presidential Decision Directive 63, and the Government Paperwork Elimination Act. The goal of the IIA is to provide the process and the policies needed to evolve Interior's various information systems and technical infrastructures to a coordinated overall structure that is responsive, accessible, affordable, and easier to maintain.

Implementation of the IIA is a well-coordinated effort making progress on several levels. The Clinger-Cohen Act calls for an Information Technical Architecture that is driven by business needs. To meet this goal, Interior is articulating the business drivers in an Enterprise Business Architecture (EBA), and developing or improving the component architectures that make up the IIA. The Interior Architecture Project has joined with the GPRA effort to develop the EBA. This coalition incorporates bureau information technology and mission requirements into the GPRA process; thus, ensuring a consistent and crosscutting view of Interior's business. The development of the EBA is following a recognized industry best practice, from the META Group, for developing information architectures. The META Group has been secured to facilitate and assist in continued development of the IIA. Support for this development is secured through a GSA FEDSIM contract.

The component architectures are being developed or enhanced by the program managers within Interior's Office of the Chief Information Officer, Information Technology and Portfolio Management Division. Component architectures include IT Security, Data Resource Management, Applications, Collaborative Computing, Directory Services, Web Services, Network Services, and Platforms. Development of the component architectures will ensure Interior meets at least minimal compliance with related statutory and operational requirements.

FY 2001 Accomplishments

- Coordinated activities of the Interior Architecture Program, broadening involvement of bureaus and offices within Interior.
- Involved and informed Interior bureaus/offices in assessments of architectural maturity throughout Interior.
- Produced a draft Technical Reference Model and Standards Profile.
- Awarded a contract to META Group Consulting to facilitate and assist in continued development of the IIA.
- Involved senior business managers in defining Interior's strategic direction and challenges.
- Aligned with GPRA to obtain documented business strategic information.
- Aligned with IT Capital Planning and Investment Control to manage IT investments.

FY 2002 Planned Activities

- Complete the high-level IIA and initiate mid-level IIA development.
- Issue the final Technical Reference Model and Standards Profile.
- Mature the partnership with GPRA to identify strategic influences and integrate them into the IIA.

- Mature the partnership with IT Capital Planning and Investment Control to make the IIA an integral component of managing IT investments.
- Continue coordination of non-exclusive enterprise licensing agreements to leverage departmentwide purchasing power and reduce total cost of ownership.

FY 2003 and Beyond Planned Activities

- Complete gap analysis for high priority projects comparing current and future business, data, applications, and technology architectures.
- Update and maintain Technical Reference Model and Standards Profile.
- Identify and facilitate departmentwide acquisitions of commonly used information technologies.

Computer Security Improvement Project

Interior is committed to implementing a comprehensive agencywide Information Technology (IT) security program that meets the statutory and practical requirements that accompany the use of IT processing, storage, and transmission capabilities for information systems. This approach is not exclusive to the financial management systems, but considers them as being some of the more important assets. As keepers of the public trust, the Department must ensure that it fulfills its functional responsibilities, and do so in a manner that meets the requirements of all public laws, Executive Branch directions, and federal standards.

Interior's goal is to implement an agencywide, uniform IT security program to meet the practical and statutory requirements of operating federal information systems. Specifically, this means compliance with public laws, federal regulations, and Executive Branch directions. IT security program areas include:

- Program Management
- Policies, Standards, and Implementation Guidance
- Education and Awareness
- Oversight, Assessments, and Assistance
- Security Certification and Accreditation
- Intrusion Detection and Incident Handling

Beyond the statutory requirements, it is clearly understood by Interior's management that there are practical risk mitigation requirements involved in operating distributed financial management systems. Specifically, shared interests exist between Interior's bureaus. In examining the potential for loss, in many cases the loss is not separable to an individual component, but could in fact impact multiple bureaus, significant portions of Interior, other federal agencies, and even the general public. The risk mitigation approach must therefore be uniform across the entire agency.

The IT security program is using a strategy that focuses on remediating computer security deficiencies beginning with the most important systems. The importance of systems is expressed through categories and prioritized from highest to lowest as follows:

- National Critical Infrastructure and National Security Information Systems
- Interior Mission Critical
- All Other Sensitive Systems

Interior Mission Critical systems are those determined to be critical to the performance of Interior missions, or whose compromise or failure to demonstrate adequate security could lead to significant resultant losses. Funding has been requested for FY 2002 for contracted services to support the agencywide IT security program implementation for Interior Mission Critical Systems. This funding will support an agencywide goal of achieving clearly demonstrated adequate security implementation for at least one-third of these systems by December 2002. The measure of successful implementation is demonstration of adequacy in these seven critical areas:

- Organization or Program Security Policies and Standards
- Certified System Security Plans
- Proper System Accreditation
- Contingency Planning
- Incident Handling Capabilities
- Security Training Program
- Investment Planning for Security Across the Life Cycle of Programs and Systems

Interior specifies “adequate” as fully meeting the requirements put forth in public laws, Executive Branch directions, Federal standards, and the agency’s own policies. The demonstration of adequacy will be accomplished through the use of structured, well-documented reviews that look at administrative and technical controls. The reviews of administrative controls will be accomplished using proven methodologies employed by internal and external oversight organizations such as the Office of Inspector General and General Accounting Office. Reviews of technical controls will be accomplished through systematic technical testing to include network mapping, vulnerability scanning, and controlled exploitation of identified vulnerabilities.

FY 2001 Accomplishments

- Conducted focused seminars for approximately 100 IT Security Managers to train them on implementing adequate security for Federal IT systems.
- Completed the internal review of the Interior IT Security Plan that provides the basis for meeting the minimum requirements for federal IT systems.
- Began a structured and well-documented initial risk assessment for Indian Trust Management systems.

FY 2002 Planned Activities

- Conduct a facilitated asset valuation process to rank in importance Interior’s information systems.
- Conduct initial risk assessments and gap analysis to determine the state of security compliance.

- Develop and implement security remediation plans.
- Implement structured processes to ensure that security requirements are well articulated in future year budget requests.

FY 2003 and Beyond Planned Activities

- Complete standards for all categories of information systems.
- Develop and implement remediation plans to include all information systems.
- Continue security program capability maturity model development, as specified by the National CIO Council.
- Continue development in accordance with Chief Information Officer Council guidelines.

Replacing Critical Programmatic Management Systems

The Department has projects underway to replace or enhance certain critical programmatic management systems that process financial data. These projects include the following:

Minerals Revenue Management Reengineering Initiative

Minerals Revenue Management (MRM) is responsible for ensuring that all mineral revenues from federal and Indian lands are efficiently, effectively, and accurately collected, accounted for, verified, and disbursed to recipients in a timely manner. These revenues amount to more than \$6 billion annually. The MRM is faced with a number of challenges that has forced it to reexamine its core business processes. One of these challenges is the Federal Oil and Gas Royalty Simplification and Fairness Act of 1996 that significantly changed many of MRM's historical operating assumptions, as well as some fundamental federal oil and gas mineral revenue financial activities. Another compelling reason for a reengineering effort is the need to improve MRM's performance by reducing its business cycle to match other comparable organizations in the public and private sectors. Key to MRM's reengineering initiative is to modernize its information technology infrastructure, by deploying new technologies and replacing applications whose roots can be traced to the early 1980s.

The reengineering initiative addresses all core MRM business processes—financial, accounting, compliance, and systems. The reengineering effort is expected to produce new business processes and support systems that are highly integrated, process centered, focused on outcomes, and well positioned to meet current and future mission requirements.

FY 2001 Accomplishments

- On October 8, 2000, all employees transitioned into the new MRM organizational structure, thus optimizing the work structure approach to the new compliance strategies, systems, and processes, while also aligning with Government Performance and Results Act (GPRA) goals.

- Started the transition to the new business processes and prepared for the new automated systems.
- Completed development and system testing of key components of the future architecture, including the data warehouse, financial system, compliance applications, workflow, and on-line analysis tools.
- Established innovative new data administration function to provide effective management control over data as a resource and to comply with the Department's and the Office of Management Budget's guidance to establish system architectures.
- Finalized and tested the method for converting historical financial and production reported data to the new systems.
- Conducted comprehensive acceptance testing to ensure new systems produce accurate results when using actual test cases.
- Completed random audit process to test, evaluate, and revise re-engineered compliance processes.
- Conducted comprehensive performance testing to ensure new systems and telecommunications connections provide acceptable and timely performance.
- Developed training materials and conducted training modules for employees, States, Tribes, and industry.
- Continued outreach and communication efforts.

Planned Actions

FY 2001 Remaining Planned Activities

- Carry out conversion of historical data (September 2001).
- Implement PeopleSoft financial system (September 2001).
- Implement compliance and data warehouse applications and tools (September 2001).

FY 2002 and Beyond Planned Activities

- Establish property processing and transportation system profiles and databases.
- Plan and implement additional process improvements for streamlining and enhancing compliance. Establish ongoing continuous improvement cycle for compliance processes and systems. As new techniques and approaches are developed in the workplace, implement new tools and applications to support them.

- Continue outreach and communications effort, which includes training activities, as needed, for both internal and external stakeholders.
- Convert all effective RIK reconciliation processes into the overall Compliance and Asset Management processes.

Improving the American Indian Trust Funds Systems

The American Indian Trust Fund Management Reform Act of 1994 affirmed the Secretary's trust responsibilities and established the Office of the Special Trustee for American Indians (OST). The Act identified actions required for the Secretary's proper discharge of trust responsibilities including: providing adequate systems for accounting for and reporting trust fund balances; providing adequate controls over receipts and disbursements; providing periodic, timely account reconciliations; determining accurate cash balances; and preparing periodic statements of account performance and balances. The Act also addressed the need for developing systems for accounting and investing funds, for reporting to account holders, and maintaining accurate data on ownership and lease of Indian lands.

The OST, headed by the Special Trustee, oversees and coordinates trust fund management reforms for the Department and reports directly to the Secretary. The OST's responsibilities include the Office of Trust Funds Management (OTFM) and other financial trust services functions transferred from the Bureau of Indian Affairs (BIA).

Reviews by the General Accounting Office (GAO), the Department's Inspector General, and independent accounting firms have identified serious financial management problems in the management of Indian Trust Funds. Reports based on these reviews indicated, among other things, that trust fund data is unreliable, inaccurate, and inconsistent, and trust systems have been inadequate to comprehensively process trust data and support investment activities. Additionally, inadequate internal controls and lack of consistent, written policies and procedures were also cited in the reports.

To bring about long-term constructive improvement in trust funds management, the Department issued a draft report, "*Indian Trust Funds and Trust Asset Management Reform Plan*" in June 1994. Several initiatives stemmed from the report, known as the Secretary's "Six Point Plan." The OTFM implemented an interim service bureau system for managing tribal investments and accounting services. This interim service improved the OTFM's performance of fiduciary duties regarding tribal trust fund investment, accounting, and reporting. BIA has performed most collection activities. The Six Point Plan also called for correcting problems with Individual Indian Money (IIM) accounts, including correcting IIM data and improving IIM-related systems.

In April 1997, the Special Trustee submitted a proposed comprehensive strategic plan to the Secretary and the Congress. Although the Secretary had reservations about certain aspects of the plan, it was agreed that the trust system improvements and data cleanup efforts in the plan would proceed. The plan included initiatives to clean up IIM records; eliminate data backlogs; improve policies, procedures, and controls; enhance training; and improve computer systems. Acquisitions were planned for: (1) Trust Funds Accounting System (TFAS), (2) Trust Asset and Accounting Management System (TAAMS), and (3) Land Records Information System (LRIS) enhancements.

These initiatives are also included in the High Level Implementation Plan (HLIP) of the Trust Management Improvement Project (TMIP). The HLIP, first published in July 1998 and revised in February 2000, now addresses 11 subprojects, and identifies responsible officials, progress made, action plans, and resource requirements. The HLIP subprojects are:

- Administrative Data Cleanup (OST)
- BIA Resources Data Cleanup
- Probate Backlog (BIA and Office of Hearings and Appeals)
- BIA Appraisal Backlog
- Trust Funds Accounting System Deployment (OST; project complete)
- Trust Asset and Accounting Management System Deployment (BIA)
- MMS Systems Reengineering
- Records Management Improvement (OST)
- Policy and Procedures (BIA)
- Training (OST)
- Internal Controls (OST)

FY 2001 Accomplishments

- Efforts have progressed in various areas including records cleanup, probate backlog elimination, and activities for improved systems. The revised HLIP, as amended by the Quarterly Status Reports, includes about 260 milestones for accomplishing trust improvement projects; as of April 30, 2001, a cumulative total of 186 milestones were completed, and 23 of the remaining 74 milestones are designated as ongoing throughout the life of the HLIP.
- The Special Trustee has expressed concern about the project management capabilities assigned to several major HLIP subprojects. The concerns include lack of clear strategy, adequate financial and staff planning, communications, and the appropriate direction of contractors. A contract has been awarded and work is underway to evaluate progress and coordination of HLIP subprojects and areas in which the Department has been held in breach of its trust responsibility.
- There are over 260,000 IIM and tribal accounts on the TFAS, a state-of-the-art trust finance system. It provides basic collection, accounting, investment, disbursement, and reporting functions of trust fund management operations. Also, the Secretary established the Office of Historical Trust Accounting.
- The TAAMS, along with the BIA Data Cleanup and the TFAS subprojects, is to provide the backbone of the major trust systems capability that the Department requires in order to deliver appropriate trust services to beneficiaries. TAAMS is an asset and accounting management system which is to include master lease, billing and accounts receivable, collections, and land title functions. The land title portion is operational in four regions, but without a title history database. The TAAMS leasing portion still requires considerable programming, and the Special Trustee has expressed concern about the capability of the BIA project management to implement the system across all regions and about the limited progress in BIA Data Cleanup. Planned TAAMS-related activities are subject to revision after a review is completed.

- The MMS Systems Reengineering initiative, including financial system, relational database management system and related modules, and compliance system, is expected to be completed shortly.

Planned Actions

FY 2002 Planned Activities

- Continue TFAS training.
- Continue TAAMS deployment at various locations. (subject to revision)
- Provide TAAMS training and orientation. (subject to revision)
- Implement records management improvements in OST and BIA.
- Continue implementing Indian Probate Reinvention Lab recommendations.
- Continue risk management presence to prevent internal control weaknesses relapses.
- After completion of TAAMS implementation at any remaining sites and completion of deferred modifications, complete documentation and supporting information as needed. (subject to revision)

FY 2003 and Beyond Planned Activities

- Complete TAAMS post-deployment data cleanup and continue TAAMS ongoing operations. (subject to revision)
- Continue records management improvement activities.

Facilities Management System

Interior's public buildings, structures, and other facilities represent a major investment of tax dollars. Ensuring that maintenance and repair of such facilities is funded and implemented efficiently and effectively is an important element in protecting that investment and reducing potential Department and bureau liability. Inadequately funded maintenance due to reduced budgets, diversion of maintenance funds for emergency responses, and competition for resources from other program needs has led to accelerated facility deterioration. Deterioration can affect public health and safety, reduce morale and productivity of employees, compromise bureau missions, reduce revenues, and increase the need for costly major repair or early replacement of constructed assets.

In FY 1997, the Interior Planning, Design, Construction and Maintenance Council (PDCMC) initiated a departmentwide study of maintenance and repair issues with the goal of reducing financial and safety liability to Interior, increasing the effectiveness and awareness of facilities maintenance, controlling the increasing backlog of deferred maintenance, and ultimately, improving the stewardship of Interior's constructed assets. In February 1998, the final report from the study was issued. It is entitled, "*Facilities Maintenance Assessment*

and Recommendations”, and offers ten major recommendations to improving the bureaus’ and the Department’s facilities maintenance programs. Three of these recommendations directly relate to facilities management systems:

1. *Ensure Appropriate Use of Maintenance Allocations*

- Initiate policies and procedures such that maintenance funds are separately identified, allocated, and tracked to ensure that all maintenance funds are used for facilities maintenance.
- Establish policies and procedures to effectively account for expenditure of facilities maintenance funds.

2. *Establish Common Definitions for Key Maintenance Terms*

- Interior should establish:
 - a common subset of facilities data elements;
 - a more standardized definitions of terms;
 - procedures for documenting inventory and backlogs;
 - procedures for determining estimated replacement costs; and
 - budget categories for the bureaus to adopt into their facilities program processes.
- The bureaus’ real property and facilities data and systems should be consistent to achieve compatibility of data.
- Program and budget information should be linked with the Federal Financial System.

3. *Ensure Integrity of Maintenance Deficiency Databases*

- Initiate a uniform methodology and core data set for facility condition surveys to assess the maintenance and repair needs of all existing Interior facilities. Validate inventory of existing facilities.
- Develop automated backlog documentation that accurately communicates the facilities’ needs and that can easily be reviewed and updated by field staff. Include standard need descriptions and associated cost estimating procedures.

The Department is currently implementing these recommendations.

FY 2001 Accomplishments

- As a result of the recommendations presented in the *“Facilities Maintenance Assessment and Recommendations”* report and the Administration’s concerns regarding the deteriorating condition of the federal government infrastructure, the Department continued to request funding for the Maintaining America’s Heritage initiative which began in the FY 1999 budget with Safe Visits to Public Lands. This initiative recognizes that funding is urgently required to ensure safe visits for the visitors to the national parks, refuges, fish hatcheries, and public lands. It is also needed to ensure that Interior employees have safe working environments and that students attending BIA schools have safe educational

environments. This initiative relies heavily on the availability of accurate and complete facilities data and a comprehensive facilities management system to effectively utilize that data in identifying those facilities that are at most risk. FY 2001 is the third year of appropriation for this important initiative.

- In December 1998, Interior's Chief Financial Officer determined that a departmental material weakness existed in the area of maintenance management systems in four of the six facility managing bureaus (BLM, FWS, NPS, and USGS). A common core COTS software system, MAXIMO, used by BOR, was implemented by NPS in 30 park units in FY 2000 and NPS is implementing it in an additional 90 parks this fiscal year. Implementation of this software is being initiated by the USGS. The BLM and the FWS are beginning pilots of the MAXIMO software. This is cognizant of FY 2001 Appropriations Conference Committee Report language directing the development of consistent facilities management systems departmentwide. BIA has recently implemented an internally developed maintenance management system.
- In December 1999, the Department issued to the bureaus standard guidelines for the conduct of cyclic facilities condition assessments to be implemented in FY 2000. This requires the bureaus, through a formal process, to assess each of their constructed assets on no greater than a five year cycle. The data from these assessments are to reside in a facilities information system and will, after the completion of the first cycle (expected in FY 2005), form the baseline that would allow reliable annual reporting of deferred maintenance and be the basis for future prioritization of facilities repair and construction projects.
- The Department established a Facilities Management System Partnership to function under the PDCMC. This partnership is to:
 - Coordinate FMS implementations within the Department.
 - Provide a forum for exchanging information and experience on FMS.
 - Develop standardized facilities management data definitions and databases.
 - Coordinate FMS developments with the Financial Management Systems Migration Project.
 - Ensure compatibility among FMS.
 - Develop improved methods for meeting regulatory and other requirements (e.g., FASAB No. 6).
 - Recommend future common software enhancements and acquisitions.

Planned Actions

FY 2002 Planned Activities

- In support of the Maintaining America's Heritage initiative, the Department will implement the third year of the "*Five-Year Facilities Deferred Maintenance and Capital Improvement Plan*" to address critical health and safety needs and critical resource protection needs across the bureaus. The long-term improvement of facilities management is dependent upon the ability to collect current and accurate facilities data, utilize standard database definitions for those data elements that are required at the Department level, implement a formal program of facilities condition assessments, and have consistent facilities management systems to effectively and efficiently process facilities data.

- The NPS will deploy the MAXIMO facilities management software in their remaining park units. The USGS will initiate the software in the first 3 of the 14 installations for which it is to be used. The BLM and the FWS are to complete piloting of the software and begin a phased deployment.
- The Department will issue common definitions of facilities-related terms for use by all facilities managing bureaus. Through the use of common definitions, data gathered through a comprehensive condition assessment process, and continued use of the Five-Year Plan, Interior will be able to present a more consistent and credible view of budgeted resources and capital investments, goals, needs, and priorities to the Administration and the Congress.

FY 2003 and Beyond Planned Activities

- Continue implementation and improvement of the Five-Year Facilities Deferred Maintenance and Capital Improvement Plan.
- Improve accuracy of the deferred maintenance backlog through cyclic facilities condition assessments.
- Complete development and deployment of consistent facilities management systems throughout the bureaus.