

DOI BUDGET YEAR 2005 IT INVESTMENT OVERVIEW

Investment Identification

Agency: Department of the Interior
Bureau: Office of the Secretary
Location in Budget: Summary of IT Investments
Account Title: Department of the Interior
Account Identification Code: 010-00-14-9999-0
Program Activity: DOI Office of the Secretary; Office of PPP
Name of Investment: [Recreation One Stop](#)
Unique Investment Identifier: 01000010401001124117058
(IT Only)(see section 53)

Investment Justification

I.A Investment Description: The Recreation One-Stop investment is one of the E-Government initiatives in the Presidential Management Agenda to improve the effectiveness, efficiency, and customer service of the Federal Government. The Recreation One-Stop initiative is intended to improve access to recreation-related information generated by the various levels of government (Federal, tribal, state, and local), to streamline the systems used to manage that information, and to enhance the sharing of recreation-related information among government and non-government organizations. The investment will include the procurement of a new contract to integrate the separate recreation-related reservation systems, including the National Park Reservation Service and the National Reservation and Recreation Service (NRRS).
The initiative will be responsible for five primary products: 1. Implement interagency web portal for recreation data 2. Integrate campground/tour reservation systems 3. Define RecML standard 4. Make data sharing operational, using RecML and web services 5. Develop migration strategies to replace/interface existing recreation-related systems, using the Federal Enterprise Architecture
The interagency portal will provide a user-friendly, web-based resource to citizens, offering a single point of access to information about recreational opportunities nationwide. (Currently a variety of such websites exist, including Recreation.gov, ReserveUSA.com, and reservations.nps.gov) The website will provide a comprehensive source of information about thousands of recreation sites owned or managed by government organizations, including facilities managed by state, tribal, and local governments. In addition, the website will provide links to other sites with information about private attractions and facilities.
Through the interagency portal, people planning a trip will be able to: Discover which parks, forests, lakes, museums, and other recreation sites managed by government agencies are located near a particular area and/or offer a specific recreational activity (or combination of activities, such as hunting and camping within 20 miles of a particular lake) Use interactive maps to locate specific recreation sites managed by government agencies and evaluate their suitability for a planned trip, including potential weather conditions, elevation, and distance to desirable features (public lands, trails, streams/lakes, roads, museums, campgrounds, etc.) Identify the schedule of planned events and the operating status of recreation sites managed by Federal agencies (especially in fire season and during floods) Determine the entrance fees and use fees for individual recreation sites managed by Federal agencies, and calculate the costs for a trip to visit multiple sites Make recreation-related reservations for use of Federal sites via one shopping cart (with the potential for expansion to include ordering entrance passes, paying for recreation-related fees and permits, and conducting other service transactions for a specific trip to Federally-managed recreation sites) Provide a user-friendly contact center for customers to make inquiries for planning trips and dealing with transactions for recreation sites managed by Federal agencies Link to related recreation information and services provided by non-Federal partners
The interagency portal will serve as an authoritative source of accurate, up-to-date information about Federal recreation facilities. The interagency website is intended to be both a "retail outlet" and a "warehouse" of public domain data about recreation sites managed by government agencies, and will supply that data to other databases, websites, search engines, and publications.
The interagency portal will implement state-of-the-art data sharing technology to make its data accessible to

other computer systems, so customers can obtain consistent information about Federal recreation activities and facilities from other information sources that have been updated recently from the interagency website. The scope of the database is limited to recreation sites managed by government agencies, and the website will be designed to encourage customers to explore other websites with more detailed information about recreation opportunities. The interagency website is not intended to provide an all-inclusive trip planning/recreation shopping service that would replace non-governmental portals. That goal would lead to unnecessary competition with the many other systems and websites designed for tourism and travel planning. The Recreation Component of the Federal Enterprise Architecture will identify existing recreation-related systems and clarify how they are related to each other today, in the "as is" environment. The recreation-related analysis will be done in synch with the development of the Forest Service and Department of the Interior enterprise architectures, and with especially close coordination with the Corps of Engineers. The documentation will be based on the analytical framework of the Federal Enterprise Architecture. This will ensure that the recreation analysis will be consistent with the results of comparable analyses of other lines of business and the partners.

A significant product from the architectural analysis will be the RecML data standard. RecML will be a voluntary data standard, adopted by consensus within the recreation community and in stages, starting with RecML 1.0. RecML is intended to streamline the sharing of recreation-related data among Federal, state, tribal, local, and non-government organizations. RecML will reduce the potential for confusion by establishing the definitions of "apples" and "oranges" for recreation.

By necessity, because of its widespread mission and business scope, the Department of Interior is developing its enterprise architecture (IEA) iteratively, progressing through increasing levels of detail. Unlike more centralized agencies with fewer lines of business, Interior supports over 50 of the sub-functions identified in the Federal Enterprise Architecture (FEA) Business Reference Model (BRM). The IEA encompasses (1) cross-cutting and agency wide business lines with supporting data, applications, and IT investments, and (2) sub-architectures reflecting unique bureau-level business requirements. Thus, even those bureau-unique investments are part of the IEA.

Interior has completed its high-level architecture (embodied in the Common Requirements Vision, the Conceptual Architecture Principles, and the Technical Reference Model), and is currently developing the next level of detail, in compliance with the FEA models. Specifically, the Department has completed Version 1.0 of the Interior Business Architecture (IBA) which focuses on one Line of Business (LOB), Financial Management, in accordance with the OMB FEA models. DOI is in the process of defining the IEA in other cross-cutting/multi-bureau LOBs (e.g., Wild Fire Management, Indian Trust, etc.) while defining the overarching structure for Bureau-specific investments to map towards. Although this investment is not specifically identified in Version 1.0 of the architecture, subsequent versions will further detail specific investments in other LOBs consistent with the overall IEA framework.

Although this investment is not identified by name in the IEA, it is being developed in full accordance with the IEA, and has been approved by the Information Technology Management Council (ITMC) in its Architecture Review Board capacity. Thus, it is a part of the approved architecture.

Interior's modernization blueprint is presently embodied in its: • Common Requirements Vision, derived from business officials' identification of requirements; • Conceptual Architecture Principles, also resulting from business officials' analysis of needs; • Technical Reference Model, including ten specific domains, each implementing the Vision and Principles identified above by the business community;

These documents are available at <http://www.doi.gov/ocio/architecture>. Recreation One-Stop documentation is available at <http://www.recreation.gov/architecture/>.

Future iterations of the IEA will map planned and operational systems and investments to the overarching IEA framework and the FEA models and will identify potential functional redundancies that will drive the future target architecture.

This investment moves the architecture toward its blueprint vision by implementing the Common Requirements Vision elements of Business Strategies, Business Drivers and Business Information Requirements.

The Migration Strategies will define how existing Federal computer systems should be interfaced/integrated or replaced to achieve greater efficiency and effectiveness in managing the information infrastructure related to recreation in various Federal agencies. Recreation One-Stop will simplify the process for customers who might be making reservations at more than one facility, by awarding a new contract in 2004 to replace the two separate reservation systems with a new, consolidated service. For more details on that effort, see National Recreation Reservation Service Business Opportunity (<http://www.recreation.gov/contractinfo.cfm>). The migration strategy will be used in the annual budget reviews by agency and OMB officials to determine the appropriate level of investment in existing and planned systems, and the appropriate time to terminate existing systems that are inefficient or duplicative.

In addition, the Recreation One-Stop architecture is being developed with specific assistance from OMB and the Solution Architects Working Group (SAWG), to serve as an early model of how the Federal Enterprise Architecture can be used to guide the migration of existing systems from their "As Is" environment to the "To Be" environment.

I.B.1 Agency mission and strategic goals and objectives supported:

Recreation.gov will provide a website with information about recreation sites and activities, and it will also establish the technical infrastructure for exchanging data. This will meet the strategic goals of the various partners. (NOTE: Many customers are expected to follow links from Recreation.gov to more-detailed websites managed by different organizations, rather than actually "stop" at only the Recreation.gov website.) A specific outcome goal in the Department of the Interior (DOI) Strategic Plan is "Provide for a quality recreation experience, including access, and enjoyment of natural and cultural resources on DOI managed and partnered lands and waters." Strategy 2 is to "Promote recreation opportunities" measured, in part, by the number of online transactions that might be processed through Recreation One Stop. Strategy 3 is to "Manage recreation activities seamlessly," and providing a customer-centered interagency website is clearly

consistent with that strategy.

The partner agencies have comparable objectives. For example, the Department of Agriculture FY 2003 Annual Performance Plan and Revised Plan for FY 2002 has an objective (3.3) to "Provide multiple benefits to people from the Nation's natural resources" with a key outcome of "Improve the satisfaction of visitors to the National Forests and Grasslands."

I.B.2
President's
Management
Agenda
strategic goals
supported:

Recreation One Stop is one of the high-priority initiatives selected in 2002 to accelerate federal government improvements in effectiveness, efficiency, and customer service. This strategy was adopted by the President's Management Council (PMC) in 2002, and it implements the "Expanding Electronic Government" priority outlined in the President's Management Agenda. As described on the E-Gov website (www.egov.gov), Recreation One-Stop is in the Government-to-Citizen portfolio along with GovBenefits.gov, IRS Free File, On-Line Access to Loans (E-Loans), and USA Services.

Recreation One Stop will use Internet-related technologies to accelerate and streamline service delivery to citizens and improve management and responsiveness of joint Federal-state-local park and recreation programs. It will apply commercial best practices to improve government operating efficiency. Recreation One Stop will reduce duplication and avoid costs by developing a single recreational data, mapping and transactional service, rather than multiple sites across many agencies. Creating a comprehensive intergovernmental service will involve developing new partnerships with state governments and private/non-profit entities.

This initiative will increase interaction with the public to ensure greater understanding of park and recreation conditions, needs and threats, as well as the impact visitors have on park resources. Recreation One Stop will provide consistent and compelling ways to communicate the value and relevance of federal, state and local parks, museums, historic sites, forests, lakes and urban recreation areas and their associated resources to all sectors of the American public.

This investment will expand and improve the quality of pre-visit information and planning services available electronically to help visitors plan their visits, including alerting them to medical risks and hazards they could encounter. Specifically, the RecML data standard will allow a wide range of organizations to share their recreation data electronically, especially via web services on the Internet. Data standards are essential to distinguish "apples vs. oranges" (such as biking vs. hiking trails), so computerized systems can be updated with accurate and consistent information.

RecML will streamline the processes required to update websites and print new editions of recreation-related publications. Local Convention and Visitor Bureaus, private campgrounds, and a wide range of other recreation-oriented organizations should benefit from the ability to distribute accurate data about festivals, new facilities, revised hours of operation, etc.

Federal agencies already use RecML to disseminate their recreation data that has been compiled in the Recreation.gov database. The standard will become part of the Federal Enterprise Architecture, the blueprint to interface/integrate existing databases/websites so they share data and avoid duplication of effort.

Expected results include: - dramatic improvement in consistency, accuracy, and timeliness of recreation data available to the public - more-seamless experience for customers planning trips and making reservations (for Federal facilities in particular) - lower costs for organizations managing recreation facilities and travel/tourism industry - implementation of "e-gov" objectives by interfacing/integrating systems for planning trips, announcing events, making reservations, paying fees, distributing maps/publications, etc.

The applicable laws and regulations affecting the development of the system are: - OMB Circular A-11 - OMB Circular A-130 - E-Government Act of 2002 - Federal Information Security Management Act of 2002 (FISMA)

I.B.7 Agencies
and
organizations
affected by this
initiative:

The Recreation One-Stop Office, within the Office of the DOI Secretary, serves as the lead/managing partner of this initiative. Other partners include:

Bureau of Land Management Bureau of Reclamation Department of Transportation (Federal Highway Administration) Fish and Wildlife Service General Services Administration National Oceanic and Atmospheric Administration National Park Service Smithsonian Institution Tennessee Valley Authority U.S. Army Corps of Engineers U.S. Forest Service (plus additional state and local governments...)

I.B.8
Investment
cost reduction
or efficiency
improvement:

Recreation One Stop quantifiable benefits will directly impact the government's Recreation.gov partners in the form of increased revenues and decreased costs. Quantifiable internal benefits of the Recreation One Stop investment are due to reduced task duplication, increased sales, and employee timesavings.

1. Avoiding Cost of Creating Other Agency Websites

Recreation One Stop will involve many federal agencies and facilitate partnerships with state and local governments. The initiative will maximize federal government productivity gains from technology by creating a consolidated database of park and recreation related information, news, and services. Additionally, Recreation One-Stop will reduce redundant systems. Eliminating duplicate efforts will result in a major cost avoidance for government agencies. Assuming the average cost of a Web site/GIS effort to consolidate recreation-related information is \$25,000 per agency (a conservative estimate, reduced from \$100,000/agency in the first Exhibit 300 completed in early 2002), the estimated avoided costs to government agencies in the first year would be \$250,000 (excluding Recreation One Stop consolidation costs). As new partners were added, the benefits from these avoided costs would increase.

2. Avoiding Website Maintenance Cost

Cost avoidance among agencies can be accomplished by eliminating new agency start-up investments and reducing redundant web-site maintenance costs. Assuming maintenance cost equal 10% of development cost, the project will avoid \$25,000 in costs the second year and would increase substantially as new partners were added.

3. Increased Sales and Fees Income

The Recreation One Stop Web enhancements will result in increased sales due to a higher quality of

recreational information and services. The public will also benefit from easier access to this information. Revenues to the government will increase via visitor service fees and other types of services provided by concessioners who support public parks and recreation activities. The Recreation One Stop team will connect customers quickly to other transaction systems that process on-line sales of Golden Eagle passes and other appropriate products and services. On-line transactions would provide better service to citizens and generate additional revenue to the government.

Linkages to related service providers will help to offset government costs. The Recreation One Stop team will explore the possibility of receiving financial support or commissions from affiliated partners and sponsors. This in turn will provide comprehensive services to the citizen; increase a stream of revenue to the economy, and partially offset government costs.

To look at one segment of this revenue alone, the Forest Service and Army Corps of Engineers currently generate approximately \$39 million in gross revenue including call center and Internet sales from their joint reservation system. Internet sales account for approximately 38 percent of this total (\$14.82 million). Increased awareness and ease of making reservations will increase this source of revenue by 2 percent (\$.3 million in FY2002). This sales increase will continue annually. (The benefits spreadsheet assumes the initial 2 percent increase compounds at 10 percent annually, meaning the FY2003 benefits from increased sales are 2.02 percent of the \$14.82 million base or \$330,000. This is a very conservative estimate, reduced from the 10% growth rate and initial \$1.482 million increase attributed to Recreation One Stop in the initial Exhibit 300).

3. Employee Time Savings

The Recreation One Stop initiative will reduce the burden on federal employees engaged in processing reservations for recreational facilities. The difference between the cost of processing a reservation online versus via telephone or mail is \$3. The cost of processing online is \$6, while the cost of processing via phone or mail is \$9. Currently, Forest Service and Corps of Engineers process 1 million reservations per year and one-third of these reservations are online. Improved awareness and ease of use could increase the percentage of online transactions and reduce the number of relatively-expensive phone/mail transactions. A conservative assumption is that Recreation One Stop will stimulate more customers to switch to online reservations, and ultimately 75 percent of all reservations would be Internet-based (rising from 333,000 customers in FY2002 to 400,000 customers in FY2003, 500,000 customers in FY2004, 666,000 customers in FY2005, and 750,000 online reservations in FY2006). This would result in savings of over \$5 million through FY2008.

Non-Quantifiable Benefits 1. Cross Agency Program Enhancement

Information quality will be improved significantly, by ensuring consistent information is provided on different web sites.

The site will feature partnerships and cooperation among various levels of government. The marketing of these important relationships and may attract new information-sharing partners from both the public and private sectors. Increased partnerships should enhance the consistency of other messages, in addition to the site-specific information in the Recreation One Stop automated information systems.

The Recreation One Stop site will generate greater awareness of the Agencies' volunteer programs, thereby increasing the number of volunteers. Similarly, awareness of what the agencies do could enhance recruiting of qualified full and part-time recreational personnel.

2. Improved Targeting of Federal Resources

By tracking and analyzing user trends and preferences through the web site, partner agencies will gain a better understanding of demand for recreational services, allowing them more effectively target recreation-related investments and budgets. Trends and shifts in public interest that may result in impacts on particular facilities can be identified further in advance.

3. Reduced Maintenance and Management Labor Costs

Offering information on all recreational sources (Federal, state, local, and tribal) via one Web site will help to direct the public to new and under-used resources, creating less wear and tear on over-utilized areas. A consolidated Federal, State and Local government effort will enable citizens to learn about alternative recreation options and related services for a complete experience, while easing over-use at traditionally popular locations. Through better marketing of expanded recreational opportunities, management and maintenance costs of public recreational facilities may be reduced. External Benefits External benefits are those accruing to the public and entities not associated with the Recreation One Stop initiative. Quantifiable Benefit 1. Increased Data Search Efficiency and Decreased Public Search Time

The citizen will benefit from Recreation One Stop by automating manual tasks. A tremendous amount of time can be saved from visiting a "one stop shop" Web site and finding complete and accurate information versus visiting multiple, unconnected sites. If the average person takes 10 minutes to find desired information, and improved navigation of the site produces a 20% reduction in time to get information, there is a 2-minute savings. 2 minute savings times the current rate of 25,000 accesses per day equals 50,000 minutes saved at a value of \$.25/minute, based on Census Bureau median income statistics. This results in annual timesavings to the public valued at over \$4 million.

2. Increased Citizen Cost Savings

The public will save time and money by ordering passes and other services via the Internet vs. mail service. This will reduce the amount of processing through the mail and reduce paperwork. Certain services or fees may be offered at discounted fees or prices for groups, tours, and year round passes for families, youth programs, senior programs and educational programs.

3. Increased Value of Information to the Public

OMB Circular A-94 states that value to the public of government services can be calculated on the basis of the public's willingness to pay for comparable services in the private sector. The public has demonstrated a willingness to pay for maps and travel information (travel books, maps, AAA membership, etc.). An estimate of the value of the information Recreation One Stop will provide is conservatively estimated at \$1 per user. With approximately 25,000 unique daily users of the current site, the value of information and services is conservatively estimated at \$9 million per year. Non-Quantifiable Benefits 1. Improved Visitor Experiences The goal of NASCIO's Government Without Boundaries initiative is to create a seamless online aggregation of government information and services from all levels of government (federal, state, and local.) With Recreation

One Stop, recreation information will be presented in a manner that is citizen-centric and structured (a branding concept that conveys a consistent message). Web site visitors will have increased access to a variety of information about national, state and local parks and recreational opportunities, historic sites, accommodations and services, recreation associations, and other related non-profit and private partnerships. Citizens will not need to understand the structure of the multiple levels of government to seek complete information or conduct transactions.

Citizens will be able to access information both intuitively and conveniently from the site without needing to understand the structure of the multiple levels of government. The American public will be better informed through consistent and compelling methods of communication about the value and relevance of historic, archeological, and natural resources and programs.

Information will be available to members of the public anytime, at their convenience. 2. More Effective Public Information

The system will enable partner agencies to promote responsible recreation practices, provide important safety messages and information, and alert the public to special events and other pertinent recreation-related information.

3. Increased Education

The American public will be better educated and informed via consistent and compelling methods of communication of the valuable and relevant historic and archeological knowledge, and natural resources and programs. This will result in consumers making decisions with higher utility, thereby increasing consumer choice and saving consumers time and effort related to recreational activities.

4. Improved Accessibility

The public, as well as the international community, who would be otherwise unable to visit America's public lands, either due to disabilities, distance or availability of time or money, will be able to visit locations on-line through this Web site. In addition, the site will be fully compliant with Section 508.

I.9.a List all other assets that interface with this asset. Bureau-specific Web sites and databases with information about recreation sites. Have these assets been reengineered as part of this investment? Yes___, No__X__. (Intent is to reengineer Recreation.gov to extract and aggregate data from bureau-specific sites, comparable to obtaining data from state-specific sites. Recreation information in existing bureau-specific sites is tangential to their primary functions.)

I.9.b Have these assets been reengineered as part of this investment (Yes/No) No

Requested Investment Summary of Spending for Project Stages (\$Millions)

BY 2005 Planning Resources:	.25
BY 2005 Acquisition Resources:	.15
BY 2005 Maintenance Resources:	12.00
BY 2005 Total, All Stages Resources:	12.40
Life Cycle Total, All Stages Resources:	64.02

DOI BUDGET YEAR 2005 IT INVESTMENT OVERVIEW

Investment Identification

Agency: Department of the Interior
Bureau: Office of the Secretary
Location in Budget: Summary of IT Investments
Account Title: Department of the Interior
Account Identification Code: 010-00-14-9999-0
Program Activity: Financial Management
Name of Investment: [Federal Financial System \(FFS\)](#)
Unique Investment Identifier: 01000010101000200402124
(IT Only)(see section 53)

Investment Justification

I.A Investment Description: Currently, the Department of the Interior is dependent on a combination of government-wide systems, departmental systems and bureau managed systems for processing financial and related transactions and meeting management's need for financial management information. One of the Departmental systems is the Federal Financial System (FFS), which provides the core accounting processing requirements for most bureaus of the Department. FFS is maintained as a standard DOI system; 6 of the largest bureaus and 2 offices in the Department use the same set of software programs. List of DOI Bureaus and offices using FFS include: Bureau of Indian Affairs Bureau of Land Management Bureau of Reclamation Fish & Wildlife Service National Park Service U S Geological Survey Office of the Secretary Office of the Special Trustee DOI's version of FFS has been certified by JFMIP as being core compliant. FFS was reviewed and approved through the Department's CPIC process.

The FFS is a commercial off-the-shelf mainframe financial software package that is designed expressly for Federal Government accounting. FFS is currently in a maintenance state. The commercial vendor that developed the system provides software modifications to enable the application to continue to meet Federal compliance requirements. However, all major processing enhancements are being made to a new generation of the software, which has not been purchased by the Department.

FFS supports all aspects of federal accounting and is composed of the following integrated components: budget execution; project cost; cost allocation; general ledger; external reporting; accounts receivable; obligations (purchasing), accounts payable; annual close; automated disbursements; travel payments; etc. FFS has been implemented in various DOI bureaus for approximately 15 years; the first two bureaus having implemented FFS in October 1988. FFS is a mainframe system; some of that technology is becoming outdated, and more modern systems are being developed and maintained with different technology. FFS is nearing the end of its useful life.

The FFS vendor has already developed and is marketing its new Web/Client/Server generation of core accounting system software, and will discontinue support of the old, mainframe version of FFS beginning October 2003. Consequently, Interior must replace FFS with a system that complies with a contemporary open system architecture environment. Further, the existing system does not take advantage of new technology and are not integrated in a manner that facilitates effective and efficient transfer of data and streamlining of processes necessary to support the Department in the future. Further, certain functionality to meet new OMB requirements have not been incorporated into the FFS software and investing in the FFS Software to make these changes is not considered feasible.

In 1998, the Department established a Financial Management Systems Migration Project (FMSMP) to address these issues. This project was renamed to Financial and Business Management System (FBMS) in 2003. The Department plans to replace FFS and other related financial systems through the FBMS Project. FFS will be retired as new functionality is available through the implementation of FBMS.

I.B.1 Agency The Federal Financial System (FFS) supports the Department of the Interior's financial accounting processes

mission and strategic goals and objectives supported:

and activities. FFS supports Interior's strategic goal to ensure financial and managerial accountability and the President's Management Agenda for Improved Financial Performance.

I.B.2 President's Management Agenda strategic goals supported:

FFS supports the President's Management Agenda for Improved Financial Performance. The President's Management Agenda includes an objective to improve accountability to the American people through audited financial statements. FFS supports the Department's core financial functions that are necessary for preparing accurate financial information for financial statements. The FFS system processes financial transactions for 6 of the Department's largest bureaus/offices and forms the basis for financial management information provided to program managers and the financial statements issued on an annual basis to OMB, Congress and the public. Further, the FFS system is one of the critical systems that are audited by external auditors as part of the financial statement audit process. Receiving an unqualified audit opinion from the external auditors is critical for providing assurance to OMB and Congress that the Department can manage its resources.

I.B.7 Agencies and organizations affected by this initiative:

Not a multi-agency initiative. This project is entirely internal to Interior. However, DOI actively participated in AMS's FFS User Group and was involved in defining enhancements to the base system used by other agencies in the Federal Government. The NBC also cross-services other agencies using FFS software.

However, DOI's FFS replacement initiative (FBMS) incorporates a multi-agency strategy.

I.B.8 Investment cost reduction or efficiency improvement:

At this stage of the life-cycle, there are no cost reductions or improved efficiencies that can be associated with FFS. Savings and efficiencies have already been realized with the initial implementation of FFS.

I.9.a List all other assets that interface with this asset.

acquisition, payroll, and charge card

I.9.b Have these assets been reengineered as part of this investment (Yes/No)

Yes

Requested Investment Summary of Spending for Project Stages (\$Millions)

BY 2005 Planning Resources:	.00
BY 2005 Acquisition Resources:	.00
BY 2005 Maintenance Resources:	24.78
BY 2005 Total, All Stages Resources:	24.78
Life Cycle Total, All Stages Resources:	213.84

DOI BUDGET YEAR 2005 IT INVESTMENT OVERVIEW

Investment Identification

Agency: Department of the Interior
Bureau: Office of the Secretary
Location in Budget: Summary of IT Investments
Account Title: Departmental Management
Account Identification Code: 010-84-140102-0
Program Activity: DOI - Office of Financial Management
Name of Investment: [Financial and Business Management System \(FBMS\)](#)
Unique Investment Identifier: 01000010101000500402124
(IT Only)(see section 53)

Investment Justification

I.A Investment Description: Financial and Business Management System (FBMS) is a major enterprise management initiative that will integrate financial management, procurement, property management and other subsidiary systems and will revamp administrative processes throughout the Department of the Interior (DOI). FBMS will provide the system and process structure for the Department to modernize its operations. This financial management system will provide complete, accurate and timely information on financial activities, including budget execution, acquisition, grants, property management, core accounting, and performance that will enable Interior's employees and managers to make informed decisions about their programs. It is directly related to the Department's management improvement goals and strategies. DOI awarded the contract in January 2004 to implement FBMS. DOI selected BearingPoint, Inc. of McLean, Virginia as the solution provider for FBMS. Background: DOI is currently dependent on a combination of government-wide systems, departmental systems and bureau-managed systems for processing financial and related transactions and meeting management's need for business management information. Some of these systems are old, and certain commercial vendors that the Department relies on may not support the systems in the future. For example, both of the Department's core accounting systems (FFS and ABACIS) are in their second decade of operation. FFS is a mainframe system based on technology that was first implemented in Interior in October 1988; some of that technology is becoming outdated and no longer will be supported by the vendor community. Modern systems are being developed and maintained with current technology. The FFS vendor has already developed and is marketing its new Web/Client/Server generation of core accounting system software, and will discontinue support of the mainframe version of FFS on September 30, 2004. Interior must replace FFS with a system that complies with a more contemporary, open system architecture environment. Most of the existing DOI business systems do not take advantage of new technology and are not integrated in a manner that facilitates effective and efficient transfer of data and streamlining of process necessary to support the Department in the future. Enhancements to the current systems are expensive and problematic. Changes are needed in order to meet rapid changes in financial management requirements and increased information responsiveness to goals described in the Department's Strategic Plan. By simplifying and speeding transaction processing, employees and management will be able to devote more of their time to analyzing and solving more complex problems. Solution: The scope of this project is to provide a Department-wide solution that significantly improves access to reliable, accurate, current and complete financial and business management information to support the decision-making process throughout all levels of the Department, affecting all employees and operations (approximately 70,000 DOI employees at about 2,400 locations nationwide). This includes such things as ensuring unqualified audit opinions, economic and efficient input and retrieval of data, and ensuring the best use of taxpayer and other available funds to promote proactive management of these funds. This also includes standardizing and streamlining the underlying functional processes with adequate internal controls and security. The system will include the following critical business functions: 1. Core Financial; 2. Acquisition; 3. Travel; 4. Personal Property and Fleet Management; 5. Real Property; 6. Budget Formulation; 7. Financial Assistance; and 8. Enterprise Management Information.

Since its inception, FBMS has been a collaborative undertaking among all the DOI bureaus. The project is designed to support federal financial management standards and to establish common business practices across the Department. FBMS will streamline linkages between critical financial management systems necessary to assure financial accountability throughout the Department.

Systems to be Replaced: The FBMS will have a phased implementation over a multi-year period. The implementation of this enterprise system solution will enable the incremental retirement of at least five major administrative systems, as many as 30 bureau-specific systems and hundreds of cuff records now used by individual managers to track their programs as individual bureaus implement the new software/solutions. The major systems to be replaced will include: Federal Financial System (FFS) [used by all bureau except Minerals Management Service (MMS) and Office of Surface Management (OSM)], Fixed Asset Subsystem of FFS [used by Bureau of Indian Affairs (BIA), BLM (Bureau of Land Management), U.S. Geological Survey (USGS), and National Park Service (NPS)] Part of FFS; Advanced Budget/Accounting Control and Information System (ABACIS)[used by MMS and OSM], Interior Department Electronic Acquisition System (IDEAS-PD)[used by all bureaus] and Federal Aid Information Management System (FAIMS) [used by Fish and Wildlife Service (FWS)]

In addition, based on the functionality available through the competitive acquisition process, other bureau-specific systems may be able to be retired.

Objectives: The objectives of this enterprise investment are to:

Implement a unified Department-wide solution that will standardize and integrate financial and business management processes and data; Reduce the risks associated with software systems that are at or beyond their useful life spans; (The current DOI finance systems are quickly becoming obsolete. The vendor for the core accounting (FFS) and acquisition (IDEAS) systems has informed the Department that it will not support those products after September 30, 2004. The systems are required to produce more information in less time with relatively constant staffing levels. The FBMS will improve the tools used by staff and managers to respond to financial management needs and legislative changes.) Provide financial and business management intelligence and analytic capabilities and analytical tools to strengthen decision-making capabilities that will enable executives, managers, and other employees to more effectively carry out the Department's missions; Ensure that secure financial and business management transactions are recorded properly and in a timely and efficient manner, with strong internal controls; Satisfy critical and routine requests for external information from the public (customers and industry) and stakeholders for financial and business management related information and data to lessen the response time to the public and burden on programs to provide information manually; Enable the Department to implement flexible and agile solutions to accommodate changes as new (and future) federal laws, regulations and financial and business management requirements may mandate. (The current core financial system meets current laws and regulations; however, enhancements to the current system are expensive and somewhat problematic); Reform and streamline key financial and business management processes consistent with all applicable regulations and policies building on available best practices to improve performance and reduce costs; Support Activity-Based Cost/Management (ABC/M) by providing a performance component with the ability to incorporate workload and performance data from the whole department into individual, multi-level and cross-functional decision-making. (ABC cost codes will be established to capture Budget Formulation activities to align budget with program targets. Enterprise Reports will be used to report these alignments to managers and decision makers); Improve the capture, access, and sharing of information and increase the integration of processes to streamline operations and improve management control; Provide a solution that fosters employee retention, professionalism, creativity, and excellence within Interior's financial and business management communities; Provide a solution that economically and efficiently leverages technology advancements over the solution's life-cycle; Implement a solution (architecture and/or process) leveraging industry and government best practices to take advantage of learning by other organizations; Implement an effective document and records management solution for FBMS activities and meet standard records management requirements; Implement cultural transformation throughout the Department to take advantage of FBMS solution and better support financial and business needs of the organization; Enable effective change from legacy systems to the new FBMS solution using change management processes to minimize risk; and Provide a solution with the capability to balance FBMS workload across DOI; and meet all applicable Department requirements and regulations for security and privacy.

CPIC Review Status: The FBMS was reviewed and approved through the Department of the Interior's 2002 CPIC process and Office of Management and Budget (OMB) for FY 2004 funding. In 2002, the Management Initiatives Team (MIT) ranked FBMS the highest priority new Department-wide IT investment. The MIT is comprised of bureau deputy directors, Deputy Assistant Secretaries and the Chief Information Officer and serves as a DOI IT investment review board.

I.B.1 Agency mission and strategic goals and objectives supported:

Agency Mission: DOI manages Federal lands, water resources and offshore areas to provide recreation, environmental protection and access to resources, fulfill requirements to deliver water and power, preserve America's cultural heritage, honor the Nation's responsibility to American Indians, Alaska Natives and island communities, and generate scientific and other information.

Agency Bureaus: DOI's mission is achieved through hundreds of programs and activities carried out by its eight bureaus and one principal office:

Bureau of Land Management (BLM) Minerals Management Service (MMS) Office of Surface Mining, Reclamation, and Enforcement (OSM) Bureau of Reclamation (BOR) U.S. Geological Survey (USGS) U.S. Fish and Wildlife Service (FWS) National Park Service (NPS) Bureau of Indian Affairs (BIA) Office of the Secretary (OS)

As the Nation's principal conservation agency, Interior serves as steward for approximately 436 million acres of America's public lands and for the natural and cultural resources associated with these lands. Interior also supervises mineral leasing and operations on more than 634 million acres of mineral estate that underlie both Federal and other surface ownerships. DOI's annual budget is about \$13 billion, along with employing

approximately 70,000 employees who work at more than 2,400 sites. Agency Goals: The Department of the Interior's strategic goals fall into four quadrants:

Resource Protection

Resource Use

Recreation

Serving Communities

These quadrants are supported by partnerships and management, and based on a foundation of science.

Interior's Management Excellence outcome goals are:

Workforce has job-related knowledge and skills necessary to accomplish organizational goals
Accountability which includes improving program performance and unqualified audits
Integration sharing improved process solutions across bureaus
Customer value
Modernization particularly for information technology processes and infrastructure

The Department is committed to working smarter to get the job done more efficiently and effectively, and moving toward a seamless Department by eliminating bureaucratic divisions and barriers. The FBMS supports the long-term goals of the Department of the Interior Strategic Plan, FY 2003- FY 2008. Specifically, the project supports the management excellence strategies for:

Human Capital Management: Improve Financial Management
Performance-Budget Integration
Competitive Sourcing, Contracts/Grants Management
Performance and Process Improvement
Citizen-Centered and E-Government Management and Information Technology Management

FBMS -- A Mission Critical System: As defined in the "Department of the Interior Information Technology Strategic Plan, FY 2000 - FY 2005, FBMS will conform to the Federal Information Technology Security Assessment Framework (Federal Framework), that can be used to assess the maturity of the FBMS's IT security readiness.

Soon after the FBMS system is acquired from the competitive marketplace, the system will reach Level 5 of the Federal Framework. Level 5 is defined to be the following:

Level 5 consists of fully integrated procedures and controls that clearly reflect Interior management's determination of acceptable risk, security priorities, and willingness to apply resources towards the appropriate level of risk mitigation. Interior will achieve this level through the use of asset valuation procedures that result in systems being considered for security implementation based on their relative importance to national, public, and Departmental interests. FBMS -- A Departmental Administrative System: Further, Section 3.2 of the Department of the Interior Information Technology Strategic Plan, FY 2000 - FY 2005, page 14, specifically addresses the FBMS role as a Department Administrative System:

3.2 Department Administrative Systems Another example of a Department-wide priority effort over the next few years is the implementation of an enterprise-wide integrated financial management system, the FBMS, formerly the Financial Management System Migration Project. The Interior Chief Financial Officer (CFO) Council will engage in a coordinated cross-functional financial management streamlining effort that encompasses key business functions such as budget formulation and execution, acquisitions and property management, accounting, grants management, and travel management. This effort adheres to the Joint Financial Management Improvement Program's Framework for Federal Financial Management Systems. The new financial management system will provide more accurate and timely information, enhance the integrity of data through improved integration and control, expand E-government capabilities, improve security in financial systems, and reduce system risks associated with the use of outdated technology. As an interim measure, quarterly financial statements will be prepared to assist in the analysis of financial information throughout the year.

FBMS -- An Interoperable and Integrated System: DOI's strategy is to establish and maintain a unified, integrated financial and business management system for use by all bureaus that will: Provide access to common financial and business data. (FBMS will allow users in the field and senior management to access common financial and business data when they need it to perform their functions effectively and efficiently.); Provide improved transactional processing. (FBMS will allow the processing necessary to record underlying transaction data and the infrastructure to provide easy access to the data that will be handled in the background with limited or no human intervention.); Provide a security-rich environment. (FBMS will 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.); Provide a single method to upgrade and/or replace older Interior systems. (FBMS will allow Interior to phase out its various current financial management systems, many of which are at least 10 to 15 years old. Interior is involved in a large number of initiatives now being planned and implemented across the Federal government, including those of the President's Management Agenda. These initiatives require a modern, up-to-date systems environment, and FBMS will provide such an environment.); Incorporate performance information. (FBMS will provide the ability to incorporate workload and performance data from the whole department into individual, multi-level and cross-functional decision-making. It will gather, track, and analyze data at the workload (output) measure, intermediate outcome measure, and end outcome measure levels. It will also have integrated analysis functionality including setting targets at multiple levels, capturing accomplishments at the lowest organizational level, calculating the deviation of performance from targets, rolling up and summarizing data, linking outputs to cost data, keeping a cradle-to-grave history of goals, targets and accomplishments, and producing reports on all of the above); and Retire older systems. (FBMS will replace legacy systems including the mainframe-based core financial system [FFS] used by most bureaus, a custom-developed internal system [ABACIS] that is difficult to support, and an acquisition system [IDEAS] that does not support multi-bureau contracting initiatives and is expensive to maintain. Although these systems have been modernized, these systems were initially designed without incorporating the Internet and web-based technologies.)

I.B.2
President's

The FBMS is a Department-wide initiative linked closely to both the Department's Strategic Goals, as noted above, and the President's Management Agenda (PMA). Once fully implemented within the Department, all

Management
Agenda
strategic goals
supported:

components of the FBMS may be used to support cross-servicing of other Federal agencies. Therefore, FBMS fits well with the President's emphasis on ensuring that all agencies are able to take advantage of the systems developed for individual agencies. The FBMS strategy was developed to support the five PMA Initiatives as described in the following five sections.

E-Government:

Government to Citizen (G2C) FBMS will have a Financial Assistance module that will link to the grants.gov system to allow citizens to use easy, online application processes to apply for Government grants. FBMS will include the internal capability to evaluate applications, award and manage grants. Government to Business (G2B) FBMS will streamline acquisition processes, allowing vendors and Government to interact for the mutual good of the parties. An example of G2B activity is providing vendors a web-based business opportunities listing and a method for the vendor to respond to and bid on these opportunities.

Government to Government (G2G) FBMS will share information between Government agencies. Examples of this include sharing business opportunities with the General Services Administration, sharing vendor registration data between Interior and the Department of Defense Central Contractor Registration, sharing Internet (web) entry points with www.FirstGov.gov, enabling interfaces for the smooth, secure exchange of funds between Interior and other agencies with whom it receives or sends funds.

Internal Effectiveness and Efficiency (IEE) FBMS will include the ability to provide information for capital asset planning, provide for the use of acquisition catalog information from other agencies, provide automated property inventory information, provide a broad base of information for audit purposes, and provide budget formulation and execution information for periodic and annual Financial Statements. FBMS will improve the effectiveness and efficiency of Interior's handling of travel authorizations, bookings, and vouchers. FBMS will enable Interior to extract both regular and ad-hoc Enterprise Reports that span all financial management system components from a single warehouse of data; these flexible Enterprise Reports will assist a wide group of employees, from senior decision makers to analysts and clerks.

Human Capital

Helping the Employee Do a Better Job The decision maker. The FBMS strategy will provide value to senior decision makers by improving decision making through more accurate and timelier 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. The manager. FBMS will add value to 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, improving the ability to take advantage of Internet capabilities.

The operational staff. FBMS will add value 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.

Improved Recruiting Employees will be drawn to DOI will see DOI as a quality environment to work in through the use of new technology and quality systems to support their jobs.

Performance and Budget Integration Integrated Budget Planning The FBMS Budget Formulation module will enable the Department to capture all relevant elements of the budget.

Budget Goals, Output Targets, Resources The FBMS budget module will capture budget goals, output targets, and required resources, incorporating Activity-Based Costing with flexible cost-code structures. Interior will define its output targets in terms of measurable, identifiable budget codes. Thus, Interior will be able to identify and articulate its goals, targets, and required resources. Budget Activities aligned with Program Targets Interior is adopting Activity-Based Cost/Management, and the FBMS will incorporate ABC/M cost codes to capture Budget Formulation activities to align budget with program targets. Enterprise Reports will be used to report these alignments to managers and decision makers.

Costs Linked to Specific Activities, Outputs, Outcomes Interior is adopting Activity-Based Cost/Management, and the FBMS will incorporate ABC/M cost codes to capture Budget Formulation activities to align budget with program targets. Enterprise Reports will be used to report these alignments to managers and decision makers. Program Performance Evaluations FBMS will contain budget plans and the results of budget execution. By using FBMS' Enterprise Reports, the user will be able to compare and evaluate the variance between intended goals and the actual performance (budget execution).

"Financial Management Improvement" Financial Systems Meet Federal Requirements By the definition of the requirement, the FBMS will meet Federal Requirements. Through technology and engineering changes, the FBMS will be able to keep up with on-going changes to Federal requirements.

Accurate and Timely Financial Information Through the reports from individual modules of the FBMS as well as through the integrated Enterprise Reports, users will be able to see near real-time reports. The FBMS will be able to produce accurate, integrated, and timely financial information.

Financial Systems Support Management Operations Using activity-based cost management (ABC/M) and the FBMS Enterprise Reports, the financial management systems will be able to provide near real-time information for management operations.

Unqualified Audits The FBMS will be able to provide Enterprise Reports that will capture information quickly and in any way the user wishes to see information. Hence, Federal managers and accountants should be able to ensure the accuracy of data in the FBMS data warehouses. This, in turn, will enable auditors to see and examine information accurately and quickly, and this should lead to an efficient audit process.

Administrative Control of Funds The internal tracking and control of funds, from planning to commitment to obligation to expenditure, will be tracked and traced through the FBMS.

Internal Control Processes Enterprise Reports will enable managers to have detailed information that will assist them in verifying internal control processes.

Competitive Sourcing Study/Direct Conversion Plans The FBMS will provide information that will assist in conversion studies to incorporate accurate information regarding full costs of employees and contracted staff.

Action Plan Implementation The FBMS will allow the tracking of costs and activities, using cost-code structures that will provide actual costs before, during, and after the implementation.

Post-Implementation Review The FBMS will allow the reporting of planned and actual expenditures the before

and after situation. The Enterprise Reports will enable the user to produce a good, useful set of reports for the post-implementation review.

I.B.7 Agencies and organizations affected by this initiative: This is a collaborative project of all Interior bureaus and offices.

I.B.8 Investment cost reduction or efficiency improvement: The Financial and Business Management System Strategy is designed to reduce costs and/or improve efficiencies in at least these areas:
 Labor cost avoidance from improved efficiency of operations due to faster applications that will allow FBMS users to do their jobs in less time; Cost avoidance from decreased time taken to accumulate Enterprise Management Information System (EMIS) information from integrated databases that will be a fundamental part of the FBMS; Decreased maintenance costs by reducing previous baseline operations as a result of retiring legacy and redundant systems; Streamline processes to provide better services to program and other managers handling financial and related transactions and implement, using COTS products, best practices from the private and public sectors; Improve the timeliness and accuracy of information available to Interior employees to minimize the need to maintain separate records and to reduce the confusion of conflicting data or information; Improve the data available to analyze operations and improve decision support; Reduce the cost of moving data between systems and eliminate the need for extensive reconciliation efforts; Improve the security of systems through security awareness and new technology to reduce the risk of misuse of systems or systems failure that could cost the government substantial time and resources to continue operations; Core Financial System components will be modernized and, hence, better meet emerging regulatory and accounting requirements; this, in turn, will decrease labor involved in meeting new requirements; Procurements will be fully automated, thus saving labor in procurement processing and allowing workload sharing/balancing across the Department; Travel will be fully automated, thus saving labor in travel preparation and travel-voucher processing; Personal and Real property systems will be fully automated and integrated into other systems (procurement and financials), thus saving labor in connecting property acquisition and property management with other required systems, e.g., core financials and procurement, eliminating the reconciliation necessary today; Grants processing and administration will be automated, saving labor costs and improving transparency of the process; Budget Formulation will be closely connected to financial planning and execution, e.g., obligations and expenditures, thus enabling enterprise report generation of a wide variety of data elements, thus saving significant time and labor; The performance component of the EMIS module will provide the ability to incorporate workload and performance data from the whole department into individual, multi-level and cross-functional decision-making; A number of legacy systems will be retired. Those include accounting (FFS and ABACIS), procurement (IDEAS), property (FFS Fixed Assets Subsystem and multiple individual bureau systems), and grants (Fish & Wildlife Service's FAIMS); The Enterprise Management Information System (EMIS), the reporting module, will provide reports to Interior employees with information necessary to make far-reaching decisions about the agency, the bureaus, and the offices. These reports will be automatically generated (or developed in an ad-hoc way) from foundational knowledge storage in the FBMS Warehouse, thus enabling the creation of reports without intense labor expenditure. Hence, this will cause the Department, Bureaus, and offices to spend less per-unit time and money responding to broad data calls. It is estimated that more than \$11 million of costs per year will be avoided by the EMIS.

I.9.a List all other assets that interface with this asset. Core accounting, acquisition, travel, real property, personal property/fleet management, financial assistance, budget formulation, payroll, revenue, facilities management and charge card interface with this asset. With respect to reengineering, these areas either have been or will be reengineered as a part of the FBMS.

I.9.b Have these assets been reengineered as part of this investment (Yes/No) Yes

Requested Investment Summary of Spending for Project Stages (\$Millions)

BY 2005 Planning Resources:	1.14
BY 2005 Acquisition Resources:	11.51
BY 2005 Maintenance	6.96

Resources:

BY 2005 Total,
All Stages
Resources:

19.61

Life Cycle
Total, All
Stages
Resources:

492.10

DOI BUDGET YEAR 2005 IT INVESTMENT OVERVIEW

Investment Identification

Agency: Department of the Interior
Bureau: Office of the Secretary
Location in Budget: Summary of IT Investments
Account Title: Departmental Working Capital Fund
Account Identification Code: 010-00-14-4523-0
Program Activity: DOI - Office of Property and Acquisition Mgmt
Name of Investment: [Interior Department Electronic Acquisition System - Procurement Desktop \(IDEAS - PD\)](#)
Unique Investment Identifier: 01000010701000900405146
(IT Only)(see section 53)

Investment Justification

I.A Investment Description: IDEAS-PD standardizes, automates and streamlines the acquisition process including requisitioning, review and approval including funds approval, Electronic Commerce, Request for Proposal/Solicitation preparation, Order/Contract preparation, contract administration, and the electronic transmission of commitments and obligations to Interior's Federal Financial System and Fixed Assets property system.

IDEAS-PD is a steady state system, having been implemented in FY 1997-1999 and now serving all DOI bureaus and twelve franchise client agencies. IDEAS-PD has been reviewed and its steady state operation approved as a Department-wide system by Interior's Executive CPIC, MIT and MEC.

I.B.1 Agency mission and strategic goals and objectives supported: The IDEAS-PD project supports the Department of the Interior's mission and goals as well as the President's Management Agenda in the area of Management – Strategy 3: Competitive Sourcing, Contracts / Grants Management. IDEAS-PD provides the automated tool for effective and efficient purchasing and contracting to directly support the missions of the Department's bureaus and offices as well as the missions of the franchise client agencies. Mission accomplishment is achieved, in part, through contracts and purchases, and charge card purchases, which together represent over 22% of the total DOI budget.

I.B.2 President's Management Agenda strategic goals supported: IDEAS is the core of the Department's move toward electronic (paperless) procurement as required by OMB Bulletin M-01-11, February 14, 2001 and M-01-15, March 9, 2001. It will upgrade the quality and consistency of contractual processes and documents across Interior's component bureaus and franchise client agencies.

In keeping with the President's Management Agenda requirement to "Create easy-to-find single points of access to government services..." and "...single procurement portal (that) will simplify purchasing...", the IDEAS-PD project is fully compatible and interfaced with/uses the government-wide integrated acquisition environment initiative FedBizOpps. Interior actively supports both of these e-government programs with funding and personnel (active user group membership) support to ensure that IDEAS-PD is fully compatible at all times.

In keeping with the President's Management Agenda requirement that federal projects "... share information more quickly and conveniently between the federal and state, local and tribal governments..." the IDEAS project provides for the rapid and efficient collection of procurement award data and dissemination of the data to the Federal Procurement Data System for further release with other agency data to the Congress, other federal agencies and interested state, tribal and local governments as well as private industry. No other

federal agency provides on-line transaction-based reporting to the FPDS as does IDEAS. The on-line IDEAS' Reports Procurement Data System (RPDS) provides data on DOI awards with overnight updates in a variety of report formats.

In keeping with the President's Management Agenda requirement that federal projects "...automate internal processes to reduce costs internally... by disseminating best practices across agencies..." the IDEAS-PD project provides procurement system support for a number of other federal agencies, particularly including smaller agencies such as the U.S. Secret Service, and thus lowers costs to those agencies and prevents "duplicative and redundant" expenditures.

In keeping with the E-GOV scorecard requirements to "Reduce the burden on businesses (by) dramatically reducing redundant data collection; provide one-stop streamlined support for businesses, and enable digital communication with businesses" the IDEAS-PD project fully supports the Central Contractor Registration database initiative.

I.B.7 Agencies and organizations affected by this initiative:

Interior is the lead agency for the IDEAS-PD system. Client agencies include:

- National Science Foundation, • U.S. Secret Service, • Kennedy Center for the Performing Arts, • Corporation for National Service, • Equal Employment Opportunity Commission, • Federal Communication Commission, • International Boundary & Water Commission, • National Labor Relations Board, • National Transportation Safety Board, • Office of Personnel Management, • Office of Justice Programs, and • US Maritime Administration.

These agencies and DOI Bureaus depend on IDEAS-PD for the procurement systems support to accomplish their missions through contracts and purchases for support services, supplies and equipment.

I.B.8 Investment cost reduction or efficiency improvement:

IDEAS-PD is a steady state system that enables electronic processing of procurement transactions. The benefits of electronic versus paper-based transactions has been long established but is further featured as a core part of the President's Management Initiatives and specifically, the Integrated Acquisition Environment, which the IDEAS-PD supports / enables.

I.9.a List all other assets that interface with this asset.

• FedBizOpps (FBO), • Central Contractor Registration (CCR) • Business Partner Network (BPN) • Federal Procurement Data System (FPDS) • Federal Procurement Data System - Next Generation (FPDS-NG), • Federal Financial System (FFS) • Fixed Assets Property System • ABACIS Financial System The FBO, CCR and BPN are newly developed government-wide systems under the management of OMB, GSA and DOD. The FPDS is a legacy government-wide system that is being replaced by the FPDS-NG, under the management of OMB and GSA. The FFS is a legacy system as is the Fixed Assets Property System, which is being replaced, along with IDEAS-PD, by the DOI FBMS project.

I.9.b Have these assets been reengineered as part of this investment (Yes/No)

No.



Requested Investment Summary of Spending for Project Stages (\$Millions)

BY 2005 Planning Resources:	.00
BY 2005 Acquisition Resources:	.00
BY 2005 Maintenance Resources:	8.58
BY 2005 Total, All Stages	8.58

Resources:

Life Cycle

Total, All

Stages

Resources:

66.42



DOI BUDGET YEAR 2005 IT INVESTMENT OVERVIEW

Investment Identification

Agency: Department of the Interior
Bureau: Office of the Secretary
Location in Budget: Summary of IT Investments
Account Title: US Department of the Interior
Account Identification Code: 010-00-14-9999-0
Program Activity: DOI - Managing Public Risk and Safety
Name of Investment: [Capstone Facility Management System Plan for Interior Bureaus \(MAXIMO\)](#)
Unique Investment Identifier: (IT Only)(see section 53) 01000010701001000401119

Investment Justification

I.A Investment Description: The project is to implement a common Facility Management System (FMS) based on the COTS product MAXIMOTM, across the land managing bureaus' that has the flexibility to be tailored to meet the bureaus differing missions. A common system within these bureaus will provide a method for the Department to collect and analyze comparable facility information from all bureaus. This project is a collaborative initiative involving multiple agencies within the Department of the Interior. It includes the National Park Service, Bureau of Land Management, Fish and Wildlife Service, U. S. Geological Survey, Bureau of Reclamation, and Bureau of Indian Affairs (Irrigation, Power & Safety of Dams). The Department of the Interior owns and operates over 34,000 buildings, 120,000 miles of roads, and a wide variety of other constructed assets. These facilities serve nearly 380 million visitors annually. They provide schooling for 53,000 Native American children and a place of work for 45,000 Interior employees. The value of these assets is measured in billions of dollars. Many are considered priceless for their historical significance. As the steward of these assets, Interior is committed to improving the management of these existing facilities and making the capital investments in new facilities that are essential to it's mission. Numerous new business practices have been implemented across the bureaus that will enable the Bureaus and the Department to manage these assets in a uniform manner. Business practices include: establishment of the Five-Year Deferred Maintenance and Capital Improvement Plan; implementing a Condition Assessment program; establishing consistent metrics for measuring performance for facility management; implementing standard data elements; increase accountability for facility stewardship. In 1999, the Departmental Chief Financial Officer identified "Inadequate Department-wide Maintenance Management Capability" as a material weakness in four of the six facility managing Bureaus. A cornerstone in the strategy for improving the management of the Department's constructed assets is the development and deployment of a standardized facilities management system. This system is an important tool for improvement of the overall condition of the constructed assets, better allocation and utilization of the limited resources dedicated to maintaining those assets, and providing accurate and timely information to the Office of Management and Budget, the Congress, and the public. A common system within these bureaus will provide a method for the Department to collect and analyze comparable facility information from all bureaus. The Department has identified functional requirements for a facility management system as: Inspections: Conducting annual or cyclic inspections and assessments for facility condition, safety, environmental compliance, accessibility, etc. to identify deficiencies and needs which are then entered into the maintenance management system. Work Requests: Scheduled preventive and/or cyclic maintenance requests (system generated or manual); breakdown or emergency repairs; and user/occupant work requests identify deficiencies and needs which are entered into the maintenance management system. Deferred Maintenance: Keeping track of maintenance work that was not performed when it should have been or when it was scheduled and which, therefore, was put off or delayed for a future period (frequently called the maintenance backlog). Individual deficiencies or needs may be combined into larger, more cost effective projects. Completed work is removed from deferred maintenance. Proper categorization of deferred maintenance is performed to facilitate auditing. Cost Estimating: Estimating the full cost of needed repairs including labor,

materials and supplies, contractor services, administrative overhead, etc. When maintenance and construction activities take place in the same project, separate costs are estimated for each type of work. Documentation is maintained for auditing purposes. Work Planning and Scheduling: Utilizing a work order system or similar approach to planning and scheduling larger or more complex maintenance activities and projects and the associated facility down time. Budgeting: Formulating annual facilities maintenance budgets within an individual bureau or the Department as a whole. Tracking: Tracking the status, schedule, and associated costs of maintenance work orders. It may include project management. Asset Inventory: Keeping an accurate inventory of all assets under maintenance. The level of detail varies with the complexity of the assets and may include information on features, components, sub-components, etc. It may be done in conjunction with or separate from real property and personal property management systems. The asset inventory is periodically validated, for example, in conjunction with periodic inspections or condition assessments. Materials Management: Managing inventories of repair parts, supplies, and equipment required for maintenance. Activities include ordering, purchasing, warehousing, distribution, etc. Labor Planning and Scheduling: Managing the job skills and crafts in the maintenance labor force by planning and scheduling the manpower assigned to work orders. Accounting and Finance: Integrating or interfacing the maintenance system with accounting and financial systems (e.g. components of the Federal Finance System (FFS)) to facilitate accurate allocation of all actual maintenance costs. Reporting: Generation of standard reports or ad-hoc queries dealing with any aspect of facilities maintenance. Job Safety: Safety standards and procedures, materials safety data sheets, personal protective equipment requirements, etc. which are used in planning and/or execution of maintenance work and to ensure regulatory compliance. Job safety information may be appended to work orders. Work Standards: Work or job standards, standard procedures or manuals, vendor manuals, etc. which are used in planning and/or execution of maintenance work. Long-Range Planning: Supporting the annual Departmental Five Year Facilities Maintenance and Capital Improvement Plan update as well as any long-range facilities planning processes within a bureau. Auditing: Supporting the annual FASAB 6 deferred maintenance auditing process. The Department has adopted MAXIMO, by Maintenance, Repair, and Operation, Inc. (MRO) as its core facilities management enterprise software system. Management of the project is provided by the Office of the Secretary, Office of Managing Risk and Public Safety (MRPS), Department of the Interior. MRPS is managing the Facilities Management System by providing policy, direction and direct oversight for the implementation and operation of the system. MRPS will continue to establish standard business practices to the facilities managing bureaus where appropriate to maintain consistency and effectiveness of the system and its data.

I.B.1 Agency mission and strategic goals and objectives supported:

FMS supports the Department of the Interior Draft Strategic Plan for FY 2003-2008 This project is a major supporting element of all five strategic goal areas; 1) Resource Protection, 2) Resource Use, 3) Recreation, 4) Serving Communities, and 5) Management. The improvement and maintenance of the facilities and infrastructure that support each of these goal areas is an integral part of the strategy of successful goal accomplishment. Each of the goal areas uses Facilities Condition Index (FCI) as a performance measure of success. The FMS is the tool that the Department and bureaus will be able to consistently and accurately evaluate and report FCI. See table in I.C, Table 1, Performance Goals and Measures for more detail on how this project supports the draft Strategic Plan. Facility Management System (FMS) supports the Department of the Interiors mission The U.S. Department of the Interior mission is to protect and manage the Nations natural resources and cultural heritage; provide scientific and other information about the resources; and honor its special responsibilities to American Indians, Alaska Natives and affiliated Island Communities. FMS supports this mission by providing records status and condition of the Nations assets e.g., buildings, administration sites, recreation sites, roads, trails, dams, etc. FMS also tracks the assets maintenance history and conditions of the facilities. FMS supports the Secretary's vision The Secretary's vision for effective Interior program management focuses on conservation, cooperation, consultation and communication. FMS supports conservation of our Nations assets by providing a record of past and current maintenance activities for assets on public lands. FMS supports cooperation in terms of interaction, collaboration and partnerships with other Department of the Interior agencies using the same COTS application, which facilitates the exchange of data in support of facilities management of our Nations assets. FMS supports consultation with others to provide the most current information associated with the use of our Nations facilities by providing Internet access to the FMS Systems. FMS supports communication to reach out to others in the exchange of information relevant to the facilities asset management of our Nations facilities. FMS supports the Secretary's key business principles Key business principles guiding Interiors operations are customer value, accountability, modernization and integration. FMS supports customer value by providing a record of past and current asset maintenance history for our Nations Buildings, Roads, Bridges, Dams, Administration Sites, and Recreation Sites, a foundation that enables management decisions that ensure effective use of the facilities. FMS supports accountability by collecting clear performance measures associated with facilities maintenance, providing reportable units via interface with other information management systems. FMS supports modernization by employing innovative resource enhancing strategies to facilitate the ongoing evolution of the management of Buildings, Roads, Bridges, Dams, Administration Sites, and Recreation Sites processes that rely on common, re-usable components in the management of our Nations assets. FMS supports integration thru the identification and consolidation of repetitive processes among FMSs component applications and other bureaus and partner systems to achieve economies of scale and enhance customer service/confidence. FMS supports the DOI IT Strategic Goals: Interiors Information Architecture modeling the Departmental and bureau business enterprise and future technical direction. FMS has been correlated with the Bureau Architecture at a high level. The Analysis phase provides the information to allow the FMS to be correlated, in more detail, to the lower levels of the Architecture. IT Security assuring continuous information to Interior customers especially for mission critical systems;

FMS application and data security is divided into 4 levels:

- System access and security measures applied to the NIRMC computer system. - Users local computer local computer and office security - Application The FMS applications and data require additional security screening. Also, - FMS controls user access, assigned by responsibility.

I.B.2
President's
Management
Agenda
strategic goals
supported:

The President's Management Initiatives are: 1) Competitive Sourcing 2) Strategic Management of Human Capital 3) Improved Financial Accountability 4) Expanded e-Government 5) Budget and Performance Integration The FMS project supports the following President's Management Initiatives: Improved Financial Accountability Expanded Electronic Government Budget and Performance Integration This project is a collaborative initiative involving multiple agencies within the Department of the Interior and other Federal Departments. It includes the National Park Service, Bureau of Land Management, Fish and Wildlife Service, U. S. Geological Survey, Bureau of Reclamation, and Bureau of Indian Affairs. In the implementation of this Facilities Management System and the re-engineered business practices associated with it, the Department and bureaus are working closely with other federal agencies such as, Indian Health Service, U. S. Forest Service, Veterans Affairs and General Service Administration. The implementation of this common facilities management system will result in Improved Financial Performance by substantially improving the Departments and the bureaus ability to account for the expenditure of facilities maintenance funds. This will not only help to assure the funds appropriated to the bureaus are used in the most effective manner, it will provide a means to identify those areas of the maintenance programs where there are funding shortfalls that result in increases the deferred maintenance. The initiative supports Expanded Electronic Government in that it focuses on using electronic technology in the improvement of the Departments operational efficiency and improving the relationship with the public by providing better and safer facilities. It supports the principles of customer value, accountability and stewardship through an electronic web-based application. The facilities management system and the standardization of business process associated with it will result in Budget and Performance Integration through an increased ability to monitor performance and performance improvements in the bureaus facilities program. One example of this is the use of the Facilities Condition Index (FCI) to determine improvements in facilities condition. This system will be the vehicle for housing the data and performing the computations necessary to have standard and reliable FCI information across the Department. The implementation of this common facilities management system also strongly supports what appears to be an emerging sixth area in the Presidents strategy for improving the management of the Federal government, Asset Management. In her Statement on June 5, 2003 before the Committee on Government Reform, U.S. House of Representatives, Linda M. Springer, Controller, Office of Federal Financial Management, Office of Management and Budget, stated: ...the Administration has taken several important steps to improve the governments asset management. We are making improved asset management a part of the Presidents Management Agenda. The expected results of this new focus include expanded asset portfolio tracking and analysis capabilities, comprehensive asset management strategies, increased sales of under performing assets and reduced maintenance and operating costs. GAO recently credited the Administration for proposing several reform efforts and other initiatives to address asset management challenges. In her testimony, Ms. Springer made specific reference to this project in commenting on NPS's implementation of the DOI common facility management system. She states: In the spirit of the Administrations initiative, some agencies have moved aggressively to improve their asset management practices. For instance, the National Park Service is examining its management of the entire life cycle of all its assets. Its goals for FY 2003 include: Developing a facility inventory of National Park Service maintained holdings; Performing assessments to determine the condition assets are in and the costs to maintain, replace, or repair them; and Establishing a baseline facility condition index (FCI) for all assets, which provides an overall rating for the condition of assets. The Service is employing a Facility Management Software System; a comprehensive asset management tool to process the asset data the Service is collecting. If it meets these goals, the National Park Service will have information it has never had before which it can use to improve dramatically its asset management practices. The implementation of this system will also provide a most important tool in the accomplishment of the Presidents major initiative of significantly improving the condition of DOI facilities and reducing the deferred maintenance backlog.

I.B.7 Agencies
and
organizations
affected by this
initiative:

This is a Departmental lead initiative that affects the National Park Service, Fish and Wildlife Service, Bureau of Land Management, Bureau of Indian Affairs, Geological Survey, and Bureau of Reclamation. In the implementation of this Facilities Management System and the re-engineered business practices associated with it, the Department and bureaus are partnering with other federal agencies such as, Indian Health Service, U. S. Forest Service, Veterans Affairs and General Service Administration. The project also has possible implications to OMB E-GOV Initiatives such as Recreation One-Stop, Geospatial Information One-Stop, E-Payroll HR Integration, Integrated Acquisition Environment and Electronic Records Management.

I.B.8
Investment cost
reduction or
efficiency

Department wide, MAXIMO will be used as part of an overall facility operations and maintenance improvement plan. At the bureau level, the implementation of this common system will result in improved facilities equipment/systems maintenance. This improvement will be evident in increased equipment life, fewer breakdowns and shorter time to completion of repairs. With the Department and the bureaus collecting,

improvement: analyzing, and using data more completely, potential problems can be rapidly identified, solutions defined, projects implemented and personnel deployed to expediently and effectively resolve issues. A readily accessible centralized database will encourage the sharing of "Best Practices" and permit facilities to more easily duplicate successful strategies. Cost data and maintenance history of physical assets will be maintained in MAXIMO. This data will be reviewed to determine repeat failures, cost trends, reliability and maintainability, allowing an improvement in the current strategies for equipment and system selection, operation, maintenance and replacement. Management effectiveness will increase due to better planning, organization and the enhanced integration of facility needs into bureaus' facility programs strategic planning and budgeting. This will insure that facilities meet Department and bureau mission requirements and that facility operation and maintenance is funded reasonably and adequately.

I.9.a List all other assets that interface with this asset. n/a

I.9.b Have these assets been reengineered as part of this investment (Yes/No) No

Requested Investment Summary of Spending for Project Stages (\$Millions)

BY 2005 Planning Resources:	.00
BY 2005 Acquisition Resources:	3.47
BY 2005 Maintenance Resources:	10.57
BY 2005 Total, All Stages Resources:	14.04
Life Cycle Total, All Stages Resources:	111.53

DOI BUDGET YEAR 2005 IT INVESTMENT OVERVIEW

Investment Identification

Agency: Department of the Interior
Bureau: Office of the Secretary
Location in Budget: Summary of IT Investments
Account Title: Surveys, Investigation and Research
Account Identification Code: 010-12-14-0804-0
Program Activity: Mapping
Name of Investment: [Geospatial One-Stop](#)
Unique Investment Identifier: 01000010501001224203076
(IT Only)(see section 53)

Investment Justification

I.A Investment Description: Geospatial One Stop is a part of the new OMB E-Government initiatives to improve the effectiveness, efficiency, and customer service throughout the Federal Government. Geospatial One Stop will improve the ability of government to utilize geospatial information to support the business of government and support decision-making. By providing the building blocks for a National Data Spatial Infrastructure, Geospatial One Stop will:

- Provide one stop web access to geospatial information through development of a portal
- Encourage collaborative planning for future investments in geospatial data
- Expand partnerships that help leverage investments and reduce duplication
- Facilitate partnerships and collaborative approaches in the sharing and stewardship of data

The availability of up-to-date and accessible information helps leverage resources and support programs such as economic development, environmental quality and homeland security.

The Geospatial One Stop project is currently in the initial stages of the FY05 Interior CPIC review process. Individual Bureaus are going through each of their own CPIC process

Project Vision To spatially enable the delivery of government services The vision for the Geospatial One-Stop is to revolutionize e-Government by providing a geographic component for use in all e-Government activities across local, state, tribal and Federal government. Goals 1. To provide fast, low cost, reliable access to geospatial data needed for Federal, State, and local government operations. 2. To facilitate G2G interactions needed for vertical missions such as Homeland Security. 3. To facilitate the improved delivery of government services to the public. 4. To obtain multi-sector input for coordinating, developing and implementing geospatial (data and service) standards to create the consistency needed for interoperability and to stimulate market development of tools

Project Summary

Over the past few decades, the computer has made geographic information about the natural world and its inhabitants much more useful to government, businesses, and communities for making critical decisions. Geographic information systems (GIS) allow users to integrate, analyze, and manage information about geospatial data in ways never before possible. Geospatial data identifies the geographic location and characteristics of natural or constructed features and boundaries on the Earth.

The Geospatial One-Stop (GOS) project serves the broader intergovernmental community and the Department of the Interior is the Managing Partner. The project will make it faster, easier and more economical for users of geospatial data to get access to the data and carry out their business activities. The data will become a vital part of the National Spatial Data Infrastructure (NSDI). The project will test and evaluate a web portal. Based on the results, a comprehensive web portal will be developed and deployed for "one-stop" access to geospatial data. After initial deployment and testing of the comprehensive web portal, reusable, commercial replication services (24X7, trusted data services) will be required.

The implementation of the Geospatial One-Stop will:

- o Provide standards and models to support the exchange of framework datasets to facilitate web services; o
- Provide an interactive index to geospatial data holdings at the Federal and non-Federal levels; o
- Promote partnerships among Federal, state, and local agencies for planned geospatial data collections; and o
- Provide an online access portal to geospatial data.

The Geospatial One-Stop builds upon existing capabilities to accelerate the development of the NSDI, technology, policies, and standards that support "one-stop" access to the Federal government's geospatial data assets. It will benefit all spatial data customers including Federal, state, local, and other governments, as well as private citizens, by providing a common, consistent source of geospatial data. It will save all parties money by providing a market for data acquisition partnership opportunities and by making data more accessible. By providing easier and faster access to data required for government decision-making, it will enhance decision support systems and delivery of services to the public.

This initiative is one of the 24 e-Government initiatives selected by the President's Management Council (PMC). It will significantly enhance the implementation of e-government by enabling geospatial data to be more accessible to support web applications and services. This project will involve the work of a number of different Federal agencies. Each will contribute resources in the form of funding, personnel, or both. A funding strategy, which includes the identification of the level of contribution from the respective agencies, is in Part I.H.3.

I.B.1 Agency mission and strategic goals and objectives supported:

Geospatial One-Stop focuses on the Presidential priority to expand and improve the use of e-government by making geospatial data available to the Federal, state, local, and other governments, and the public. The purpose is to enable agencies to fulfill their missions and goals more efficiently and effectively. This multi-agency initiative is established under and aligned with various public law and policy provisions: Information Technology Management Reform Act (ITMRA), Government Performance Results Act (GPRA), Paperwork Reduction Act (PRA), Intergovernmental Cooperation Act, Executive Order 12906, and it is also aligned with OMB Circular A-16, Public Law 44 USC 3511, OMB Circular A-130, OMB Circular A-119, and Public law 104-113, OMB Memorandum 98-5, and a variety of other policies relating to the management of government information.

GOS also has established a direct programmatic relationship with other major GIS initiatives within DOI, such as the National Map and Enterprise GIS Information Management (EGIM). The National Map initiative will provide current, on-line digital maps (primarily topographic) with national coverage. EGIM will provide a consistent GIS-focused, technical, resource, and service foundation across DOI. GOS in conjunction with these complementary initiatives will establish both the systems and processes required for uniform geographic data and information access and associated performance based management processes. This approach is consistent with DOI's land- and resource-centric mission, strategies and objectives. GOS is providing leadership in the area of inter-agency and intra-agency geospatial coordination. This role directly supports the Secretary's four key business principles of customer value, accountability, modernization and integration. The Department's strategic goals are: 1. Protect the Nation's natural, cultural and heritage resources: GOS and related initiatives will improve data quality and availability of data for analysis, mapping of critical habitat for endangered species, and visualization of threats and solutions through the application of GIS technology. 2. Manage resources to promote responsible use and sustain a dynamic economy: Improvement in habitat conservation, restoration and condition of the National Wildlife Refuge System will be facilitated by implementation of GOS.

3. Provide recreation opportunities for America: GOS and related geospatial initiatives (e.g., EGIM, Recreation One Stop) will facilitate recreational visits to federal lands by providing a uniform basis for the production and delivery of recreational maps.

4. Safeguard property and financial assets, advance scientific knowledge, and improve the quality of life for communities we serve: Communities and stakeholders will be able to access and use geospatial data on hazards more effectively for hazards mitigation and management. Supports the President's management agenda (Disaster Assistance and Crisis Response E-Government initiative). More geospatial scientific data will be made accessible to customers, including more real-time data delivery, improved data integration tools, and GIS tools.

5. Manage the Department to be highly skilled, accountable, modern, functionally integrated, citizen-centered, and results oriented: Customer satisfaction with ease, speed, and effectiveness of data access and data integration will be increased.

Data and information related to these mission areas will be made readily available to the public through the GOS Web Portal.

I.B.2 President's Management Agenda strategic goals supported:

Geospatial One-Stop directly supports the President's Management Agenda by providing a geospatial component for government and is one of the 24 Quicksilver initiatives. This initiative is one of the 24 e-Government initiatives selected by the President's Management Council (PMC). It will significantly enhance the implementation of e-government by enabling geospatial data to be more accessible and usable.

As summarized in OMB's Strategy for E-Government :

The Geospatial Information One-Stop will provide access to the federal government's spatial data assets in a single location and help make state and local spatial data assets more accessible. Federal agencies will also make their planned and future spatial data activities available to state and local governments to promote collaboration and reduce duplicative efforts. Data standards developed through an intergovernmental process will result in data that can be shared widely, saving taxpayers money. It will also help empower the private sector by communicating the characteristics of a desired standardized data product.

Value to Citizen: Standardized and reliable spatial data can help save hundreds of millions of dollars annually through collaboration and coordination of spatial data acquisition and maintenance. Lastly, it can help improve and expedite citizen service by making data more readily available to agencies requiring that information to perform their business functions.

Value to the Government: Full deployment will result in easier, more reliable access to spatial data that should result in hundreds of millions of dollars saved annually by eliminating redundant data collection and increasing opportunities for cost-sharing partnerships. Consolidation and coordination of spatial data assets are critical

enablers for other E-Government initiatives, as well as for the Homeland Security effort. Since the OMB Strategy for E-Government was announced in February 2002, work on the Geospatial One-Stop has proved that the assumptions stated in the strategy that emerged from OMB's 2001 Quicksilver review process are correct:

- Spatial data is expensive and often collected repeatedly for the same geographic area for very specific business needs. Collaboration will help to align business needs to minimize duplication.
- Citizens trust government data, especially local government spatial data, in everyday use and especially in emergencies
- Intergovernmental delivery of healthcare, social services, economic development incentives and other services to businesses and citizens can not be effectively administered and managed without seeing community needs through a common set of lenses – the very context that spatial data helps define
- For all the money spent on spatial data, discovering spatial data holdings and having software applications that easily incorporate spatial data into analysis remains the province of more specialists than generalists, and that elitism and high cost of information discovery ill-serves citizens trying to participate in their government, request changes of their government or suggest partnerships and collaborations to make their government more effective at lower cost
- Federal agency spatial data acquisition plans remain embedded in program mission areas and as a result are difficult to tease out and aggregate nationally across agencies. Indeed a FirstGov search for Exhibit 300s involving spatial information capital investments of federal agencies turns up few agencies that post online their plans for review. The undiscoverable extent of federal spatial data plans means that 87,000 non-federal governments and the private sector (commercial, nonprofit and academic) cannot effectively partner with or leverage federal fiscal investments.

GOS will serve as the organizational umbrella for all federal agency channels for geospatial services (Facilities Locator Service, the National Map, BLM's GeoCommunicator). The GOS Portal will serve as a virtual repository for spatial data and web services to support local, state, and federal programs and decision-making. In this context it also supports the following portions of the President's Management Agenda:

1. Strategic Management of Human Capital – GOS will work with other initiatives such as EGIM, which will provide Best Practices for IT management, associated with Geo-spatial processes. These improvements in operational efficiencies will also be complemented by appropriate investments in and management of Human Capital. Current GIS-related processes will be streamlined, reduced or eliminated and, in appropriate instances, reengineered. With the implementation of Geospatial One-Stop approved standards through the Federal Geographic Data Committee, large-scale purchases of GIS tools, and technical support concentrated in an approved suite of tools, support costs will be favorably impacted by economies of scale.
2. Expanded Electronic Government – The implementation of e-Government through the GOS portal will deliver useful science, recreational, and place-based data on a real-time time basis to broad segments of the public, as well as serve specific government-to-government information needs. Geospatial One-Stop will make it faster, cheaper, and easier for all levels of government to secure useful geospatial information.
3. Budget and Performance Integration – GOS is part of a comprehensive and ongoing restructuring of strategic planning and budget preparation to provide better linkages across Federal Departments and agencies, to achieve consistency of project and budget estimates. Substantial cost savings and cost avoidance can be expected as a result of streamlined geographic information management, standardized data, operation and maintenance. Reducing the time and cost required for data preparation; documenting spatial data holdings in an on-line clearinghouse; coordination with partners in anticipation of data acquisition; and application interoperability will combine to return much of the investment.

I.B.7 Agencies and organizations affected by this initiative:

The following agencies have specific responsibilities for Framework themes of data under OMB Circular A-16 and will be lead partners of the Geospatial One-Stop project:

- Department of the Interior (DOI) o United States Geological Survey (USGS) o Bureau of Land Management (BLM)
- Department of Commerce (DOC) o United States Census Bureau (Census Bureau) o National Oceanic and Atmospheric Administration (NOAA) o National Ocean Service (NOS) o National Geodetic Survey (NGS)
- Department of Transportation (DOT) o Bureau of Transportation Statistics (BTS)

The following FGDC agencies have significant geospatial data programs and responsibilities under A-16 and are also partners in this project with financial responsibilities identified in the Exhibit 300:

- National Aeronautics and Space Administration (NASA)
- Environmental Protection Agency (EPA)
- Department of Homeland Security o Federal Emergency Management Agency (FEMA)
- United States Department of Agriculture (USDA) o Natural Resources Conservation Service (NRCS), Farm Services Agency (FSA), Forest Service (FS)
- Department of Defense (DOD) o National Imagery and Mapping Agency (NIMA)
- US Army Corps of Engineers (USACE)

In carrying out the Geospatial One-Stop project, other partnership and consortiums, such as National Digital Elevation Program (NDEP) and National Digital Ortho-photo Program (NDOP) will also serve as active partners.

One Stop will also provide a geospatial component to other EGOV initiatives. Initial efforts for coordination have been with Recreation.gov where GOS will supply a location service for their portal and with DisasterHelp.gov to link GOS search and metadata retrieval capabilities to its first responder mapping application.

I.B.8 Investment cost reduction or efficiency improvement:

In 1993, OMB performed a data call in which it estimated that \$4.1 billion was spent annually, at the federal level, on collection and management of geographically referenced data. In addition, state and local governments are estimated to spend twice that of the Federal government on collection and management of geographic referenced data. The Geospatial One-Stop project will reduce the costs associated with the management of geospatial data and improve the efficiencies by which it is acquired, accessed, and used across multiple Federal, state, and local governments, and the public sector. Geospatial One-Stop will accelerate the cost efficiencies while reducing duplication. Geospatial services can be better organized, built, and funded in light of local needs, capacities, and supplemental resources. Complex problems, adaptive management, and innovative regulatory and public-private partnerships require a common set of practices. A

shared process of all relevant factors, stakeholders, and local assets and programs capable of being leveraged in near real-time, lets agencies avoid duplication, waste, and gaps. The Geospatial One-Stop will:

- Increase consistency, quality, reliability, and reuse of geospatial data.
- Expand access to standard data more rapidly and at less cost.
- Provide consistent and accessible nationwide data to prioritize, implement, and adapt federal and state programs for local benefit.
- Improve efficiency of coordinating intergovernmental and private sector efforts.
- Promotes partnerships among federal, state, local, private, tribal, and academic constituents.
- Provide more accountable performance and results-oriented management.
- Improve citizen involvement in the digital democracy, thereby improving program accountability and performance.
- Support demand for interoperability and functionality in technologies and drives domestic and international sales.

I.9.a List all other Geospatial assets, such as interoperable standards, are being developed. We believe there are many assets across multiple agencies that will need a migration plan to interface with OMB policy guidance associated with Geospatial One-Stop. Further work is needed to assess these numerous cross-agency assets. Assets include but are not limited to: The National Mapping Program, the National Spatial Reference System, the National Geologic Mapping Program, the National Wetlands Inventory, the National Cooperative Soil Survey Program, the National Public Land Survey System, Geographic Coordinate Database, the National Oceanic and Atmospheric Administration (NOAA) nautical charting and nautical data collection and information programs, the U.S. Army Corps of Engineers (USACE) inland waterway charting program, the Offshore Minerals Program, the NASA's Earth Science Enterprise, FEMA's Flood Plain Mapping program and other federal activities that involve national surveying, mapping, remote sensing, spatially referenced statistical data, and Global Positioning System (GPS). In addition to the federal programs identified above, GOS is also closely aligned with DOI's Enterprise GIS Information Management (EGIM) initiative. This effort represents a crosscutting program, which will provide coordinated management and operation of all GIS and associated assets and related services. It also involves specification and development of a comprehensive set of Best Practices (and processes) for GIS data and information management, in order to serve the citizens, as well as governmental and commercial interests.

I.9.b Have these assets been reengineered as part of this investment (Yes/No)

No

Requested Investment Summary of Spending for Project Stages (\$Millions)

BY 2005 Planning Resources:	.00
BY 2005 Acquisition Resources:	10.83
BY 2005 Maintenance Resources:	.00
BY 2005 Total, All Stages Resources:	10.83
Life Cycle Total, All Stages Resources:	43.43

DOI BUDGET YEAR 2005 IT INVESTMENT OVERVIEW

Investment Identification

Agency: Department of the Interior
Bureau: Office of the Secretary
Location in Budget: National Park Service, Associate Director-Visitor Protection
Account Title: Department of the Interior
Account Identification Code: 010-00-14-9999-0
Program Activity: Risk Management Division
Name of Investment: [Incident Management & Reporting System \(IMARS\)](#)
Unique Investment Identifier: 01000010501001800115046
(IT Only)(see section 53)

Investment Justification

I.A Investment Description: The Department of Interior (DOI) has the responsibility to manage federally owned resources, protect the environment, prevent, detect, and investigate criminal activity and manage visitor use and protection programs. This requires the identification, collection, analysis, management and reporting of information related to incidents, which are defined as any occurrence that requires documentation. Incident Reporting requires appropriate software that will allow all program areas within the DOI to create reports in various formats, sort data, conduct data analysis, and interface with other systems.

The DOI draft Revised Strategic Plan for FY 2003-2008 (February 2003) addresses an IG study of the Department's public safety organizations (Law Enforcement programs). This study recommends a Department-wide centralized records management system. This records management system will meet the Department's strategy for a more integrated and coordinated approach supported by common programs. Although IMARS system will cover many programs, the one cross-cutting program is law-enforcement.

The DOI has struggled for years to develop a system that will allow the recording and management of information relating to any type of incident. Bureaus have independently satisfied bureau needs in this area. Functional areas and incident categories requiring an Incident Management and Reporting System (IMARS) include: natural resources (observations, encounters, diseases/deaths, infestations, threat identification, etc.), cultural resources (vandalism, theft, looting, resource damage, threat identification, etc.), wildland and structural fire, law enforcement and crime prevention, public health (foodborne, waterborne, vectorborne/environmental diseases, etc.), employee safety and health (illnesses, injuries, equipment damage, risks, etc), public safety, visitor use management, emergency medical responses, search/rescue, structural hazards/failures, environmental/natural occurrences (damage from storms, winds, floods, etc.), technological (viruses, hacking, vandalism, illegal use, etc.), Federal Lands Highways Program/traffic accidents, etc.), hazardous materials (spills, dumping, accidents, etc.).

Data is an essential management tool and is critical to identifying our problems, collecting, and analyzing information for the purpose of recognizing trends, prioritizing threats, sharing information, developing mitigation plans and reporting results, measuring our performance, identifying our weaknesses, allocating resources and reinforcing our strengths. The Department is unable to provide the full range of data and information on incidents when asked or required which continues to be a source of embarrassment and is considered by some as a "material weakness." We are unable to provide meaningful data to report on a number of GPRA goals. Several reports such as the GAO report on structural fire and the IACP report on NPS' law enforcement identified our inability to collect good data as a major weakness. In the absence of an effective Incident Management and Reporting System (IMARS), many Bureaus have elected to develop their own methods of data collection and management, most of which are not integrated beyond the bureau boundaries. This

significantly reduces the ability of the DOI to meet its Service-wide reporting requirements.

There is no case incident system in the Department as mandated by public law 100-690. However, individual bureaus have systems. The purpose of this initiative is for a single incident management system.

This project is currently progressing through the capital planning and investment process. This project is at the beginning stage of the life cycle. We completed a needs assessment, with a third-party vendor, that strongly supports the need for a system that this initiative would satisfy

I.B.1 Agency mission and strategic goals and objectives supported:

Program Area - Law Enforcement:

Need - Enhance criminal investigation and information sharing, provide National Incident-Based Reporting System (NIBRS) reporting, track L.E. personnel, commission files, background investigations and mandatory training implement Computer Aided Dispatch System (CAD), Enhance correctional facilities, incident tracking and integrate judiciary results with the law enforcement process.

Benefit - Enhance officer safety, meet national reporting requirements, increase opportunities for case resolution and prevention of crimes against resources and persons. Ensures the integrity of the judiciary system by tracking incidents. CAD system allows emergency operations and communications to be augmented by an automated system that will interface with the E911 system providing automated routing of emergency calls to public safety answering points.

Program Area - Emergency Management:

Need - Emergency response to critical infrastructure and incidents.

Benefit - Allows DOI to respond in appropriately based on severity of the incident with the necessary response.

Program Area - Security:

Need - Tracking key assets and critical infrastructure per the Presidents plan, homeland security, catastrophic defense, and border and transportation security. Intelligence with federal law enforcement agencies including the Department of Homeland Security.

Benefit - Allows DOI to mitigate potential threats and protects assets and enhance the ability for efficient resource allocation.

I.B.2 President's Management Agenda strategic goals supported:

The IMARS is a Department-wide initiative linked closely to both the Department's Strategic Goals and the President's Management Agenda (PMA). All components of the IMARS may be used to support cross-servicing of other Federal agencies, e.g., reporting requirements to other Federal agencies. Therefore, IMARS fits well with the President's emphasis on ensuring that all agencies are able to take advantage of the systems developed for individual agencies. The IMARS strategy was developed to support the following PMA Initiatives.

Strategic Management of Human Capital

Procurement Planned for Competitive Commercial Sourcing - The Incident Management, Analysis and Reporting System (IMARS) support structure assigns those functions that are inherently governmental, such as policy and planning, to in-house federal personnel identifies and outsource those functions that are not central to the DOI mission

Improves Financial Performance - IMARS creates a single enterprise service that eliminates unnecessary duplication, achieves economy of scale, reduces support resource requirements and maximizes training.

Expanding E-Government - IMARS creates a comprehensive enterprise-wide electronic infrastructure allowing the DOI to more transparently & universally communicate, collaborate, access services, share resources, and access common applications across the entire department. The result is improved management and organizational efficiencies of the department, and ultimately better service to the public.

Budget Performance Integration - IMARS consolidates multiple IT initiatives into one comprehensive

infrastructure strategy, for incidents and the management of those functions.

Performance Integration- Meets legislative Reporting requirements, satisfies GPRA & ARPA Homeland Security Meets security implementation directives to the Department outlined in The National Strategy for the Physical Protection of Critical Infrastructures and Key Assets

Supports Resource Protection

Supports Serving Communities

Legal Requirements: Drivers for Incident Reporting

Law Enforcement:

The Uniform Federal Crime Reporting Act, 1988 we report through the National Incident-Based Reporting System (NIBRS)

Public Law 100-690

The National Strategy for the Physical Protection of Critical Infrastructures and Key Assets White House Strategic Counter Terrorism Plan (2003)

Lacey Act and Lacey Act Amendments of 1981 (18 U.S.C. 42, 16 U.S.C. 3371-3378).

Upper Mississippi River Wildlife and Fish Refuge Act (16 U.S.C. 721-731).

Bear River Migratory Bird Refuge Act (16 U.S.C. 690-690i).

Fish and Wildlife Act of 1956 (16 U.S.C. 742a-742d and 742e-j-2) (includes airborne hunting prohibitions).

Fish and Wildlife Improvement Act of 1978 (16 U.S.C. 712).

Fish and Wildlife Recreation Act (16 U.S.C. 460k-460k-3).

National Wildlife Refuge System Administration Act (16 U.S.C. 668dd-668ee)

50 Code of Federal Register

US Fish and Wildlife Service Manual

NPS guidance DO-9/RM-9

Department Manual 446

BLM-Federal Land Management and Policy Act (FLMPA)

BLM-Law Enforcement General Orders and Law Enforcement Handbook 9260-1

Office of National Drug Control Policy Reporting Requirement

Government Performance and Results Act (GPRA) Management Policies 8.2.5.1

NPS Director's Order 50-C (draft) - Public Risk Management

The National Park Service Organic Act of 1897 (16.U.S.C. 1)

Privacy Act of 1974, 5 USCA Section 5552A

Archeological Resources Protection Act (ARPA); 16U.S.C. 470aa-mm.

43 CFR Part 7

Executive Order 11644

National Environmental Policy Act (NEPA)

Other requirements for monitor of resources and resource damage

Native American Graves Protection and Recreation Act (NAGPRA)

National Parks Omnibus Management Act, 1998, Secs. 202, 204

Endangered Species Act

Clean Air Act

Clean Water Act

Oil Pollution Act, 1990

National Park System Resource Protection Act - 16USC 19 (jj)

Migratory Bird Treaty Act (16 U.S.C. 703-711).

Migratory Bird Hunting and Conservation Stamp Act (16 U.S.C. 718-718h and 718j).

Bald and Golden Eagle Protection Act (16 U.S.C. 668-668d).

Endangered Species Act (16 U.S.C. 1531-1544).

Marine Mammal Protection Act (16 U.S.C. 1361-1384, 1401-1407)

Departmental Manual DM 15.501

Resource Conservation and Recovery Act (RCRA) 6002

OSHA 29 CFR 1910 (Hazard Communication Standard)

Comprehensive Environmental Response, Compensation & Liability Act CERCLA (Super Fund)

USC, Title 23, Sec. 204, Federal Lands Highway Program

USC, Title 402, Highway Safety Program

Program Agreement for Highway Safety, July 7, 1999

1996 Anti-Terrorism Act

I.B.7 Agencies
and
organizations
affected by this

The following will be participating in this system:

initiative:

Office of the Secretary - Office of Law Enforcement and Security

Bureaus - National Park Service (Lead) Bureau of Reclamation Fish and Wildlife Service Bureau of Indian Affairs Bureau of Land Management

I.B.8 Investment cost reduction or efficiency improvement: Costs will be reduced and efficiency improved by the replacement and integration of various localized law enforcement efforts, occurring throughout the DOI, into a centralized and common system.

A common law enforcement system will become the DOI reference architecture. A commercial product will be sought that satisfies law enforcement program. This cost-effective system approach will immediately provide DOI law enforcement program with a capable product and ensuring we select a technologically expandable product.

The evolution will consist of a series of implementation prototypes with documented customization and usage. As a common standard emerges, experienced personnel will experience the same look and feel of the system across multiple installations. Training efforts on a common system will be reduced, while system mastery will promote specialized and complicated accomplishments across the DOI law enforcement workforce.

I.9.a List all other assets that interface with this asset.

No single existing DOI incident report assets meet the legislative reporting requirements of the Department of the Interior. Efforts will be made to bring any relevant data from existing systems into the new system. For example, USFWS Law Enforcement Management Information System (LEMIS) serves to protect federally protected species. This system would accommodate the requirements of LEMIS, and expand to additional Department requirements in law enforcement. The plan is for the new system to meet the various legislative reporting requirements by using a vigorous design approach and to only plan interfaces to successful systems. Thus, the plan for a selection of a commercial product that already has a track record for data exchange with multiple required incident interfaces. IT Systems built using Open System Interconnection standards should have readily convertible data. Some engineering will be required, but no reengineering should be necessary. As the product is implemented interfaces with existing DOI systems may be necessary, as an example, to pull personnel information from FPPS. As another example, LEMIS will become an IMARS module to improve the quantity and quality of information available to officers Department-wide. Other bureaus will gain access to wildlife-related investigative activity, intelligence information, and trade data presently captured in LEMIS.

I.9.b Have these assets been reengineered as part of this investment (Yes/No)

No

Requested Investment Summary of Spending for Project Stages (\$Millions)

BY 2005 Planning Resources:	.87
BY 2005 Acquisition Resources:	2.07
BY 2005 Maintenance Resources:	3.47
BY 2005 Total, All Stages Resources:	6.41
Life Cycle Total, All Stages Resources:	71.83

DOI BUDGET YEAR 2005 IT INVESTMENT OVERVIEW

Investment Identification

Agency: Department of the Interior
Bureau: Office of the Secretary
Location in Budget: Summary of IT Investments
Account Title: Wildland Fire Management
Account Identification Code: 010-04-14-1125-0
Program Activity: DOI - Office of Wildland Fire Coordination
Name of Investment: [LANDFIRE](#)
Unique Investment Identifier: 01000010201001900108023
(IT Only)(see section 53)

Investment Justification

I.A Investment Description: On July 7, 1998, the (Department of the) Interior Fire Coordinating Committee (IFCC), decided future action needed to be taken on the Incident Qualifications and Certification System (IQCS). The Fire Directors (IFCC) decided a formal engineering study was necessary to evaluate and define IQCS' current Program, information, and operational requirements. The National Wildfire Coordinating Group (NWCG) sanctioned the IQCS Information Engineering Investment Study in October 20, 1999 as its guide for identifying requirements and future actions. Based on the findings of the Investment Study, in June 2001 NWCG chartered the IQCS Acquisition and Design phases with BLM as the lead agency. As part of the Charter an RFI and RFQ was completed for solution selection. KPMG was chosen as the contracting agency for completion of the Design phase with options for Construction and Implementation. Work was initiated on the Design phase April 30, 2002 and Complete September 30, 2002. Work on Construction began Oct 01, 2002 and is expected to complete Oct 01, 2003.

The success of the Federal fire mission depends on the Incident Qualification and Certification (IQC) Program information. IQC is a critical function for managing the fire program's risk, primarily in the areas of health, (life) safety, and legal liability. Currently, the Department of Interior, Forest Service and State Programs have three separate computerized databases of fire personnel qualifications, including "Red Card," information. In support of the qualification and certification process, these systems document the training and development, experiences, and qualifications of the 60,000 fire fighters. It is anticipated that other risk (i.e. oil spills, HAZMAT, etc) and incident-related personnel that perform emergency response duties will be included in the IQC database. The IQC Program is a performance-based certification process. A job qualification is based on documented performance of required skills, knowledge and abilities (that may be gained through many avenues, such as training, simulated and life experiences). The IQC Program mitigates the potential for loss of life, personnel injuries and fire management liability by assuring that only qualified personnel are assigned to incident duties. The IQC training activities provide specialized developmental opportunity. Certification is the documentation of management's periodic assessment and reassessment of qualified personnel. The Incident Qualifications and Certification System (IQCS) investment is chartered to develop (design, construct, and implement) an information system that tracks training and certifications for Wildland Firefighters. Fundamental high-level business processes and functions include:

Repository management of incident (example: wildland fire) positions performance standards and their respective qualification and certification requirements. Training management that includes items such as: course/offering descriptions, learning objectives, pre-course requirements, class schedules, student registration and class participation information. Workforce analysis that accurately reports in a timely manner the disposition, status and deficiencies of positions throughout the incident response community Tracking of personnel information related to an individual's qualification and certification currency and history that

includes information such as: positions, position performance, training, physical fitness status, and external warrants. The Construction Phase is a culmination of the activities that have occurred during the five-month Design Phase. During the Design Phase, the investment team refined the business requirements and estimated the level of effort necessary to build the IQCS so that it will meet the expectations of the IQCS user community. During this time the technical team has been engaged with the Subject Mater Experts (SME's) to clearly articulate the system requirements, identify the level of work to configure the Software application as well as the level of work necessary to customize the delivered package. After the business requirements were further defined, the technical team reviewed each of the documented business requirements. The purpose of this review was to perform a fit/gap analysis and to identify the level of work necessary to support each of the documented business process steps.

The investment is currently in the 6th month of the Construction Phase with approximately 6 months remaining.

Construction Phase tasks can be broken down into four primary phases, they include Configuration, Construction, Testing, and Implementation Planning: 1. Configuration includes the setup and build-out of the Control tables used by the application. 2. The Construction Phase is where conversion, interfaces, modification, and customizations are built and unit tested by the technical staff. This activity is critical to the success of the final deliverable and serves to refine the system functionality. 3. System testing includes full Integration testing, User Acceptance testing, Load, Balance and Communication testing. 4. Detailed planning for the production roll out of the IQCS system.

I.B.1 Agency mission and strategic goals and objectives supported:

Mission (GPRA) Justification Component:

The Incident Qualification and Certification (IQC) Program information directly supports two of the five DOI Government Performance Reporting Act (GPRA) mission goals. The goals are as follows:

Goal 1: "Protect the environment and preserve our nation's natural and cultural resources." This qualification and certification system ensures that only qualified individuals are assigned to protecting the environment and preserving our nation's natural and cultural resources. This protection responsibility is a primary mission for the Bureau as well as the Department of the Interior. Goal 3: "Manage natural resources for a healthy environment and strong economy." This system ensures that only qualified individuals are assigned management roles in the oversight for natural resources to ensure the health of the environment. These management activities are conducted by individuals qualified and certified to conduct wildland fire suppression activities as well as prescribed burns and fuels reduction management activities. Presently, there are three (3) non-networked incident qualification and certification systems in more than 100 locations being used by the wildland fire community. This redundancy has created data management problems for field units. There is high-level support from both senior management and the field for development of a single qualifications and certification system or systems that are interoperable which meets the needs of all participating agencies and the states. The success of the Federal fire mission depends on the Incident Qualification and Certification (IQC) Program's information. IQCS is a mission essential system because it can mitigate the potential for loss of life, personnel injuries and fire management liability.

I.B.2 President's Management Agenda strategic goals supported:

As per the Presidents Management Agenda the IQCS investment contributes directly to Competitive Sourcing, Strategic Management of Human Capital, Improving Financial Performance, and Expanding Electronic Government. 1. Competitive Sourcing has been accomplished by evaluating and hiring Contract Staff for the Design and Construction of the investment. A feasibility study was performed which evaluated and ranked both in-house and external staff, and the greatest value was found to be through external staffing (depth of knowledge, flexibility of hours, cost) 2. Strategic Management of Human Capital will be through the effective workforce management functionality inherently designed within the system. IQCS will be able to efficiently and easily generate forecasting and current availability of all workers within the Federal and State Fire system. 3. Improving Capital Performance is accomplished by combing multiple disparate platforms into one single operating system thereby reducing the physical overhead of hardware and software in addition to the resources necessary to operate them. This creates a year on year lower operating cost. 4. Expanding Electronic Government is contributed by the reduction of the manual and paper tasks necessary in the current system. All transactions will be available at all times through a Secure Internet Connection, each transaction will be documented and recorded electronically, and reports can be generated to track trends and forecasts in transactions.

I.B.7 Agencies and organizations affected by this initiative:

Yes this is a multi-agency investment. Bureau of Land Management is the Lead and Managing Agency. Parties involved are the Department of the Interior, Bureau of Indian Affairs, National Park Service, Fish and Wildlife Service, Bureau of Land Management, U.S. Forestry Service, Department of Agriculture, and National Association of State Foresters.

I.B.8
Investment
cost reduction
or efficiency
improvement:

As per the Presidents Management Agenda the IQCS investment contributes directly to Competitive Sourcing, Strategic Management of Human Capital, Improving Financial Performance, and Expanding Electronic Government. 1. Competitive Sourcing has been accomplished by evaluating and hiring Contract Staff for the Design and Construction of the investment. A feasibility study was performed which evaluated and ranked both in-house and external staff, and the greatest value was found to be through external staffing (depth of knowledge, flexibility of hours, cost) 2. Strategic Management of Human Capital will be through the effective workforce management functionality inherently designed within the system. IQCS will be able to efficiently and easily generate forecasting and current availability of all workers within the Federal and State Fire system. 3. Improving Capital Performance is accomplished by combing multiple disparate platforms into one single operating system thereby reducing the physical overhead of hardware and software in addition to the resources necessary to operate them. This creates a year on year lower operating cost. 4. Expanding Electronic Government is contributed by the reduction of the manual and paper tasks necessary in the current system. All transactions will be available at all times through a Secure Internet Connection, each transaction will be documented and recorded electronically, and reports can be generated to track trends and forecasts in transactions There are three (3) incident qualification and certification systems being used by the wildland fire community. This multi-system operation generates redundancies in business and information management functions. The estimated contracted maintenance and operations cost of these systems is currently \$600k per year. The estimates for internal data-entry and record upkeep are \$1,650,000.

The IQCS Definition Phase (Requirements Analysis Study) determined the best value (cost & functionality) solution to meet the fire community's business requirements. The chosen new IQCS system will effectively combine the current platforms, thereby reducing the cross platform inefficiencies. (i.e.) multiple data entry, multiple training requirements, additional hardware requirements, etc.

As stated in the investment charter, "goals include providing a thorough and comprehensive study of interagency incident qualifications and certification program requirements to:

explore the development of a best solution(s) for an interagency Incident Qualifications and Certification (IQC) Program; so that: interagency field units and personnel are better served; and investments in wildland fire IRM applications are optimized."

The existing charter is currently under revision to convey the current status of the investment, which has moved into the Design Phase as of May 2002. The new revisions will carry forward the original charter theme, ensuring that interagency units are provided a solution that helps to save lives, minimize response time, and decrease overall cost of ownership.

I.9.a List all
other assets
that interface
with this asset.

LANDFIRE will use and/or exchange a variety of existing geospatial, statistical, and other data sets as well as a number of computer programs, models, etc. in meeting project goals. However, there are no system specific interfaces being developed or reengineered as a result of the project. LANDFIRE deliverables will be ingested by the Fire Program Analysis (FPA) System (in development) and will provide fire managers with a common interagency process to evaluate the effectiveness of alternative fire management strategies through time, to meet land management goals and objectives. Geospatial data layers, delivered by the LANDFIRE project, will be critical inputs to the FPA system. The Fire Effects Assessment Tool (FEAT) is an application reengineering project in the National Park Service's wildland fire management program. It will be a ground-truthing system for the Fire Program Analysis (FPA) application. Indirectly, FEAT will provide some level of plot-level vegetation information that will potentially be used to validate LANDFIRE derived information layers. Other asset - FPA Reengineered? No Other asset - FEAT Reengineered? No

I.9.b Have
these assets
been
reengineered
as part of this
investment
(Yes/No)

No

Requested Investment Summary of Spending for Project Stages (\$Millions)

BY 2005 Planning Resources:	.00
BY 2005	4.50

Acquisition
Resources:

BY 2005
Maintenance
Resources:

3.45

BY 2005 Total,
All Stages
Resources:

7.95

Life Cycle
Total, All
Stages
Resources:

50.77

DOI BUDGET YEAR 2005 IT INVESTMENT OVERVIEW

Investment Identification

Agency: Department of the Interior
Bureau: Office of the Secretary
Location in Budget: Summary of IT Investments
Account Title: Working Capital Fund
Account Identification Code: 010-00-14-4523-0
Program Activity: Freedom of Information Act (FOIA)
Name of Investment: [Electronic FOIA Tracking System \(EFTS\)](#)
Unique Investment Identifier: 01000010701002000305108
(IT Only)(see section 53)

Investment Justification

I.A Investment Description: Background: The President's Management Agenda requires Federal agencies to improve financial performance and expand electronic government. The Department of the Interior (DOI) will invest over \$6 million dollars in the Electronic FOIA Tracking System (EFTS) to work towards accomplishing these goals. This system is being designed in three modules. The first module was designed to allow Bureaus and Offices Department-wide to track, control, and manage their FOIA requests.

The transition effort will last approximately seven years.

Description: All Federal agencies are required to respond to requests for information within specific timeframes under the Freedom of Information Act (FOIA). This is an inherently governmental activity. The world of FOIA is citizen driven by citizen interest and it is difficult to quantitatively measure actions related to FOIA and associated costs from year to year. The number of requests, appeals, and lawsuits the Department receives is unpredictable as it is based on current political, environmental, and economic concerns. The Electronic Freedom of Information Act (FOIA) Tracking System (EFTS) will empower citizens to make FOIA requests and access documents released to the public through a common web site/portal. Reducing the burden to the citizen and making the interaction with their Federal Government (in all cases) more user friendly and citizen centered, is a goal which directly supports the President's Management Agenda. Streamlining FOIA processing will enable the Department to establish a standard electronic FOIA system that includes a mechanism for receiving and assigning FOIA requests through response, concurrence, review, signature, dispatch, and records disposition. This initiative will automate current manual processes as well as integrate activities at multiple DOI sites currently operating independently without benefit of electronic centralization. Standardizing the receipt and responses to requests will improve response time and the ease with which citizens can obtain access to Government information they are entitled to under the law. Again, the EFTS support of these PMA goals are a key objective of the near term implementation. In accordance with the President's government-wide initiatives to improve financial performance and expand electronic government, the EFTS will comply with expanded electronic government by providing for the sharing of information between the various bureaus and offices within the Department of Interior; providing a centralized internal automation system to process FOIA/Privacy Act (PA) requests, appeals and litigation, thus reducing overall Departmental costs for this program; reducing the burden on citizens with regard to submitting FOIA requests, and creating a single point of access for FOIA personnel to track FOIA/PA requests from receipt to completion. The EFTS, a web-based system, is the first centralized system to manage FOIA requests electronically Department-wide. The EFTS will also provide valuable information to DOI FOIA Coordinators, identify duplicate requests, ensure consistency in responses, reduce the time in processing requests, and facilitate reporting and reviews.

The EFTS will also streamline the use of human capital by reducing the time required to prepare statutory reports which supports the PMA of Strategic Management of Human Capital. Use of this system will allow FOIA personnel to track billing costs and ensure Government expenditures for the program are accounted for and recouped consistent with the law, improving the financial performance of the FOIA program through

increased accountability in direct support of the PMA of Improved Financial Management. In the first release of this system, FOIA Officers and Coordinators will be able to verify request information and track responses throughout the Department. Following implementation of the system on October 2, 2002, all bureaus/offices with Internet access are required to use the EFTS to manage and track their FOIA requests. The EFTS is a high priority by the DOI CIO and the Assistant Secretary. The FOIA program has continually evolved to become more budget and performance oriented which supports the PMA of Budget and Performance Integration. The additional modules and enhancements to the EFTS will provide a more fluid use of the system and achieve a more results-oriented process in keeping with the President's initiatives. The design of the system allows for additional modules/enhancements that will be user friendly both to the Department FOIA personnel and the public. Future modules include Electronic Document Management (EDM) and Appeals and Litigation. They will integrate public accessibility with the FOIA program through electronic means and further comply with the President's initiatives regarding Expanded Electronic Government. Ultimately, the customer is the beneficiary of this investment.

Status: To date, all Bureaus and Offices within the Department that have Internet access are using the system. The Office of the Chief Information Officer (OCIO) is in the next phase of the planned design and build strategy for the EFTS enhancements to include the Help Desk, multiple fee schedules, and the security plan and risk assessment updates. A project manager has been assigned to the EFTS. The project manager is in the process of establishing an integrated project team consisting of Bureau FOIA Officers, representatives from the IT area, including privacy and security, and a financial analyst to support the project. The project manager has held monthly meetings with DOI's Bureau/Office FOIA Officers (the users of the system) to discuss EFTS issues. The investment has gone through DOI's CPIC process and was approved in July 2003.

I.B.1 Agency mission and strategic goals and objectives supported:

This investment supports the agency's mission by providing access to Government documents while protecting the interests of all parties involved. Specifically, this project supports the DOI strategic management excellence goals of Integration and Customer Value. In particular, the EFTS supports DOI's management strategies by fostering citizen-centered E-GOV and performance process improvement. The EFTS will provide a more streamlined FOIA process throughout DOI while improving the efficiency of the FOIA program and concurrently providing a higher quality of government to business and citizen service. The agency's mission and goal to provide a more customer focused service while standardizing and sharing data within the Department will be met before the established long-term goal of 2008. This system will allow the DOI FOIA program to meet this goal almost immediately following Departmentwide implementation of the system (see I.A). The EFTS will comply with expanded electronic government by providing for the sharing of information between the various bureaus and offices within the Department of Interior; providing a centralized internal automation system to process FOIA/Privacy Act (PA) requests, appeals and litigation, thus reducing overall Departmental costs for this program; reducing the burden on citizens with regard to submitting FOIA requests, and creating a single point of access for FOIA personnel to track FOIA/PA requests from receipt to completion. The EFTS, a web-based system, is the first centralized system to manage FOIA requests electronically Department-wide. Prior to implementation of the EFTS, FOIA requests have been managed manually, or through limited stove-piped systems at bureau or field locations, that do not integrate. The EFTS will also provide valuable information to DOI FOIA Coordinators, identify duplicate requests, ensure consistency in responses, reduce the time in processing requests, and facilitate reporting and reviews. The EFTS will improve service to the citizen community by simplifying and improving consistency of responses. Given the nature of DOI's decentralized environment, it is difficult to ensure that information is released consistently from bureau to bureau.

A centralized tracking system will improve the quality and efficiency of the overall FOIA process and provide for a more streamlined process throughout the Department and will be in keeping with the Presidential objectives for public accessibility of government. The EFTS will also streamline the use of human capital by reducing the time required to prepare statutory reports. Use of this system will also allow FOIA personnel to track billing costs and ensure Government expenditures for the program are accounted for and recouped consistent with the law, improving the financial performance of the FOIA program through increased accountability.

I.B.2 President's Management Agenda strategic goals supported:

The investment supports the strategic goals of the President's Management Agenda in Expanded Electronic Government, Budget and Performance Integration, Improved Financial Management and Strategic Management of Human Capital. As the modules of the EFTS are implemented over the next seven years, the system will continue to provide a more fluid level of compatibility for use both within the department and while exchanging information with other Government agencies. As the EFTS collaborates and shares information with other agencies, it will directly support and further the PMA of Expanded Electronic Government. This web-based system provides the future capability to collaborate with other agencies regarding FOIA requests, appeals, litigation, and interpretations of the law, thus assisting in a more standard approach in the program area. DOI is in the process of talking to other agencies to see if we can leverage our work to benefit citizens and the Government. DOI will be presenting demos of the EFTS to interested agencies and will continue to research and review what other agencies are doing in an effort to provide more collaborative services with those agencies which will ultimately benefit the public. As the additional modules are implemented, the department will collaborate and partner with other agencies to determine the most beneficial means to further enhance the system that will meet its requirements and the President's Agenda. The EFTS will also become more citizen-centered by allowing citizens to file electronic FOIA requests with the system, check the status of

their requests, and will provide a means to communicate electronically with the FOIA office handling their request. This point of access will eliminate time spent providing paper documents and further move the department to a paperless government while ensuring that electronic communications with customers are user-friendly. This will ultimately reduce the burden on the government workforce as well as the burden placed on citizens who spend a substantial amount of time waiting for a paper response. These accomplishments will support Improved Financial Management as well as improve Strategic Management of Human Capital. Sharing of information between the government, citizens, and with other agencies will proliferate and greatly enhance and improve the FOIA process; ultimately reducing the cost of the program. This web-based system was not designed to provide only departmental FOIA personnel access and tracking capabilities, but designed with the public in mind as well as the President's Management Agenda; a more citizen-centered, user-friendly government while increasing budget performance and integration. The EFTS will make effective use of existing resources while providing better customer service and continuity in FOIA operations throughout the DOI. By providing an integrated DOI portal, the EFTS will "create easy-to-find single points of access to Government services for individuals . . . reduce the expense and difficulty of doing business with the Government . . ." This system will allow for faster, more efficient communication between the government and private citizens, in turn enhancing the public's participation in the FOIA process and furthering DOI compliance with E-GOV. The EFTS improves the DOI financial performance and expands electronic government, while providing progressively positive long-term results. The EFTS provides a standard reporting mechanism for government accountability.

I.B.7 Agencies and organizations affected by this initiative: DOI has been approached by other agencies to collaborate and share our findings regarding the initial phase of the EFTS. At the present time, no other agencies or organizations outside DOI are directly affected by this initiative. However, this project is a candidate for cross-agency collaboration because all Federal agencies must comply with FOIA and FOIA requirements are very specific. Citizen access to Government information that crosses agencies would be greatly simplified by a central Federal point.

I.B.8 Investment cost reduction or efficiency improvement: Use of this system will also allow FOIA personnel to track billing costs and ensure government expenditures for the program are accounted for and/or recouped consistent with the law. One of the most significant areas where the benefits are noticeable is the time and cost reduction in direct relation to the preparation of the Annual Report to Congress, which will drop significantly through the use of the system. Also, the time and costs involved in responding to inquiries from management and the public regarding the status of FOIA requests and other issues will be reduced through the use of this centralized system. Efficiencies will result by replacing manual processes with electronic ones and centralizing information for search and review to ensure consistency and avoid duplication. As the system builds up a repository of searchable material, the bureaus will be able to share information regarding searches and reviews performed earlier thus providing more timely responses to requesters. Duplication occurs as a result of subsequent requests by other individuals for similar information. Prior to implementation of the EFTS, it was difficult for FOIA Officers to quickly identify earlier actions that could expedite the processing of subsequent requests--the search, review and redaction process had to be repeated and the citizen was forced to wait unnecessarily. Duplication imposes an unnecessary burden on the entire FOIA process--it also results in inconsistencies in responses. This undermines the entire FOIA program. Providing a single DOI portal for citizens to submit requests will benefit citizens who will no longer have to comb through the various DOI sites for FOIA offices. The EFTS will provide an avenue for more consistent, timely and accurate responses to public requests, thus providing a more consumer-friendly relationship. The public will benefit significantly through the planned enhancements, which will allow greater access and more readily available information concerning requests. The number of requests, appeals, and lawsuits the Department receives is unpredictable as it is based on current political, environmental, and economic concerns. However, consistent and timely responses should increase customer satisfaction, ultimately resulting in fewer appeals and litigation, thus reducing overall costs to the Department.

I.9.a List all other assets that interface with this asset. The individual databases maintained by the bureaus and offices. Have these assets been re-engineered as part of this project? Yes. The multiple stove-piped systems maintained by the bureaus have been replaced with a single centralized Departmentwide system consistent with the Department's EA guidance.

I.9.b Have these assets been reengineered as part of this investment (Yes/No) Yes

Requested Investment Summary of Spending for Project Stages (\$Millions)

Planning Resources:	
BY 2005 Acquisition Resources:	.96
BY 2005 Maintenance Resources:	.13
BY 2005 Total, All Stages Resources:	1.16
Life Cycle Total, All Stages Resources:	6.07

DOI BUDGET YEAR 2005 IT INVESTMENT OVERVIEW

Investment Identification

Agency: Department of the Interior
Bureau: Office of the Secretary
Location in Budget: Summary of IT Investments
Account Title: Department of the Interior
Account Identification Code: 010-00-14-9999-0
Program Activity: DOI - Office of the Chief Information Officer
Name of Investment: [Land Mobile Narrowband Radio Conversion](#)
Unique Investment Identifier: (IT Only)(see section 53) 01000010701002200101002

Investment Justification

I.A Investment Description: Background: Federal Government agencies are required by Title 47, U.S.C. 903 (d)(1) to make more efficient use of the radio spectrum. The National Telecommunications and Information Administration (NTIA) mandated that all Federal spectrum users migrate from wideband channels (25 kHz) to narrowband radio channels (12.5 kHz). This action doubles the amount of spectrum available for Federal users by the year 2005 for Very High Frequency (VHF) and the year 2008 for Ultra High Frequency (UHF) allocations. The Department will invest over \$300 million dollars in the transition effort.

Status: During November 2000 the Department declared the radio program as a material weakness because of the imminent funding crisis during FY2004. The two driving forces are:

The need to correct the deficiency that created a material weakness for the Department.

The National Telecommunications and Information Administration (NTIA) mandate to transition 25Khz wideband radio channels to 12.5 kHz narrowband channels by January 1, 2005. Users of wideband channels are relegated to secondary user status, a condition that cannot be tolerated in a public safety environment.

DOI will not be able to order, install, and make operational required equipment to meet the NTIA VHF mandate by January 1, 2005. The Department notified the NTIA of this fact during August 2002. The Department must seek ways to mitigate adverse effects of wideband operations on authorized narrowband users. The NTIA is working with the Federal radio community to determine impacts. Furthermore the Department must implement a radio replacement cycle after full narrowband implementation to replace radios ending their useful 10 year life-cycle.

I.B.1 Agency mission and strategic goals and objectives supported:

The narrowband transition initiative supports all four of the Department's strategic goals. The Department uses the Land Mobile Radio infrastructure to tie together geographically dispersed public safety and protection missions. These missions include law enforcement on Federal and tribal lands, urban and wild land fire fighting, seismic monitoring, wildlife tracking, management of national parks, and water reclamation activities. The DOI uses Land Mobile Radio (LMR) to collect and disseminate information between DOI locations and other federal, state and local agencies having similar missions. Current Wideband radio operations in a narrowband environment will cause harmful interference in the VHF radio band after January 1, 2005 and UHF band after January 1, 2008. As a cross-agency initiative Radio Narrowbanding supports several of the current President's strategic goals and, as such, is a strong candidate for funding as a presidential priority and as an e-Government initiative. As articulated by the OMB, the vision of e-government is an order of magnitude

improvement in the Federal Government's value to citizen. OMB, through the e-Government Task Force, has established that through this initiative-

Public safety personnel will be able to communicate easily with local, state, tribal, and federal personnel in the event of an emergency.

Efforts shall be focused on specific end results

Effective and interoperable communications between public safety officials throughout all levels of government, before, during, and after their response to a variety of events, such as natural and technological disasters, terrorist actions, and criminal activities, as well as to conduct other life saving activities such as search and rescue operations

Integration across state, tribal, and local governments, and with/among federal departments and agencies

Saving of lives through quicker public safety disaster response coordination Realized cost savings through standardization of equipment and sharing of infrastructure

To enable this vision, the President's e-Government Taskforce identified initiatives in four categories: Service to Individuals; Service to Businesses; Intergovernmental Affairs; and Internal Efficiency and Effectiveness. The Radio Narrowband program is in the category of Intergovernmental Affairs, given its emphasis on improved government-to-government wireless communications for public safety. That said, elements of the Radio Narrowband Program supports goals in the other three areas (citizens receive better response from public safety providers, the assets of business are better protected, and sharing results in new efficiencies).

Radio narrowbanding also supports the President's reform agenda. According to the President's Blueprint for New Beginnings, if reform is to help the Federal Government adapt to a rapidly changing world, its primary objectives must be a government that is citizen centered, results oriented, and market based.

I.B.2 President's Management Agenda strategic goals supported: Radio narrowbanding supports a key element in the President's Management and Performance Plan, namely expanded electronic government. The wireless systems used by this Department to perform their missions are critical elements of an expanding electronic government enterprise. Wireless is the edge of the electronic frontier, and an expanded electronic government requires its most vital functions, such as public safety, to be supported through up-to-date wireless systems. Given the mission-critical nature of these systems, they constitute critical infrastructures because their continued functioning is essential to domestic and economic security. As such, these systems are not only vital to traditional public safety but also to current day homeland security. In addition, because these systems are digital and highly integrated into enterprise networks, they are becoming an increasingly important part of the cyber-security proposition as well. In sum, the narrowband radio program intersects and supports several priority goals and arenas for the Administration.

I.B.7 Agencies and organizations affected by this initiative: US Department of the Interior DOI Office of the Secretary DOI University DOI Office of the Regional Solicitor DOI Office of Aircraft Services NIFC DOI Office of Surface Mining USGS FWS BIA BLM NPS BOR Minerals Management Service IBWC

I.B.8 Investment cost reduction or efficiency improvement: Increase Radio Frequency Spectrum efficiency.
Improve interoperability among all department components, as well as other Federal law enforcement agencies.

Maximize efficiencies and savings through shared infrastructure and common procurement strategies.

I.9.a List all other assets that interface with this asset.

I.9.b Have these assets been reengineered as No

part of this
investment
(Yes/No)

Requested Investment Summary of Spending for Project Stages (\$Millions)

BY 2005 Planning Resources:	1.99
BY 2005 Acquisition Resources:	33.86
BY 2005 Maintenance Resources:	3.98
BY 2005 Total, All Stages Resources:	39.83
Life Cycle Total, All Stages Resources:	334.55

DOI BUDGET YEAR 2005 IT INVESTMENT OVERVIEW

Investment Identification

Agency: Department of the Interior
Bureau: Office of the Secretary
Location in Budget: Summary of IT Investments
Account Title: Department of the Interior
Account Identification Code: 010-00-14-9999-0
Program Activity: DOI-Office of the CIO
Name of Investment: [Infrastructure and Office Automation](#)
Unique Investment Identifier: (IT Only)(see section 53) 01000020001200000404139

Investment Justification

I.A Investment Description: The Department's mission is to protect and conserve America's natural resources, provide access to the nation's natural and cultural heritage, honor trust responsibilities to American Indians, Alaska Natives and island communities, and conduct scientific research. These objectives are achieved through the Department's representative Bureaus, offices, and committees. The organization's widespread scope and responsibilities have resulted in a large, decentralized agency that operates from many locations broadly distributed across the United States, Puerto Rico, U.S. territories, and freely associated states. Much like the organization's overall structure, the current Information Technology (IT) architecture for DOI is quite large and extremely dispersed. Each Bureau and departmental office operates independently of the other, supporting individual network and information services and a wide range of IT systems and applications. Operational management of these diverse technological resources is a separate responsibility of each Bureau and office. The result has been a challenging environment to control and maintain. This fact was emphasized by recent legal proceedings brought against DOI, which scrutinized its information management and security practices. In response to the: challenging environment described above; Department's strategic goals with regard to: o mission areas; o e-government, o information technology, and o Interior Enterprise Architecture (IEA) President's Management Agenda, DOI is undertaking initiatives to consolidate and standardize its existing IT and network infrastructure with the goal of facilitating functionally-based (versus organizationally-based) electronic service delivery (see section I.B) by increasing information velocity, facilitating secure direct public interaction with DOI IT systems, and improving management of DOI's IT assets. This consolidation and standardization should yield future cost savings, productivity increases, and avoided costs. Following in this document is a description of the existing infrastructure of the Department in the context of a future vision of e-government and movement towards an enterprise wide view of DOI's infrastructure. Therefore, this document provides a baseline of DOI's current infrastructure and a discussion of future plans for DOI. In other words, this document describes future changes in the business of IT rather than use of IT in business. These changes are being driven by changing business needs as discussed in section I.B, below. Tiering from this document, specific 300 forms will be submitted as future plans ripen into actual projects (such as the Enterprise Services Network project). Finally, the Department is in the midst of developing a Department-wide E-Government strategy with the contractual assistance of the Accenture Company. The final strategy is expected to be approved by the end of FY 2003. The strategy and investments (that currently have an existing exhibit 300) noted below have all been through the DOI CPIC process, both at the Bureau and Departmental levels. In 2002, governance of the DOI CPIC process was significantly strengthened. The Department's CPIC executive review structure is multi-tiered, comprised of Bureau and Departmental investment review teams that: a) review the business and technology cases of new and on-going IT projects; b) identify duplication or possible crosscutting projects and project integration opportunities; and c) recommend projects for the DOI investment portfolio. Review and decision-making concerning IT projects is conducted initially by Bureau investment review teams.

All investments are subject to Bureau investment review team approval of newly proposed investments, and control throughout the life-cycle of ongoing projects. All major IT projects undergo consideration by voting members of the Executive CPIC (IT Management Council). For IT investments, the IT Management Council (ITMC) is the first review tier that is conducted at the Department level, once projects have been approved by Bureaus and their review teams and Bureau heads. The ITMC reports to the Secretary as needed on a variety of IT management and investment matters. The ITMC is composed of the Department CIO, senior Bureau CIOs, and the Department's Senior Procurement Executive. This body is co-chaired by the Department CIO and a Bureau CIO, on a rotational basis. After projects are recommended for approval by the Executive CPIC, the Management Initiatives Team (MIT), and the Management Excellence Council (MEC) are convened to review and approve or disapprove projects. Although the basic responsibility of these two groups is to address business and program-related issues, they hold special meetings each year specifically to review IT investments. The timing of these special meetings is such that the MIT evaluation followed by the MEC evaluation are complete prior to the Secretary's final budget decisions in early August of each year and the results are available to assist her in making those decisions. Funding requests for approved projects are included in the Department's annual budget submission to OMB.

I.B.1 Agency mission and strategic goals and objectives supported:

One of the DOI's most significant strategic goals is to provide services and information to our citizens electronically. This is because a successful E-Government implementation adds value to citizens and businesses and achieves a basic transformation as shown in the following graphic: (See graph in ITIPS Library) The ultimate goal of E-Government is to provide a transformation in how DOI conducts business and delivers services so that information and services are easy to obtain and use when a citizen, business, or other Governmental agency needs them.

A successful E-Government Program is significantly more than an IT effort. To achieve rapid delivery of information and services requires a transformation of the business of the enterprise not just a new IT system. It is also more than an individual Bureau effort. With the advent of the on-line environment, external parties expect service delivery on a consistent basis across a specific function without regard to organizational boundaries. The following graphic generally illustrates the current manual service delivery process. Citizens and businesses first interact with front-office staff. The front-office staff then interacts with other staff in the Back Office who interacts with any necessary automated systems: (See graph in ITIPS Library)

This direct interaction with DOI IT systems has profound implications for an infrastructure. The most significant of which is that the current decentralized infrastructure does not well support direct interaction.

Therefore, it is unreasonable to expect external parties to interact with multiple DOI/Bureau systems delivering the same service that is organized by an artificial boundary rather than function (which is the current situation). This view of service delivery requires a consolidated enterprise approach.

Due to the explosive growth of the Internet and use of PCs in over 40 percent of all homes in the United States, expectations of our employees, citizens, and businesses that transact with the DOI have significantly changed. Two of the hallmarks of the Information Age are the universal access to information and information velocity.

Many businesses have realized what makes customers choose one company over another is speed and accessibility of their information (being able to get information at any time, 24-hours a day, 7 days a week). Customers are simply seeking the best information possible in the fastest possible time. The keystone of success in the Information Age is the ability to add value to outputs by being able to quickly transform data and records into useful information and make that information widely accessible.

Therefore, organizations that have successfully made the transition to the 21st century do not conduct business either internally with their employees or externally with their customers in the same way now than they did before. In the private sector, these trends are being addressed by developing new and/or modified business processes and innovative uses of technology, as organizations recognize that information and services and the speed with which they are delivered are indeed an asset, as well as being able to rapidly adapt to changing business needs. These entities also recognize that they must provide universal electronic access to their business information at such times as their customers need it.

Information Velocity

Information velocity is a new term of the Information Age. In the late Industrial Age (1970's and 1980's), business cycle times were on the order of 7 years. In the late 1990's, and into the 21st century, cycle times for information change are expected to be on the order of 12-18 months. Clearly, the speed of change is accelerating. Information velocity is a measure of how fast data is collected, transformed from data into information, processed by the organization, and action taken to make results available to the public. Information velocity and universal access will be increasingly important factors over the next 5 years.

Transforming Data Into Valuable Information

The graphic to the right illustrates how successful organizations now add value to information. The successful organization collects its business data and adds relevance to the data to transform it into information. Information is then analyzed to produce knowledge which is then used for decisionmaking, leading to actions. Once accountability is assigned to actions, outcomes are generated by the organization. It is clear that those organizations that view information as a major asset do add substantive value at each step of this process. To ensure success in the Information Age, we must manage data in a structured way. Data must be collected to a common standard in order to be reliable, current, and relevant. These attributes are the key to sharing, linking, and, ultimately, integrating data and information from various sources to gain knowledge needed to address issues facing the organization. Without consistent data across the enterprise, it will be impossible to efficiently provide on-line services to the public. As our publics (citizens, businesses, and other governments) become more digitally connected, they will expect consistency across organizational boundaries. Consistent data is a step in meeting this expectation.

The DOI collects, analyzes, and records a tremendous amount of both data and information about the public lands and resources, ranging from land title to recreational usage to wildlife habitat. This business information is of great utility and value to a wide variety of other parties, including public land users; educational institutions; countless public interest groups; other Federal, State, Tribal, and local agencies; and the scientific community.

With valuable information and a high degree of information velocity, DOI can: form partnerships to obtain and exchange basic information among agencies at all levels and with other knowledgeable parties (which will reduce costs of repetitive data collection); provide information to the public to indicate where and how the agency is achieving its mission (the public's right-to-know), and collaboratively find and implement creative, lasting and supportable solutions to pressing public issues.

Other benefits come from many sources, which involve the use of DOI data/information in a variety of public and private applications are:

Lower costs of developing and populating a variety of databases (both DOI and external to DOI); o Less redundant data collection; o Reduced private purchase of data; Lower costs of carrying out tasks that require consistent data/information; o Reduced staff time because of data currency, availability, consistency, completeness, etc.; Improved quality of decisions made with the data/information; o Increased quality of data (i.e. current, seamless, consistent, etc.); o Uniform metadata availability; o Instantaneous, constant, and widespread data availability; and Increased use of the data/information o Greater numbers of entities using DOI data in existing applications o New applications will develop as a function of better data availability

In the past, efficiency benefits (cost-savings) alone are usually sufficient to give a positive net benefit and justify investment in consistent data. Even when this is not the case it is simply assumed that the full benefits will outweigh the costs. Estimation of the effectiveness benefits of consistent data is potentially a time-consuming and expensive process. This generally involves developing a metric for outcomes of many tasks that are, by their nature, non-market goods.

In short, DOI wants to deliver services and information to citizens, businesses, tribes and other governmental agencies, anytime, anyplace, anywhere. A basic, robust technical infrastructure is necessary to meet the objectives and expectations described above.

I.B.2
President's
Management
Agenda
strategic goals
supported:

DOI's infrastructure completely enables e-government. Without any infrastructure, electronic service/information delivery would be impossible. In regards to the other PMA goals. Human Capital, Competitive Sourcing, Financial Performance, and Budget and Performance Integration, the infrastructure provides the foundation for incorporation and use of information technology in the work processes that support those goals. While it could be argued that these goals could be achieved without the use of information technology, the time to achieve these goals would be increased and arguably then, the total cost would increase.

I.B.7 Agencies
and
organizations
affected by this
initiative:

This is not a direct multi-agency initiative. However, a sound and robust infrastructure that is based on up-to-date information technology facilitates participation in other multi-agency initiatives. It also is the foundation for recreation.gov, geospatial one-stop, E-Payroll, and volunteer.gov. Those four projects are dependent upon a responsive network, servers that are reliable, and software that executes rapidly.

I.B.8
Investment cost
reduction or
efficiency
improvement:

In regards to DOI's future vision, managing the DOI infrastructure on an enterprise basis will help to mitigate future additional costs of operating two service delivery mechanisms: (1) electronic service delivery and (2) DOI's traditional bricks and mortar service delivery. This mitigation will occur in the following areas:
Consolidated acquisition of hardware and software. By purchasing this technology at a consolidated level, DOI has been able to minimize (but not eliminate) impacts to mission areas by assuring that information technology is purchased at the best possible price Consolidation of operation of DOI's infrastructure. Consolidation, integration and centralization of non-core resources into a shared services model is widely considered to be the most efficient means of delivering support services, including IT, throughout large and geographically dispersed organizations in the private sector, and has become a well-established trend over the past decade. Consolidation and centralization reduce redundancies in physical infrastructure investments and enable senior management to more easily identify opportunities to develop or deploy common applications and business processes, promoting efficiency and productivity.
Cost reductions will result from physical consolidations of operations or resources to maximize performance over a larger base of resources. Cost reductions generally are a result of a direct budget reduction in personnel, operations and maintenance, and contract costs.
Productivity improvements will result from increased standardization of all IT infrastructure resources and services through a logical consolidation of IT policies, processes, procedures, and standards Department-wide. Productivity improvements generally result in increased availability of personnel time that can be re-directed to value-added activities that better support DOI's key missions and programs.
Cost avoidance will result from increased management of IT resources through a rational consolidation. Early investments are required in rational consolidations to yield later returns. Ultimately the greatest returns from rational consolidations are in cost avoidances which reflect costs that will not be incurred that would otherwise have been incurred if the investment was not made. Finally, this strategy incorporates an information infrastructure and systems management approach that is embodied in a set of best practices often referred to as Infrastructure Resource Planning (IRP), Enterprise Resource Planning (ERP), or Enterprise Systems Management (ESM). That will result in a high quality and efficient computing environment. These are the framework for standardizing processes and by using automated tools to track information flow will streamline critical information management functions making DOI much more efficient both in terms of funds and time, and assist in the transition from the de-centralized infrastructure of today to a more centralized future infrastructure. A high quality-computing environment is the result, since it is projected that the future infrastructure will be better at meeting end user requirements (i.e., investment prioritization, reliable systems; available systems; efficient sharing of information; and proper access to applications, data integrity, and secure information and applications). An efficient computing environment results because user requirements can be met in less time and with less labor compared to other information management approaches.

I.9.a List all

Since this document is prepared as a summarization of DOI's existing infrastructure, all of DOI's and its

other assets that interface with this asset.

Bureau's information technology assets interface with the infrastructure. This is due to a variety of reasons: 1. Networks provide a transport mechanism for data and information generated by DOI specialists in DOI's software applications; 2. Networks also provide a communications mechanism for both intra-DOI and external entities; and 3. Virtually all DOI employees use either the office automation suite and/or email package that is part of this document. It would be difficult and a potentially time-consuming task to provide an extensive re-listing of these portfolios in this document. To address the question of re-engineering requires two different answers. In regards to the existing infrastructure, the majority of information technology assets are at the Bureau level, and some of our Bureaus have performed official re-engineering while others have maintained the status quo for their investments. In regards to the future vision described in this document, DOI is committed to re-engineer work processes to achieve the objectives described above. Many in DOI are coming to the realization that offering services, data, and information in the on-line arena are a new responsibility and to accommodate that, work processes will need to be changed. The amount of change and the timeframe required to implement this change are directly related to available resources. Finally, in the exhibit 300 documents either recently or to be submitted in support of the future vision, the question of re-engineering is or will be addressed in detail.

I.9.b Have these assets been reengineered as part of this investment (Yes/No)

Yes

Requested Investment Summary of Spending for Project Stages (\$Millions)

BY 2005 Planning Resources:	63.32
BY 2005 Acquisition Resources:	.00
BY 2005 Maintenance Resources:	299.53
BY 2005 Total, All Stages Resources:	362.85
Life Cycle Total, All Stages Resources:	1422.33

DOI BUDGET YEAR 2005 IT INVESTMENT OVERVIEW

Investment Identification

Agency: Department of the Interior
Bureau: Office of the Secretary
Location in Budget: Summary of IT Investments
Account Title: Departmental Working Capital Fund
Account Identification Code: 010-00-14-4523-0
Program Activity: DOI-Office of the Chief Information Officer
Name of Investment: [Enterprise Service Network Project](#)
Unique Investment Identifier: 01000020003200100404139
(IT Only)(see section 53)

Investment Justification

I.A Investment Description: This project was submitted for its first review through the Department's CPIC process on June 13, 2003. In July 2003, the CPIC modified the planned phasing of the project activities and then approved the first phase, or useful increment. This Exhibit 300 has been updated to reflect those modifications and was submitted for a second review through DOI's CPIC process as of August 22, 2003.

As a result of deficiencies in the current, decentralized network environment, and consistent with the President's Management Agenda, the "Simplify and Unify" principle underlying it, and the Department's own strategic objectives as they relate to IT and e-government, DOI has elected to pursue investment in a single, enterprise-wide network infrastructure. On January 6, 2002, the Office of the Chief Information Officer of the Department of the Interior issued a statement amending the DOI IT Strategic Plan to include the consolidation of all bureau Wide Area Networks (WANs).

Specifically, consolidation of existing infrastructure and services via the Enterprises Services Network (ESN) investment is currently envisioned to achieve the following tactical objectives:

- Mitigate cyber security risks by reducing the number of DOI Internet access points
- Efficiently and effectively leverage departmental IT resources by implementing enterprise-centric network architectures and services (e.g., Help Desk)
- Achieve compliance with OMB A-130 and National Institute of Standards and Technology information security standards
- Collapse and redeploy bureau networks across a single network infrastructure that provides any-to-any connectivity and satisfies the business and mission requirements of all DOI bureaus
- Utilize a sustainable operational model that will facilitate department-wide consolidation of strategic IT services in the future (e.g., directory services, web hosting, messaging and data warehousing)
- Establishes the foundation for supporting a consolidated Enterprise Messaging Initiative
- Consolidated Web hosting services will provide citizens with improved access to public information and e-government initiatives

Although these objectives represent a sweeping change from the Department's present environment, they reflect its strategic management objectives of modernization, integration, and accountability for results. The potential benefits gained by migrating to a single enterprise network include: centralized, standardized and efficient network operations; enhanced accountability for network performance; a uniformly high level of security; the reduction of risks associated with the loss of knowledge capital due to high projected turnover rates for skilled IT staff; and improved technical support for network managers.

The current DOI network environment is highly fragmented and decentralized. Bureaus and Offices manage and operate their own internal and external networks using a variety of business models; some are Government-operated, while others are outsourced to a service provider. Though this environment provides the bureaus with considerable autonomy and flexibility, it also has resulted in duplicative investments in equipment and resources, non-standard processes, and overlapping applications. As OCIO plans future investments to modernize and integrate the Department's and bureaus' IT systems, the diversity of the existing WAN environment adds considerable cost and complexity to these efforts. For example, the deployment of common applications requires customized implementation processes that account for variations in each WAN. The

consolidation and centralization of IT services into a shared management model, moreover, is consistent with successful private sector efficiency initiatives and best practices. Research indicates that more than 60% of Fortune 500 companies have moved away from decentralized management of non-core or support functions, including IT, and implemented centralized "shared service" centers over the past decade. The primary business drivers behind this migration are improvements in overall cost savings (estimated at 20-25% on average for large companies) and management effectiveness and control.

In addition to cost and complexity, however, the present decentralized environment in DOI continues to pose very serious IT security challenges for the Department, which has mounted a major effort to remediate such deficiencies over the past year and a half. Failure to ensure a high level of network and data security could put the Department and its senior officials at risk of non-compliance with recent Court orders and expose DOI to substantial additional legal liabilities in the future. The accountability of the Department and its leadership, in turn, makes a decentralized WAN environment untenable from a management perspective, by diffusing responsibility for network operations and security across multiple bureaus and offices with varying policies, processes, and levels of compliance. Currently, for example, each of the Department's thirteen Wide Area Networks must complete its own Certification and Accreditation (C&A) process, which in addition to imposing a significant cost burden, makes tracking of progress and ongoing identification of deficiencies more difficult at the Department level. In addition, the deployment of common applications across multiple bureaus creates new security risks that must be identified and addressed. The ESN will be designed to include built-in security features, both at its perimeter and internally, to create a highly secure network. Additional investments outside the scope of the ESN initiative are planned that will add an additional layer of security by enabling user authentication and the compartmentalization of access to data and resources, e.g., Enterprise Active Directory. From a human capital perspective, the goal of consolidated and centralized network management and operations activities is consistent with the real resource constraints facing the Department. In several of its key mission areas (Resource Protection, Resource Use, Serving Communities) DOI has projected very high rates of turnover (41%) among skilled IT staff within the next several years, particularly within bureaus with the largest and most complex networks (US Geological Survey, the National Park Service, the Bureau of Reclamation, and the US Fish and Wildlife Service). Like many government organizations, DOI must contend with shortages in the skills and capabilities required to manage its IT operations at the same time that demands for expanded and modernized electronic services and information-sharing among partners, stakeholders, and government leaders are increasing. Moreover, many DOI bureaus are already thinly staffed in their network operations relative to their business needs and mission requirements. By consolidating and centralizing network resources, the ESN leverages human capital more efficiently across the Department.

A related benefit of the ESN is the ability to provide better and more consistent access to technical support services for network administrators. Currently, the quality and availability of Help Desk services varies considerably among bureaus, but is generally limited to standard workweek days and hours (e.g., Monday through Friday, 8am to 8pm). The ESN will provide Help Desk services on a 24/7/365 basis through a centralized Network Operations and Security Center (NOSC) to bureau network administrators. This improved support should translate into indirect cost savings, as issues are identified and resolved more quickly and consistently than in the current environment. A single 24/7/365 enterprise NOSC will reduce the requirement for bureau to maintain duplicate facilities and resources.

In the status quo environment, cross-bureau connectivity is established via a Virtual Private Exchange (VPX) located at the Department's National Business Center (NBC) in Denver and Washington, D.C., although not all bureaus and Offices are connected to the VPX. The advantage of this technology is its very low cost; however, it has a number of limitations that make it unsuitable as a modern backbone infrastructure, even if enhanced. First, it lacks built-in network management or security features, and so fails to meet DOI's strategic IT security objectives. Secondly, its bridging architecture is not easily scalable. Third, because it is comprised of a single node, it is vulnerable as a single point of failure. Fourth, it does not currently provide any-to-any access among bureaus, limiting collaboration and resource sharing.

Consolidation of the bureaus' WANs will be achieved through a systematic process of connecting existing bureau hubs to a service provider's shared network backbone to form an Enterprise Service Network. The ESN is envisioned to be a standards-based intra-network backbone that integrates existing networks, systems, and computing environments to provide secure and robust telecommunications between DOI, its bureaus and offices. Specifically, the ESN investment will achieve technical consolidation, centralization and sharing of all of the following DOI-wide resources identified in CIO Council Best Practices Committee guidance: network backbone, help desks, access circuits, WAN contracts, intrusion detection and firewall services, and network management resources. In addition, remote access users (employees, remote offices, and other stakeholders who must access DOI networks from remote locations) are considered an integral part of DOI's overall network community, and the ESN investment will encompass a common, Department-wide remote access solution as a critical component. Thus, the ESN will provide the data communications to support both intranet and Internet access across the Department.

Furthermore, DOI plans to leverage the ESN as the base infrastructure to enable additional consolidation of common department-wide network services and applications. As part of this effort, the ESN program includes the development of a network management and operations center to support delivery and assurance of the planned enterprise services. The Network Operation and Security Center (NOSC) that is currently serving the Bureau of Indian Affairs (BIA), can be expanded to support the operations and management of enterprise-wide services that DOI plans to provide to its bureaus. Network services that will be managed and operated from the NOSC and are included in the ESN concept and program include Internet access, remote access, and Help Desk operations. Just as importantly, the ESN will provide the foundational infrastructure that will directly enable the consolidation, centralization and sharing of additional resources across the Department, specifically including data centers, data storage and warehousing, web hosting, housing and content management. The ESN will also help the Department more effectively identify and manage software-licensing needs across the bureaus. The ESN will also support deployment of additional services such as active directory (to provide user authentication and enable DOI to compartmentalize access to resources) and email or messaging. While these additional services are outside the scope of the ESN investment, they have been identified as separate

investments and are being planned by OCIO in coordination with ESN development efforts. As a modernized, integrated network backbone infrastructure, the ESN will deliver very significant operational and foundational benefits to the Government. Centralized, standardized and consolidated network operations, including security, will also enable consolidation of the multiple network and security policies and procedures that exist in the current environment. As a result, DOI will be able to operate under one common security policy, and full compliance by all bureaus and offices will be much easier to achieve and monitor. In addition, the provisioning of future DOI and bureau-wide network services will be less costly and time-consuming, as standard applications can be deployed through a common implementation process, without the customization that is required in the current environment. Finally, by providing any-to-any access among all DOI bureaus, the ESN will facilitate communication between bureaus and with other stakeholders and improve their ability to share resources (data and applications) and collaborate on ongoing and future e-government initiatives. The ESN investment will be implemented in two phases. While the Department's CPIC committee approved Phase 1 in July 2003, Phase 2 will require separate approval by the CPIC based on the successful completion of Phase 1. Phase 1 encompasses three objectives: 1) establishment of a Department-wide Intranet 2) consolidation of all Internet connections across the Department and 3) the build-up and implementation of a Network Operations and Security Center (NOSC), leveraging the BIA's existing investment in a facility in Reston, Virginia. The reuse of the BIA Reston NOC will involve the creation of a separate Indian Trust service domain to ensure that trust information is properly contained and protected from non-trust environments. Completing these objectives in Phase 1 will enable DOI to achieve important benefits, most notably a reduction in its network security vulnerabilities and cost savings due to the consolidation of Internet access. Furthermore, the establishment of a Departmental intranet and a NOSC will enable the provision of 24/7/365 help desk support to bureau network administrators, which should result in more efficient and effective handling of day-to-day network security and performance issues. Phase 2 will encompass the secure connection to the ESN of the bureaus' approximately 150 bureau hubs or sites that are located primarily in cities, as well as their approximately 1500 remaining smaller sites, generally located in more remote areas. Once the ESN is fully implemented at the end of Phase 2, the Department will be able to realize the full value of its investment, as described above, including increased (incremental) security benefits (due to the connection of additional bureau sites and, ultimately, centralized configuration management), as well as significant cost savings and cost avoidance (due to improved security and longer-term reductions in redundant resources and processes).

I.B.1 Agency mission and strategic goals and objectives supported:

The Department of the Interior's mission is to protect and manage the Nation's natural resources and cultural heritage; disseminate scientific and other information about those resources; and honor its special responsibilities to American Indians, Alaska Natives and affiliated Island Communities. Particularly in an environment characterized by limited resources, the fulfillment of these diverse mission objectives depends increasingly on the ability to communicate and coordinate effectively across bureaus, with other governmental agencies, and with businesses, partner organizations and citizens. By providing a modernized, nationwide backbone infrastructure across the Department, the ESN initiative will provide crucial support to the Department and bureaus' ability to achieve their mission objectives. Underscoring the fundamental role of IT in effective organizational management, the ESN initiative primarily supports one of the Department's six overarching strategic goals, Manage for Excellence and Accountability, and its associated long-term objective of Using IT to Better Manage Resources and Serve the Public. The anticipated benefits of the ESN to key customers and stakeholders include:
 Providing robust, reliable network service across the Department, with consistent and effective technical support for direct users (network administrators within bureaus and Offices)
 Providing a consistent and appropriate level of network and data security
 Providing a modernized, flexible (scalable) backbone infrastructure that facilitates efficient communication and provides a strong foundation to support the growing information and electronic service needs of internal and external stakeholders
 Reducing the duplication of effort and resources inherent in a decentralized network environment
 Centralizing and consolidating the development of network and security policies and procedures to promote the adoption of consistent, Department-wide policies and ensure that problems are detected and corrected quickly
 Enabling or facilitating the integration of common business processes across bureaus
 Providing a common platform to facilitate the provisioning of future Department- and bureau-wide IT services and applications, such as a common email system
 Enhancing the accountability of network management for network performance, service quality and cost by adopting a centralized, rather than distributed, management model

I.B.2 President's Management Agenda strategic goals supported:

The President has called for "active, but limited" Government: one that empowers states, cities, and citizens to make decisions; ensures results through accountability; and promotes innovation through competition. According to the President's Blueprint for New Beginnings, if reform is to help the Federal Government adapt to a changing world, its primary objectives must be a Government that is Citizen-Centered, Results-Oriented and Market-Based. Funding of the ESN is justified by its support of three of the five key elements in the President's Management Agenda. The ESN fits into the following categories:
 Strategic management of human capital to "streamline processes and reduce layers between citizens/customers and decision-makers; redirect high level and administrative staff to front-line service delivery; link human resource decisions and structures to the agency's mission; build and sustain a high performing workforce; and/or increase employee satisfaction." Centralized management of a single enterprise network is expected to significantly reduce the overall level of effort required to maintain the existing, separately managed wide area networks within each individual bureau. This will enable the redeployment of scarce IT resources from day-to-day network management to more strategic roles and/or citizen-facing activities. Competitive sourcing to "achieve efficient and effective competition between public and private resources." The

development of the ESN creates an opportunity for the Department to determine the most efficient and effective means of delivering Wide Area Network services to its bureaus and offices, both in terms of physical infrastructure and network security and operations services.

Expanded Electronic Government to "reduce the reporting burden to businesses; provide an easy single-point-of-access to government services to individuals; share intergovernmental information efficiently; and automate internal processes to reduce costs." The ESN will enable secure, any-to-any connectivity between all bureaus and Offices. This will facilitate the efficient and timely sharing of information with internal and external stakeholders, and provide a modernized backbone infrastructure to support expanded collaboration on e-government initiatives.

I.B.7 Agencies and organizations affected by this initiative:

This is not a multi-agency initiative.

I.B.8 Investment cost reduction or efficiency improvement:

Although the implementation of the ESN will increase DOI's costs for WAN infrastructure and services in the near- to medium-term, the ESN investment will reduce costs and create much greater efficiencies in resource management and information sharing in the longer term. Consolidation, integration and centralization of non-core resources into a shared services model is widely regarded as the most efficient means of delivering support services, including IT, throughout large and geographically dispersed organizations in the private sector, and has become a well-established trend over the past decade. The ESN investment encompasses Department-wide consolidation and centralization across multiple categories of technical resources, including help desks, network backbone, access circuits, WAN contracts, intrusion detection and firewall services, and management resources. Consolidation in each of these areas should represent significant gains in efficiency and long-term cost savings. In addition, centralization and consolidation of the Department's WAN resources will enable senior management to more easily identify opportunities to develop or deploy common applications and business processes, further promoting efficiency and productivity. Just as importantly, resources and information can be more readily shared with other governmental entities and with other partners and stakeholders, which may lead to efficiency gains (benefits) outside of DOI.

The ESN investment will also generate very significant cost savings (in the form of cost avoidance) from improved network security. The ESN will be designed with appropriate layers of built-in security features, which will make it far less vulnerable to security breaches than the bureaus' existing WAN infrastructure. Further, centralizing both configuration management and day-to-day network operations into a single Network Operations and Security Center (NOSC) will result in reductions in the system downtime and reconstitution costs associated with security incidents. In the status quo environment, network security must be handled on a reactive, ad-hoc basis; deployment of new applications within bureaus creates new security vulnerabilities that must be identified and then addressed. A single, highly secure Department WAN, centrally managed on a 24/7/365 basis, will greatly reduce the level of effort required to maintain network security. There may also be cost avoidance realized from the direct and indirect legal consequences of network security failures at DOI. Although it is not possible at present to quantify this potential source of cost avoidance, it is certainly important to note that the Department's Court-mandated disconnection from the Internet in late 2001, as well as the more recent, related disconnection of some bureaus, clearly implies an economic impact both to the Department itself and to citizens and other stakeholders. In addition to the direct (and high) cost of legal fees, indirect costs such as lost productivity among DOI employees and stakeholders may be quite significant.

In addition, as a foundational infrastructure, the ESN lays the necessary groundwork to enable the consolidation, centralization and sharing of other IT resources across DOI. These resources include data centers, data storage and warehousing, web hosting, housing, and content management, and enterprise software licensing. A recent audit by the Department's Inspector General found, for example, that DOI currently spends between \$110 and \$220 million per year on its decentralized web hosting capabilities, a far greater figure than comparable public and private sector organizations. Consolidation of web hosting is therefore considered to represent an area of potentially large cost savings, but cannot be achieved without the foundational infrastructure of the ESN.

Finally, in considering the long-term costs and benefits of this investment, it is useful to keep in mind the larger context of IT capabilities within the Government. DOI projects a very high rate of turnover among its skilled IT staff over the next several years (41%). As business needs and mission requirements for expanded electronic services and information sharing increase in future years, DOI will be confronted with a very significant capability gap – with its own cost implications in the form of retention, hiring, and training – if it maintains the status quo. Redeploying scarce human capital to the most strategic roles while turning to the private sector for day-to-day network services addresses this situation efficiently and effectively.

I.9.a List all other assets that interface with this asset.

The ESN will interface with several other assets that will be reengineered as part of this project. The first interfacing asset is the Network Operations and Security Center (NOSC) that is currently supporting the BIA TrustNet initiative. The ESN will fully leverage this existing resource, by expanding upon its current physical and organizational infrastructure (planned to be fully operational by September 30, 2004) to provide network and security services across all bureaus and offices. Secondly, either the TrustNet network itself, or the US Geological Survey's service provider's (VBNS+) network may be expanded to create the ESN, depending upon the service provider and technology selected during the contracting phase. In the event that one of these two networks is used as a starting point for the ESN's infrastructure, it will be an interfacing asset and will be reengineered for that purpose. During the ESN implementation process, the ESN will interface with existing WAN equipment (circuitry, routers, etc.), which will be reengineered (i.e., WAN circuits currently connected to bureau or service provider networks will be reconnected in phases to the ESN to the extent feasible). Once implementation is complete, all existing WAN circuits will either be directly connected to the ESN or disabled.

The bureaus' Local Area Networks (LANs) will also interface with the ESN. The ESN will connect to the perimeter of the LANs. Additional security equipment (firewalls and intrusion detection systems) will be added as part of the ESN investment to enhance the security of this interface. Network administrators and managers within the bureaus will manage the interface between their LANs and the ESN. The ESN may improve the performance of the bureau LANs (e.g., faster Internet and intranet access), but this will depend on a number of factors specific to the bureaus or that are not currently known. As a transport system, the ESN will also interface with various types of DOI data (including Trust data, geospatial data, etc.). Finally, the ESN will interface with the existing Virtual Private Exchange (VPX) node at the National Business Center in Denver, which is currently being enhanced to provide additional security features.

I.9.b Have these assets been reengineered as part of this investment (Yes/No) Yes

Requested Investment Summary of Spending for Project Stages (\$Millions)

BY 2005 Planning Resources:	3.00
BY 2005 Acquisition Resources:	6.50
BY 2005 Maintenance Resources:	4.70
BY 2005 Total, All Stages Resources:	14.20
Life Cycle Total, All Stages Resources:	1095.44

DOI BUDGET YEAR 2005 IT INVESTMENT OVERVIEW

Investment Identification

Agency: Department of the Interior
Bureau: Office of the Secretary
Location in Budget: Summary of IT Investments
Account Title: Departmental Working Capital Fund
Account Identification Code: 010-00-14-4523-0
Program Activity: DOI Technology Services Division, Telecom
Name of Investment: [Interior Enterprise Communications System \(PBX\)](#)
Unique Investment Identifier: (IT Only)(see section 53) 01000020003200200404139

Investment Justification

I.A Investment Description: The Interior Enterprise Communications System as recommended is a voice communications platform for the Main and South Interior Buildings that will provide enhanced consolidated voice communications features to all occupants in the buildings. The system will also allow for future connectivity and support to external office locations in the Washington Metropolitan Area to the platform. The current status of this project is in the Planning Stage.

I.B.1 Agency mission and strategic goals and objectives supported: The acquisition of a DOI PBX platform will provide DOI with maximum interoperability and minimize redundant stand-alone voice system purchases. In addition, the PBX functionality will enable DOI to provide its customers with improved voice services and response times.

This system supports agency mission and strategic goals by serving communities with an enterprise solution for DOI officials, employees, to communicate effectively with the public.

DOI has established IT Initiatives to better support the missions and goals of its Bureaus and Offices. The acquisition and implementation of a DOI PBX platform will comply with DOI's IT Initiative: Enterprise approach to providing financial and operational accountability; Enable a IT architecture to provide a common, multipurpose, standards-based infrastructure; Institute a centralized management process that tracks and maintains technical data, IT program, acquisition, and billing process; Develop a strategy that ensures the availability of emerging technologies and evolving service requirements Promote convergence of voice and data technology and infrastructure Provide emerging value-added services to the Department and Bureaus, via a standards-based infrastructure

I.B.2 President's Management Agenda strategic goals supported: This system supports agency mission and strategic goals by providing improved quality service to a multi-bureau customer base and supports the Secretary's modernization goal resulting in efficient, cost effective delivery and utilization of telecommunications voice services and provide a single point of access to the services servicing the Government and the taxpayers. Collaborative efforts are being sought with potential customers. Have begun informal marketing for collaborative partnership with OPM and the National Science Foundation. Market research is planned for the Federal Home Loan Bank Board.

This initiative for a Department-wide telecommunications system meets the requirements of supporting the

President's Management Agenda for E-Government by simplifying and unifying redundant activities within DOI.

I.B.7 Agencies and organizations affected by this initiative:

No.

I.B.8 Investment cost reduction or efficiency improvement:

This investment will reduce costs and improve efficiencies by acquiring state-of-the-art technology to replace (30) individual 12 to 15 year old telephone key systems and multiple voicemail systems into one consolidated Voice Communications Platform for sharing of services; eliminating multiple maintenance contracts; improving management and infrastructure of systems; providing system reports for optimizing services and guarding against fraud, waste and abuse; saving on overall system, operational, maintenance, and response time and costs; and direct local control and 24 / 7 monitoring of system and services for controlled outcomes in responding to customers and mission requirements . Replacement of multiple key systems at \$2,400,000 for equipment plus circuits and operating cost over a ten-year life cycle totaling \$17,812,000. By installing the new enterprise platform the department would pay \$11,332,800 for the system equipment circuits and operating cost over a ten-year life cycle for a savings of \$6,000,000.

I.9.a List all other assets that interface with this asset.

* Voice Mail Services *Multiple GSA Centrex telephone lines

I.9.b Have these assets been reengineered as part of this investment (Yes/No)

Yes

Requested Investment Summary of Spending for Project Stages (\$Millions)

BY 2005 Planning Resources:	.02
BY 2005 Acquisition Resources:	1.65
BY 2005 Maintenance Resources:	0
BY 2005 Total, All Stages Resources:	1.67
Life Cycle Total, All Stages Resources:	16.82

DOI BUDGET YEAR 2005 IT INVESTMENT OVERVIEW

Investment Identification

Agency: Department of the Interior
Bureau: Office of the Secretary
Location in Budget: Summary of IT Investments
Account Title: Department of the Interior
Account Identification Code: 010-00-14-9999-0
Program Activity: DOI - Office of the Chief Information Officer
Name of Investment: [Electronic E-mail Archive System \(EEAS\)](#)
Unique Investment Identifier: 01000020003200600116054
(IT Only)(see section 53)

Investment Justification

I.A Investment Description: This project is in response to the Special Master's Opinion filed on July 30, 2001. Both the Opinion and Motion are filed in the Cobell v. Norton case pending in the U.S. District Court for the District of Columbia. This Justification also addresses the need for the DOI to satisfy the Court that this agency has secured a reliable method for email archive and retrieval. The Electronic Email Archive System is a critical tool to enable Interior to meet our Trust responsibilities to American Indians. The Electronic Email Archive system provides a reliable method for email archival, retrieval, document production from historical files and the ability to restore and access legacy information now backed to tape by the designated bureaus, assurance and evidence that future emails and their attachments will be reliably, consistently and automatically captured, archived and retrieved in a safe, secured and entrusted environment. This project has been approved by the Management Initiatives Team on August 2, 2002.

I.B.1 Agency mission and strategic goals supported: The Mission of the Department of the Interior is to protect and provide access to Nation's natural and cultural heritage by serving communities and fulfilling trust responsibilities. Interior's bureaus play a vital role in accomplishing the overall mission of the Department. This project supports the following Department strategic goals by: Fulfilling Indian Trust Responsibilities by providing reliable, verifiable ready available data for the Court, FOIA and DOI employees. Interior intends to provide assurance and evidence that future emails and their attachments will be reliably, consistently and automatically captured, archived and retrieved in a safe, secured and entrusted environment.

I.B.2 President's Management Agenda strategic goals supported: The following is how the EEAS system will support the President's Management Agenda: Expanded E-Government: EEAS promotes Expanded E-Government by maximizing government productivity gains from technology by outsourcing all electronic mail for Indian Trust bureaus and offices eliminate the cost and need to create daily back-up of tapes, once excepted by the court. This data will be stored in a searchable format increasing the quality of data needed for the Court.

I.B.7 Agencies and organizations affected by this initiative: Yes, this project is being use by all bureaus/offices which handle Indian Trust data. These bureaus/offices are: 1. Bureaus of Indian Affairs 2. Bureau of Land Management 3. Bureau of Reclamation 4. Minerals Management Service 5. National Business Center 6. Office of Hearings and Appeals 7. Office of the Special Trustee for American Indians 8. Office of Surface Mining Reclamation and Enforcement 9. Office of the Solicitor

I.B.8 Investment cost reduction or efficiency: Currently, it is unduly burdensome to search backup tapes for electronic mail messages. Interior maintained that the production of paper printouts of the electronic messages rendered "unreasonable and duplicative" the need to search backup tapes. The EEAS system will provide a means to search the information stored on

improvement: backup tapes.
 E-mail users must save email in two ways. They must print and save the e-mail in hard copy and they must save the electronic version in user mailboxes until it has been captured on a backup designated for indefinite retention. The EEAS system will save DOI many man hours from manually printing and saving Trust related documents. There will also be an enormous saving by reducing the number of tapes that must be backed-up daily.

I.9.a List all other assets that interface with this asset. Email systems in all bureaus/offices within the Department of the Interior except for the Office of the Inspector General, and the mail systems within the National Park Service, Fish and Wildlife Service and US Geological Survey.

I.9.b Have these assets been reengineered as part of this investment (Yes/No) No

Requested Investment Summary of Spending for Project Stages (\$Millions)

BY 2005 Planning Resources:	.00
BY 2005 Acquisition Resources:	.36
BY 2005 Maintenance Resources:	1.50
BY 2005 Total, All Stages Resources:	1.86
Life Cycle Total, All Stages Resources:	14.06

DOI BUDGET YEAR 2005 IT INVESTMENT OVERVIEW

Investment Identification

Agency: Department of the Interior
Bureau: Office of the Secretary
Location in Budget: Summary of IT Investments
Account Title: Departmental Working Capital Fund
Account Identification Code: 010-00-14-4523-0
Program Activity: DOI - Office of the Chief Information Officer
Name of Investment: [DOI-Wide Certification and Accreditation \(C/A\) Program](#)
Unique Investment Identifier: 01000020003200700404140
(IT Only)(see section 53)

Investment Justification

I.A Investment Description: To help DOI fulfill its mission objectives and to comply with Federal IT Security guidance and regulations, DOI is developing an enterprise wide, standardized, centrally managed and funded IT system Certification and Accreditation (C/A) program to improve accountability and reduce IT security stovepipes.

The U.S. Department of the Interior is a large, decentralized agency which invests over \$800 million each year for IT support of its business activities. Historically, IT security has been controlled and administered from a decentralized perspective utilizing nonstandard approaches and reactive IT security funding. This has resulted in inconsistent IT security where inadequately protected information has occasionally been compromised at substantial cost to DOI. For the past three years DOI has reported the lack of an adequate information security program to Congress as a material weakness.

The Interior-wide C/A Program ensures a secure environment for all of the Department's IT assets including information, information systems and information infrastructure. Certification and accreditation is required to verify that security controls to protect information assets are in place and that responsible officials are held accountable for the secure operations. The C/A Program has defined a standard methodology that will be used to certify and accredit all Interior Major Applications (MA) and General Support Systems (GSS).

Security Prioritization of DOI IT Systems. The C/A Program has grouped DOI systems into categories based on the criticality of the IT system in meeting the agency's mission responsibilities, the type/sensitivity of the information processed, transmitted, and stored by the system, and the need for protective measures. In the "Priority Pyramid" below, the uppermost triangle represents those systems deemed most critical to DOI's mission; these will undergo C/A first, followed by those systems in the middle and lower tiers of the pyramid. (See diagram in ITIPS Library)

Legislation Mandating C/A. The Federal Information Security Management Act of 2002 (FISMA) and OMB Circular A-130, Appendix III require that federal government agencies protect information and information systems from unauthorized access, use, disclosure, disruption, modification, or destruction in order to provide:

- integrity, which means guarding against improper information modification or destruction, and includes ensuring information nonrepudiation and authenticity;
- confidentiality, which means preserving authorized restrictions on access and disclosure, including means for protecting personal privacy and proprietary information; and
- availability, which means ensuring timely and reliable access to and use of information.

The C/A Program implements the FISMA and OMB information security requirements throughout DOI.

C/A Defined. Certification is a comprehensive evaluation of the technical and non-technical security features and other safeguards of an IT system and establishes the extent to which a particular design and implementation meets documented security requirements. Only certified systems may be accredited. Accreditation is the formal declaration by an approving authority that an IT system is compliant with established security requirements and is approved to operate using a prescribed set of safeguards. The accreditation is supported by a technical evaluation, security evaluation, risk assessment, contingency plan, and signed rules of behavior. C/A is an on-going requirement; re-accreditation must occur whenever there is a significant change in an IT system, and/or at least once every three years.

C/A Benefits to Federal IT Security. In FY2001 OMB identified six common government-wide IT security weaknesses in its summary report to Congress. The C/A Program helps strengthen each Interior IT security weakness, as shown in the following table.

IT Security Weakness Area: Agency senior management attention to IT security C/A Program Effort to Address Weakness: The C/A Program manager reports IT security progress and concerns directly to the CIO and Deputy Assistant Secretary.

IT Security Weakness Found: IT security performance measures C/A Program Effort to Address Weakness: The C/A Program incorporates a set of summary and detailed performance measure and milestones which are actively utilized to manage the C/A Program.

IT Security Weakness Found: Security education and awareness C/A Program Effort to Address Weakness: The C/A Program has provided IT security training to DOI security managers and has trained and certified many Certified Information Systems Security Professionals (CISSP).

IT Security Weakness Area: Integration of security into CPIC C/A Program Effort to Address Weakness: The centrally-funded C/A Program requires that system managers specify funding requirements for C/A and report on the use of that funding.

IT Security Weakness Found: Security of contractor services C/A Program Effort to Address Weakness: C/A Program contractors will be required to operate at capability maturity model (CMM) level 2.

IT Security Weakness Area: Detecting, reporting, and sharing information on vulnerabilities C/A Program Effort to Address Weakness: As a centrally-managed program with contractor partners, the C/A Program serves as a conduit for the dissemination of IT security best practices across DOI.

The DOI Standards-Based C/A Process. The C/A Program's C/A process mirrors the National Institute of Technology (NIST) process as defined in NIST Spec Pub 800-37. The C/A Program's process consists of four distinct phases, pre-certification, certification, accreditation, and post-accreditation. Each of these phases is addressed in every system accreditation (for both operational legacy systems and new development systems) irrespective of where the system is in the life cycle. The following diagram illustrates the four phases of the C/A Program's process and the specific outputs associated with each phase. (See diagram in ITIPS Library) The majority of DOI's systems have neither been accredited nor been designated an interim approval to operate (IATO). The C/A Program intends to grant IATO to all of its high-risk systems by FY2004, with full C/A by 2006. The performance measures tables later in this exhibit provide additional information on the C/A Program's performance measurement program. The following diagram illustrates the tasks associated with each phase in the C/A Process. (See Diagram in ITIPS Library) **Role of Centralized Funding.** The C/A Program will centrally fund C/A activities throughout DOI. This will provide incentives to Bureaus to achieve system accreditation since they will need to demonstrate how they will use the funds and provide performance targets to the C/A Program manager prior to the disbursement of funds for C/A activities. A formal approach and strategy for the disbursement of C/A Program funds to Bureaus is under development. The central funding of the C/A Program will streamline program management by locating all C/A management activities in a single location. This will increase IT security oversight and ensuring a standardized approach to C/A activities DOI-wide.

C/A Program Roles and Responsibilities. The roles and responsibilities of the individuals in the C/A Program are outlined in the following table. Additional information is available in the Policies and Procedures Guide for the C/A Program.

Role: Designated Approving Authority (DAA) Responsibility: Senior manager with the authority to formally approve the operation of an IT system at an acceptable level of risk **DOI Title:** Departmental CIO (designated by the DOI Secretary)

Role: Certifier Responsibility: Technical expert that determines the level of residual risk and makes an

accreditation recommendation to the DAA DOI Title: Bureau CIOs

Role: System Owner/Program Manager Responsibility: Responsible for the system throughout the lifecycle and ensures that the security requirements are integrated in a way that will result in an acceptable level of risk to the operational infrastructure DOI Title: System Owners, A-130 Project Manager

Role: System Security Manager Responsibility: Day-to-day security of an IT system including physical security, personnel security, incident handling, security awareness, training, and education DOI Title: Installation IT Security Manager, Regional IT Security Officer, Bureau IT Security Manager

Role: System Manager Responsibility: Ensuring that adequate managerial, operational, and technical safeguards are maintained within their areas of responsibility DOI Title: System Administrators

Contracting Approach. In FY2003 the C/A Program developed a standardized project plan and statement of work (SOW) that C/A contractors will use to bid on DOI C/A work. Key aspects of the SOW include a task list that maps to DOI's C/A process and NIST Special Publication 800-37 . The SOW will be firm fixed price to place the contract execution risk on the contractor, thereby reducing risk to the government. The SOW contains a standard "C/A Project Plan and Task List" that can be utilized to further refine IT system requirements, establish specific performance milestones, and to help program, system, and security staff manage the C/A effort. The contractors who will use this SOW to bid on C/A services understand DOI, and most are small, qualified firms who meet DOI performance standards.

The C/A Program and DOI's CPIC Cycle. This program is currently in the Select phase of DOI's CPIC cycle.

I.B.1 Agency mission and strategic goals and objectives supported:

A secure IT computing environment, made possible by the C/A Program, supports every DOI mission, goal, and objective as it strengthens the IT tools used by DOI employees to deliver services to DOI stakeholders. The C/A Program's specific support for DOI's Management mission area is described below.

Management Accountability: Accountability will be improved because funding for C/A will be predicated on the accomplishment of milestones in system plans, and the C/A Program explicitly makes system owners responsible for their system's security.

Modernization: The C/A Program will support the modernization of DOI through the application of state of the art security tools and best practices to the systems DOI relies upon for mission accomplishment.

Customer Value: DOI relies on secure IT systems to accomplish strategic goals and thereby deliver value to its external customers. A standardized, centrally-funded C/A Program supports this process by strengthening the IT tools used by DOI staff to serve DOI stakeholders.

Integration: Integration is supported by standardizing, streamlining, and centrally funding C/A activities across DOI. The program will foster the sharing of lessons learned and best practices across bureaus and offices agency-wide.

Workforce skills in place to accomplish DOI goals: IT security education and training is a key component of the C/A Program. The program will help ensure that managers and IT security staff have the required skill sets to establish and maintain secure DOI computing environments.

I.B.2 President's Management Agenda strategic goals supported:

The DOI C/A Program directly supports the achievement of the five President's Management Agenda strategic goals:

PMA Goal: Strategic Management of Human Capital C/A Program Support: The Adopt Information Technology Systems initiative is designed to promote the adoption of knowledge management systems by government agencies to capture the knowledge and skills of retiring employees. The C/A Program will improve human capital management by providing training to employees to meet new demands. It will also help preserve government functional knowledge by ensuring that the information contained in these systems is secure and not subject to compromise.

PMA Goal: Competitive Sourcing C/A Program Support: DOI, like other government agencies, is required to outsource many support activities. For those "inherently governmental" activities, the C/A Program will allow DOI to operate more like a private sector firm by applying industry-developed IT security best practices to its

operational IT systems.

PMA Goal: Improved Financial Performance C/A Program Support: IT security failures, such as that of the Indian trust management system, negatively impact agency financial performance through the siphoning off of dollars that could be used for mission accomplishment. A comprehensive C/A Program at DOI will ensure that all existing and new systems are resistant to unauthorized access and disclosure, preventing security breaches and avoiding their costs.

PMA Goal: Expanded Electronic Government C/A Program Support: The success of electronic government programs is directly tied to the security of the systems that support it. Security lapses compromise information safety and user trust. The DOI C/A Program will provide the solid security foundation needed for e-gov initiatives to expand throughout the agency by validating security controls and making managers accountable for them.

PMA Goal: Budget and Performance Integration C/A Program Support: A enterprise wide C/A Program at DOI will improve agency performance by linking funding for system certification and accreditation to accomplishment of milestones in system plans. Without C/A, systems cannot become operational; therefore under the C/A Program managers will be motivated to demonstrate performance.

I.B.7 Agencies and organizations affected by this initiative:

The scope of the C/A Program is DOI-only. However, DOI is composed of many bureaus and offices that serve specialized customer bases and operate in a decentralized environment. From this perspective the program has multi-agency attributes. The benefits of a unified and standardized C/A Program will be available to DOI bureaus and offices as they continue to serve their customers.

Some DOI IT assets are available to other Federal agency partners or are offered as services through memoranda of understanding; therefore, the IT security benefits generated by the centralized, standardized process will spill over to those agencies that are end users of DOI systems. The partnering strategies for this project reside at the MOU level between DOI and the partnering agencies.

I.B.8 Investment cost reduction or efficiency improvement:

Along with people, information is one of the most valuable of DOI assets. DOI bureaus and offices rely on information residing in DOI information systems and groups of systems to do their jobs every day. Protecting DOI information assets from unauthorized disclosure, intentional and unintentional, is an absolute imperative to the achievement of DOI's mission, goals, and objectives. Similarly, the integrity of DOI information is critical and often involves millions of dollars of assets. Systems that do not have the rigorous security controls in place that result from a centrally managed certification and accreditation process are at risk from security breaches.

The C/A Program will avoid the following costs:

- Expenditures to recover from system security compromises
- Litigation costs to defend the agency from losses associated with security breaches
- Financial losses from fraudulent activities committed when systems are compromised
- Loss of faith in the integrity of DOI's information.

The C/A Program will achieve the following efficiency improvements:

- The application of proven IT security best practices that have a track record of success
- A standardized, repeatable methodology that becomes easier to implement as C/A participants become more familiar with it
- The accountability and traceability for performance of security responsibilities and implementation of security measures during the entire lifecycle of an IT system
- C/A activities are conducted utilizing standardized, consistent, and replicable methodologies and processes
- Multiple or common IT security weaknesses that occur across several IT systems can be identified and addressed by a single or set of security countermeasures
- A higher degree of confidence and trust between internal and external business partners resulting in more sharing of information and reduced information search costs
- End user productivity improves when security breaches are minimized since they avoid having to work in a degraded mode, or not at all, while the IT staff tries to contain and repair the breach
- Improved IT staff productivity results when staff are not diverted from mission needs by security breaches
- Auditors will be able to audit a standardized process and its outputs; therefore auditing can be done more efficiently.

The C/A Program avoids other negative mission-related consequences of security breaches, such as the stigma associated with the need to report IT security as a material weakness, the loss of public trust, and the loss of financial audit credibility.

I.9.a List all other assets that interface with this asset. The C/A Program is a collection of standardized operation procedures including budget and performance management that will allow the agency to certify and accredit its major applications and general support systems. These systems represent the assets that will interface with the C/A Program. Major applications and general support systems have been reengineered and consolidated; however those activities have not been performed as part of the C/A Program.

I.9.b Have these assets been reengineered as part of this investment (Yes/No)

Requested Investment Summary of Spending for Project Stages (\$Millions)

BY 2005 Planning Resources:	
BY 2005 Acquisition Resources:	12.54
BY 2005 Maintenance Resources:	
BY 2005 Total, All Stages Resources:	12.54
Life Cycle Total, All Stages Resources:	38.60

DOI BUDGET YEAR 2005 IT INVESTMENT OVERVIEW

Investment Identification

Agency: Department of the Interior
Bureau: Office of the Secretary
Location in Budget: Summary of IT Investments
Account Title: Enterprise Architecture
Account Identification Code: 010-00-14-4523-0
Program Activity: DOI - Office of the Chief Information Officer
Name of Investment: [Interior Enterprise Architecture Program Development and Management](#)
Unique Investment Identifier: 01000030001300100304103
(IT Only)(see section 53)

Investment Justification

I.A Investment Description: Major changes have taken place during FY 2003 affecting the architecture program, and in particular, reporting of tasks and costs on the architecture program. This Exhibit 300 report now encompasses all architecture work underway across the enterprise, including several component sub-architectures instead of only the cross-cutting Department-wide and multi-bureau initiatives, the costs have increased significantly. This is a change from last year's submission, where we addressed the costs for only the cross-organizational / Department-wide architecture. The changes do not reflect a substantial increase in the previously reported costs, but rather, coverage of costs heretofore not included. The changes causing the increase include:

1. Interior has now developed a single integrated architecture approach for the Department, rather than unconnected additional architectures for individual bureaus. Consequently, costs reported last year in the Exhibit 53 for bureau-level and Indian Trust Architectures are now included in this submission. As a result, although the IEA costs have not escalated significantly, the inclusion of these sub-architectures displays significantly increased costs in this business case.
2. Interior has chosen to realign its enterprise architecture to conform to the new FEAF models, requiring a re-direction of the work.

The Interior Enterprise Architecture (IEA) project responds to the requirement in the Clinger-Cohen Act of 1996 and OMB Circular A-130 for each Executive Agency CIO to establish an enterprise architecture. This project involves development and implementation of a major program throughout the agency, affecting all levels, all business lines, and all technology of the Interior Department.

Structure of the Business Case:
It is important to note that, unlike many other major IT investments, the architecture project is not a systems development project. Consequently, the areas of the Exhibit 300 addressing specific system requirements are not applicable to this project.
An automated tool will be acquired and used to house the architecture. The cost of acquiring the tool are included in the overall figures presented in this Exhibit 300.
The IEA is an all- encompassing, federated architecture for the Department. It incorporates sub-architectures from bureaus, offices, lines of business, Department-wide requirements, and collaborative efforts crossing bureau and office organizational boundaries.
This business case reflects and encompasses that diversity. Costs for the project are derived from:
The Office of the Secretary's Working Capital Fund
Bureau personnel's participation on Departmental working groups, of which there are several
Bureau specific funds spent on architecture artifacts to support bureau-unique business requirements
Indian Trust Architecture Funding from the Office of the Special Trustee for American Indians

Architectural Approach:
At Interior, a bureau-centric and bureau-funded agency, use of a collaborative approach is imperative. DOI adopted a federated model for architecture development, as shown in the IEA Funding Diagram, located in the ITIPS Resource library. All I bureaus and offices are involved in development of the Departmentwide portions of the architecture; multiple bureaus are involved in cross-bureau portions; and individual bureaus

will develop architectural components for business areas unique to their organization. The Departmentwide and cross-organizational portions of the architecture must conform absolutely to the IEA requirements, unless a waiver is obtained. The bureau-specific portions of the architecture must conform to the IEA requirements to the extent possible, and bureaus must justify the portions that must be unique because of specific bureau business requirements.

Funding for the Department-wide architectural components consists of (1) working capital fund contributions from the bureaus and offices, and (2) bureau expenses for salaries, travel, and work performed by working group representatives attending meetings and participating in development.

Funding for the multi-bureau initiatives will be partially funded through the WCF, with supplemental funding provided by the bureaus. Examples of cross-cutting / multi-bureau lines of business involve Indian Trust Management, Wildland Fire Management, Recreation, and Royalty Revenue Management.

Finally, bureau-unique components will be funded by each individual bureau as needed.

Phased Implementation

Because of Interior's size, variety of missions, and decentralized nature, the entire architecture could not all be established at once. Interior supports over 50 of the lines of business described in the Federal Enterprise Architecture Business Reference Model. Consequently, a phased approach has been taken.

-- Background work on the Interior Enterprise Architecture included considerable research in the past, and an initial baseline document was published in 1999 through a collaborative Interior-wide project. However, until the Y2K conversion was completed, funding available for architecture was limited.

-- In early 2000 the project resumed and was included as a Departmental Management Goal in the Departmental Strategic Plan. In 2001, an accelerated approach was adopted in response to requirements from OMB. The CIO adopted the META Group approach to accelerated architecture development. Using that approach, the first step undertaken was to conduct extensive interviews of business management throughout the agency. CIO representatives and bureau/office representatives working as the Interior Architecture Working Group, worked with contractor assistance on these interviews. A Common Requirements Vision was published in October 2001, which presented agreed-upon business strategies, business drivers, environmental trends, business information requirements, and business technology requirements. In addition, in September 2001, the CIO established an Interior Architecture Strategy Board composed of senior business executives from throughout Interior. The Board's function was to make decisions and direct activities of the Architecture project. It also identified and published a Governance Process in June 2002 for the architecture. In July 2002, the Strategy Board merged with the Interior Management Initiatives Team (MIT).

A second step in the IEA development was identification of a Conceptual Architecture, published in January 2002, with associated architecture principles for Interior, rationales for each principle, and associated implications. In addition, ten domains were identified as critical to the architecture; five business-focused domains and five technology-focused domains. Inter-bureau domain teams were formed to develop the Technical Reference Model. The domain teams identified which of the Principles applied to each particular domain, tailored the rationale and implications to specifically address each domain, and identified associated products and services. Products and services for each domain were classified as preferred, contained, research and development, obsolete, or rejected. All the Domain work was incorporated into a draft Technical Reference Model, published in May 2002 and approved and finalized in August 2002. On September 5, 2002, the Chief Information Officer (and co-chair of the Information Technology Management Council) issued a memo to Bureau and Office Heads and Chief Information Officers requiring use of and compliance with the TRM.

In June 2002, the IT Management Council (ITMC) agreed to function as the group responsible for technical review and approval of the Architecture. The IEA initiative has been approved by the ITMC and the MIT. In December 2002, the high level architecture concluded with a Conceptual Migration Plan which was approved by the ITMC and delivered to OMB.

The Draft TRM was used, for the first time, in a pilot effort to assess and guide selected business cases for information technology (Exhibits 300, e.g. FMSMP, MAXIMO) for budget year 2004.

Products:

Together, the Common Requirements Vision, Conceptual Architecture Principles, Technical Reference Model, and Conceptual Migration and Implementation Plan present Interior's view of the to be architecture, including business level, information level, solution level, and technology level requirements.

Current Focus and Approach:

For this BY 2005 submission, Interior has modified its approach, based on direction from OMB. Specifically:

1. Formerly, the IEA had addressed all cross-organizational investments, and several individual bureaus planned to prepare individual architectures for their bureau-unique functions. In the 2004 budget pass back, OMB directed Interior to focus on a single, Department-wide Enterprise Architecture approach, rather than several separate architecture initiatives. With the pass back direction from OMB, Interior realigned this project to incorporate all functions into the single federated IEA. Bureaus will still address unique requirements, but those will be coordinated with and approved by and developed in accordance with the requirements of the IEA. The bureau sub-architectures are components of the IEA. The Indian Trust Architecture project is following and participating in the IEA guidance, requirements, data standardization, and all requirements of the IEA. All of these efforts are now coordinated and combined into this single business case.

In order to make acceptable progress in development of the architecture, we are now using a top down / bottom-up approach. The Department level IEA team is focusing on establishing the structure and approach for developing the architecture; defining data management policies and practices; establishing a suite of automated tools to collect all architecture artifacts from all sources; establishing standards and templates for populating the tools; adopting and embedding the FEA models into the IEA; defining several high-level lines of business; leading the revision and refinement of the IEA TRM; and coordinating and consolidating the work performed by the bureaus and the Indian Trust Architecture endeavors. The OCIO enterprise architecture team performs the preponderance of its work in coordination with both business and technical personnel from across the entire Department to collaboratively achieve the needed structure and reliable information for the architecture. Bureaus and offices participate through the Interior Architecture Working Group, the Interior

Business Architecture Team, the technically-oriented Domain Architecture Teams, and the Popkin Tool-focused Integrated Project Team.

2. Interior has chosen to adopt the FEA Models as the basis for the IEA models. Publication of the Federal Enterprise Architecture Models during 2003 has led to a certain amount of re-design as Interior strives to conform to the new and evolving Federal models. Similar adjustments will occur as the Federal models continue to evolve.

3. During 2003, the architecture program was expanded to include a data resource management function and a narrow scope business definition effort, thus involving additional contractors. It is every intention that these functions proceed into future years, particularly 2004 and 2005, in order to put in place an architecture of sufficient detail and to provide the clear direction and guidance needed in this agency. Also, we are working to identify centers of excellence wherever they may occur in the agency, and leverage their expertise and perhaps products, as appropriate. Currently, the development approach from the Bureau of Land Management is being piloted in the OCIO for the business architecture.

I.B.1 Agency mission and strategic goals and objectives supported:

The Interior Enterprise Architecture Development and Maintenance Program is the critical tool to enable effective delivery of information products and services to DOI customers and stakeholders. In fact, the overriding purpose of the architecture is to ensure that investments in IT solutions directly support the mission and goals of Interiors business community. Among the expected benefits of the EA are: Implementation and use of IT solutions that directly support and enhance delivery of Interiors products and services to its customers, partners, and the American Public; continuous improvement in efficiency of information management, quality, and processing; continuous streamlining and review of the number and variety of systems, databases, and applications; and continuing review and improvement of the architecture itself to assure direct alignment with and support of the agency business mission and goals. Thus, it supports all of the Departments strategic goals.

New Agency Strategic Plan

In 2002 Interior undertook development of a revised Strategic Plan. Mission areas in the forthcoming plan are: Resource Protection, Resource Use, Recreation, and Serving Communities. An adjunct goal supporting the others is Management. The Interior Enterprise Architecture, now engaged in its mid-level development, will align to the impending strategic plan. An activity-based costing initiative currently taking place throughout the agency will be used to ensure alignment. In the revised Strategic Plan, Interior architecture specifically falls under Management. In particular, it is addressed in the End Outcome Goal Modernization. As with the earlier Plan, establishment and application of the enterprise architecture in reality directly supports all of the Departments goals, and fosters their achievement.

Applying the Architecture

In September 2002, the Chief Information Officer issued a memorandum to Bureau and Office Heads and Chief Information Officers stating:

Now that the TRM [Technical Reference Model] is final, effective immediately, all crosscutting Interior IT initiatives (new development or enhancement) must follow the TRM. The TRM is intended to act as a catalyst for IT personnel to better engage non-IT organizations in discussions around tradeoffs and priorities within the established governance structure. The TRM is a critical component of developing a more systematic approach to acquiring, deploying, operating, and managing IT at Interior. My vision is to use the TRM as one of the primary tools for making sound IT investment decisions. The ITMC will use it as the basis for approving /disapproving crosscutting IT project proposals. Simply put, it will serve as a modernization blueprint for ensuring our initiatives are in direct alignment with the business vision for Interior.

In other words, the TRM is the foundation on which all DOI Crosscutting IT initiatives must be based. The Enterprise Architecture Team worked with the CPIC personnel and contractors, as well as the IEA working group in the bureaus to provide the guidance necessary for conformance with the IEA.

During the BY 2005 budget cycle, all major IT investments processed by DOI were provided with specific instructions regarding conformance with the Common Requirements Vision, the Conceptual Architecture Principles, and the Technical Reference Model. All proposed investments have been evaluated against standardized specific criteria established by the EA Team to measure compliance with all levels of the architecture, thus incorporating the architecture squarely into the CPIC process.

In addition, Development and Implementation of the Enterprise Architecture is, itself, a strategic goal of the Department. It is included in the Management sections of the DOI Strategic Plan

Moreover, because the Enterprise Architecture is collaboration-focused in its development and also promotes and facilitates collaboration, it is the chief enabler for the Secretary of the Interiors four Cs program of Conservation through Collaboration, Cooperation, and Coordination.

Finally, the architecture is the enabler to design and implement IT solutions in accordance with the Presidents Management Agenda goal of e-government.

As stated in Interior's Strategic Plan,

By focusing on the Presidents Management Agenda and the Secretary's vision and management principles, the Department has developed an integrated strategy to improve performance and reduce inefficiency and duplication. Interiors management improvement strategy closely follows the Presidents Management Agenda, tailoring it to the unique mission of the Department.

I.B.2 President's Management Agenda strategic goals supported:

-- E-Government:

The Interior Enterprise Architecture (IEA) project directly responds to the Presidents Management Agenda goal of promoting e-government. The architecture will provide the roadmap for all future information technology solutions to business needs. The architectural guidance, standards, principles, and priorities will guide the selection of IT solutions, ensuring that they are in concert with the Administrations Management Initiatives. The IEA also will map to the Federal Enterprise Architecture and will identify all actual and potential e-government candidate systems through orderly analysis of business functions and associated technology solutions. Interior is the managing partner of two Federal e-gov projects; Recreation one-stop and Geospatial

one stop, which are collaborating members of our data resource management, business, and technical architecture efforts.

-- Financial Management and Strategic Management of Human Capital

The IEA Project also collaterally supports the goals of Improved Financial Performance, and Strategic Management of Human Capital. Major projects in these two areas are planned for Interior, and the IEA Team has been working with these projects on (1) establishing and demonstrating conformance with the Architecture and (2) determining the potential impacts of the projects on the IEA. Until Interior and the OMB are comfortable with the architecture at Interior, these projects were placed on hold until a financial management architecture was defined.

Also, during FY 2003, a business architecture was constructed and approved for the domain of financial management. Through this effort, as well as adoption of the FEA PRM, financial accountability has been significantly strengthened.

-- E-gov and Outsourcing

A robust, clear, and useful Enterprise Architecture is the key to successful projects and to successful information sharing with and/or serving other Federal Agencies, State and Tribal Governments, Industry (such as the Oil and Gas Industry), and the Citizenry. Interior is loading the business and data information into an automated repository tool, based on the structure of the FEA models. The other layers will also be loaded in a continuing effort. Through analysis of the information gathered, the architecture community and Agency management will have the information needed to identify which areas of business and/or IT should be candidates for outsourcing, for coordinating into future e-gov projects, and/or coordinating, consolidating, or eliminating to improve in-house efficiency and provide better service to the citizens and to our partners in government and industry.

-- Budget and Performance Integration:

Interior made significant progress in 2003. The strategic planning, e-gov, PART initiative, and strategic planning communities all were educated and encouraged to participate in the FEA Architectural program through understanding and application of the Performance Reference Model and the Business Reference Model, as well as through budget participation in both performance management, linking it to budget, linking both to the IEA and to the FEA. All are working from the same information and striving toward the same goals; i.e. demonstrating through the budget, capital planning, architecture, and GPRA processes how initiatives clearly demonstrate linkage to the business, the budget, and performance.

Finally, the IEA provides the framework, direction, standards, and guidelines to Interiors projects supporting over half of the Presidents e-Gov goals, as described in Part II.A.1.E., directing their conformance and contribution to not only the Interior Enterprise Architecture, but also to the PMA initiatives as well as the Federal Enterprise Architecture.

I.B.7 Agencies and organizations affected by this initiative:

The Interior Enterprise Architecture will initially address cross-cutting initiatives in the Department of the Interior. The project itself is currently confined to Interior, but is fully coordinated with OMB and the Federal Enterprise Architecture Framework and its Business Reference Model. A few examples of interagency relationships include management of wildfires, environmental coordination, and energy development and management. Interior is the managing partner for the Recreation One-stop and Geospatial One-Stop E-Gov initiatives, and is an active participant in many others.

I.B.8 Investment cost reduction or efficiency improvement:

The Interior Enterprise Architectures entire premise and goal is to improve the efficiency of delivery of information to customers within and without DOI for use in making decisions, transacting business, conducting commerce, visiting agency resources, obtaining permits, distributing revenues, making reservations, sharing scientific information, and a vast array of other services. In addition, through establishment of effective standards, procedures and processes, the quality of information available will improve markedly, thus providing the citizen and other partners with more accurate, timely and consistent information. As the architecture evolves to increasing levels of granularity and is used to guide the restructuring of business as well as IT applications and infrastructure, cost reductions are expected in, at a minimum, areas such as: time required for research; coordination and delivery of services and information; IT system acquisition, maintenance, and operation; coordination of information, and analysis and reconciliation of inconsistent information. Moreover, the Architecture will promote and enable ease of use for Interiors customers as well as employees and partners. To date, several projects have been initiated for standardized purchases of equipment and agency wide software products, achieving considerable savings. (These are discussed in separate individual Exhibit 300 Business Cases.)

The quantitative benefits that will result from this foundation effort are to be reaped in the future IT solutions undertaken and maintained throughout the Agency. Projects will be selected and prioritized according to the architecture framework. Only appropriate, well-managed, business responsive initiatives will be approved. For example, as part of the enterprise architecture initiative, Interior has undertaken several enterprise acquisition investments to standardize hardware and/or software. Examples include: Active Directory, Standardized Platforms, standard database management system, and standardized architecture tool. Savings will accrue throughout the Department because of (1) lower prices through mass purchases and (2) reduced training and maintenance costs through standardization.

Quantitative Benefits Observed To Date:

Calculated average annual return for the IEA project, based on (1) bulk purchase agreements and (2) elimination of unnecessary initiatives or systems conservatively estimated is:
\$ 9.000 Standardized desktop, laptop, and storage configurations \$10.000 Standardized and bulk purchase of ORACLE data base licenses \$.834 Standardized OA Software across the agency \$14.000 Estimated savings through elimination of unneeded projects at a projected 2 per year
Total \$35.000 M annually, projected potential savings

I.9.a List all other assets that interface with this asset. All of Interiors assets will ultimately interface with this asset. Current areas of emphasis include the Activity Based Costing initiative, the Federal Business Management System, the Human Resources Strategic Plan, the Financial and Business Management System, e-Government, the Fire Management Initiatives, the Indian Trust Assets, Recreation.gov, Geospatial.gov, law enforcement coordination initiatives, and others.

I.9.b Have these assets been reengineered as part of this investment (Yes/No) Yes

Requested Investment Summary of Spending for Project Stages (\$Millions)

BY 2005 Planning Resources:	2.73
BY 2005 Acquisition Resources:	7.82
BY 2005 Maintenance Resources:	2.72
BY 2005 Total, All Stages Resources:	13.27
Life Cycle Total, All Stages Resources:	105.04

DOI BUDGET YEAR 2005 IT INVESTMENT OVERVIEW

Investment Identification

Agency: Department of the Interior
Bureau: Bureau of Land Management
Location in Budget: Summary of IT Investments
Account Title: Management of Land and Resources
Account Identification Code: 010-04-14-1109-0
Program Activity: Minerals, Realty & Resource Protection
Name of Investment: [LR2000 \(Legacy Systems\)](#)
Unique Investment Identifier: 01004010701040100117057
(IT Only)(see section [53](#))

Investment Justification

I.A Investment Description: OMB Circular A-16, revised August 19, 2002 designated DOI, Bureau of Land Management (BLM) as the lead agency for:

Federal Land Ownership Status: Federal land ownership status includes the establishment and maintenance of a system for the storage and dissemination of information describing all title, estate or interest of the federal government in a parcel of real land mineral property. The ownership status system is the portrayal of title for all such federal estates or interests in land.

Public Land Conveyance (patent) Records: Public land conveyance data are the records that describe all past, current and future right, title and interest in real property. This is a system of storage, retrieval and dissemination of documents describing the right, title and interest of a parcel. The Department of the Interior, Bureau of Land Management (BLM) has the responsibility for maintaining the land and mineral records for the United States that today amounts to more than a billion records. On March 22, 1999, BLM rehosted Case Recordation, Status, Legal Land Description and Mining Claim Recordation Systems in a Y2K compliant web-based application. During 2002 Cadastral Survey Field Note Index, Bond and Surety and Master Name components were added to the LR2000 System. The LR2000 Systems were deployed prior to the initiation of the Capital Planning and Investment Control (CPIC) process (\$7.72 million for planning and acquisition of the system). Figures displayed in this Exhibit 300 are risk-adjusted. LR2000 is a business-essential national system in Steady State (Operations and Maintenance) and will be funded until it is replaced.

A description of the Legacy Systems re-hosted into the LR2000 System is as follows:

Case Recordation (CR) is an automated system for recording data for land and mineral, title, use authorization, and withdrawal cases. Data includes serial number, case type, name and address, legal land description, case actions, and general remarks.

Legal Land Description (LLD) is an automated system that describes land in accordance with a cadastral or special survey, including principal meridian, township, range, section, survey type, number and suffix, aliquot part and nominal location, acreage, and geopolitical information.

Mining Claim Recordation System (MCRS) is an automated system containing more than three million cases including data about mining claims recorded with BLM. Data includes serial number, mining claim name, claimant name and address, legal land description, case actions, and general remarks. MCRS includes

records of lode and placer mining claims, mill sites, and tunnel sites located on public lands.

Status (ST) is an automated system that contains historic data pertaining to title cases that transferred surface and/or mineral rights to or from the U.S., and restriction of U.S. rights, such as withdrawals, segregations, and classifications. Cadastral Survey Field Note Indexing System (CS) is an automated system that provides an on-line index to the survey field note records maintained throughout BLM. Data associated with surveys include surveyor, date of survey, contract number/date, approval date, boundary, principal meridian, township, range, subdivision, survey type, survey number, claim name and claimant name. Bond and Surety System (BS) is an automated system that contains bond and surety information for branch offices of BLM. Its purpose is to streamline, accelerate, and facilitate bond actions, by making information readily accessible.

Master Name System (MN) is an automated system that contains names, addresses, name entity identification numbers (NIDS) and the category of name entities which classifies the name as either (A) Agency, (C) Corporate, or (P) Private. LR2000 is accessible from both the Intranet (<http://LR2000.blm.gov>) and Internet (<http://www.blm.gov/LR2000>) via a web browser such as Netscape or Internet Explorer. The LR2000 website was designed for those who work in the oil and gas industry, mining industry, land and mineral title companies, utilities, state and local governments, interest groups, and members of the public that require access to BLM land and mineral records. LR2000 provides more than 5,100 reports per month to the public. LR2000 provides land managers with prompt access to data pertaining to authorizations and ownership of Federal resources (25,000 standard reports and 15,000 Ad Hoc reports per month).

The LR2000 System is in Steady State (Operations and Maintenance) and is currently undergoing an E-Government Strategy Review.

The BLM Information Technology Investment Board (ITIB) has approved an E-Government initiative to provide web-based permit application, payment, and status services to our customers using the LR2000 system as the foundation. This initiative will enable public users to submit electronic applications, pay application fees and rentals electronically and monitor the status of such transactions. Building off the LR2000 foundation and other work, BLM has completed an analysis for re-hosting the Automated Lease Management System (ALMS) into an electronic process for permitting rights-of-way and calculating rental fees. ALMS processes about 24% of all cases in LR2000 (about 146,500 cases out of 611,600). It is planned that the ALMS effort will prototype both the business and technical issues surrounding this web-enabled project. It will also provide the base for processing other permit types (both lands and minerals) in an interim common use authorization module.

The LR2000 E-Government (ALMS) initiative will commence in 4th Qtr FY 2003. Salient points of this initiative are as follows:

- Work with national program leads and key field users to identify the forms each program will utilize during the various stages of a use authorization workflow process.
- Work with the eForms project, to analyze the identified forms, to identify the requirements for designing generic/common application /permit/compliance forms that will serve the needs of the programs.
- Use these identified priorities in the eForms project to orchestrate timely generation of automated application/permit/compliance forms. Electronic forms must allow for screen-fillable data entry (automatic data collection) that will be exportable to appropriate systems.
- Link seamlessly ALMS and LR2000 to the eForms web site, allowing customers transparent access (one-stop shopping) to electronic forms, rather than having to navigate multiple web sites.
- Relate the application/permit/compliance form input data to the appropriate databases, establishing requirements for new data elements and rules for setting and enforcing constraints for data quality control.
- Develop specifications for ALMS use authorization workflow process.
- Add new data fields to the appropriate databases and modify or add reports as identified by program requirements.
- Utilize e-Authentication project's findings to ensure secure industry-standard data transmission/encryption and electronic signature/authentication for electronic application/permit/fee payment processes.
- Utilize previously gathered ALMS business requirements to develop software specifications and proceed with design, development, and testing of a prototype use authorization module for rights-of-way.

-Accept on-line customer payments of fees, providing for financial support/tracking/customer notification of online payments associated with use authorization workflow module.

-Develop full use authorization tracking capabilities, allowing applicant/permittee/lessee to check status of applications online.

-Deploy ALMS as E-Gov enabled system, allowing rights-of-way customers to conduct electronic transactions with BLM.

-Gather requirements for a common use authorization workflow module that would accommodate the lands and minerals actions of other BLM Programs.

-Apply the common E-Gov components of ALMS to other lands and minerals records currently hosted in LR2000.

I.B.1 Agency mission and strategic goals and objectives supported:

OMB Circular A-16, revised August 19, 2002 designated DOI, Bureau of Land Management as the lead agency for:

Federal Land Ownership Status:

Federal land ownership status includes the establishment and maintenance of a system for the storage and dissemination of information describing all title, estate or interest of the federal government in a parcel of real land mineral property. The ownership status system is the portrayal of title for all such federal estates or interests in land.

LR2000 Status provides BLM with an operational system for electronic management of federal land ownership records. The overwhelmingly positive reception of LR2000 with both internal and external customers enhances the potential for multi-agency consideration.

Public Land Conveyance (patent) Records:

Public land conveyance data are the records that describe all past, current and future right, title and interest in real property. This is a system of storage, retrieval and dissemination of documents describing the right, title and interest of a parcel. LR2000 Status and Case Recordation provide BLM with operational systems for electronic management of public land conveyance records.

The LR2000 System was deployed in FY 1999 as part of Y2K. LR2000 contains seven legacy systems, Case Recordation, Mining Claim Recordation, Status, Legal Land Descriptions, Bond and Surety, Master Name and Cadastral Field Note Index. LR2000 maintains Public Land Conveyance records (attribute data) for past, current and future rights, title and interest in real property. LR2000 contains case abstracts (attribute data) for land and mineral cases, tracking activities on federal lands. LR2000 is providing the basis for being able to manage all federal land ownership status and conveyance of interests in real property.

LR2000 supports the Department of the Interior's mission The U.S. Department of the Interior mission is to protect and manage the Nation's natural resources and cultural heritage; provide scientific and other information about the resources; and honor its special responsibilities to American Indians, Alaska Natives and affiliated Island Communities. LR2000 supports this mission by providing records of the extent of the Nation's land and mineral ownership (LR2000 Status). LR2000 also maintains a record of use authorizations (LR2000 Case Recordation and Mining Claim Recordation) for the Nation's natural resources.

LR2000 supports the Secretary's vision The Secretary's vision for effective Interior program management focuses on conservation, cooperation, consultation and communication.

-LR2000 supports conservation of our Nation's land and its resources by providing a record of past and current activities authorized on public lands.

-LR2000 supports cooperation in terms of interaction, collaboration and partnerships with others by providing Internet access to the LR2000 Systems and interfaces to other Bureau and Department systems to facilitate the exchange of data in support of the management of our Nation's resources.

-LR2000 supports consultation with others to provide the most current information associated with the use of our Nation's resources by providing Internet access to the LR2000 Systems and full data exports to our

partners in land management.

-LR2000 supports communication to reach out to others in the exchange of information relevant to the use authorizations of our Nation's resources.

LR2000 supports the Secretary's key business principles Key business principles guiding Interior's operations are customer value, accountability, modernization and integration.

-LR2000 supports customer value by providing a record of past and current title and use authorization actions for our Nation's resources, a foundation that enables management decisions that ensure effective use of the resources.

-LR2000 supports accountability by collecting clear performance measures associated with use authorizations of our Nation's lands and minerals, providing reportable units via interface with the Bureau's Management Information System (MIS).

-LR2000 supports modernization by employing innovative resource enhancing strategies to facilitate the ongoing evolution of use authorization processes that rely on common, re-usable components in the management of our Nation's resources.

-LR2000 supports integration thru the identification and consolidation of repetitive processes among LR2000's component systems and other Bureau and partner systems to achieve economies of scale and enhance customer service/confidence.

LR2000 supports the Department's draft Strategic Plan for FY 2003 ñ FY 2008: The draft Strategic Plan is organized around the Department's principal mission areas: Resource Protection; Resource Use; Recreation; and Serving Communities.

-The Department's stewardship responsibilities involve the complicated task of determining where, when, and to what extent renewable and non-renewable economic resources on public land should be made available. LR2000 supports Resource Protection and Resource Use by providing land status data (improving the Department's information base) and a record of land and mineral resource authorizations (ensuring effective lease and permit management) for the Nation's public lands, providing management with the appropriate and timely information to effectively promote/manage resource protection and use while sustaining a dynamic economy. With the Nation experiencing unprecedented demands for oil, natural gas and coal, employees of the Department make daily decisions that affect the well being of our nation and quality of life of our citizens (effectively manage and provide efficient access and development/production). As a national major application, LR2000 provides the tools/data (improved technical assistance) to enable the BLM to field a highly skilled, accountable, modern, functionally integrated, and citizen-centered results oriented workforce (improved resource management and stakeholder satisfaction).

-LR2000 supports Serving Communities by providing land status data and information from our Nation's land and mineral cases to Internet customers on a daily basis. As the Internet expands, there will be an increasing demand for online government services. LR2000 is currently being reviewed to identify processes that can be conducted online (i.e., applications, fees, permits and filings).

LR2000 supports the DOI IT Strategic Goals: -Interior's Information Architecture modeling the Departmental and bureau business enterprise and future technical direction. LR2000 has been correlated with the Bureau Architecture at a high level. The Analysis phase provides the information to allow the LR2000 systems to be correlated, in more detail, to the lower levels of the Architecture.

-IT Security assuring continuous information to Interior customers especially for mission critical systems; LR2000 application and data security is divided into 3 levels:

-System access and security measures applied to the NIRMC computer system.

-Users local computer ñ local computer and office security

-Application The LR2000 applications and data require additional security screening. LR2000 has implemented the BLM Application Security System (BASS), which is a component-based security module. BASS will manage user passwords and access to BLM web-based applications and will provide a reusable module to replace the application-specific login procedures.

-E-government providing customer-centric services, information, and products using the Internet, the World

Wide Web, and other electronic media. LR2000 currently provides Intranet/Internet access to internal/external customers seeking land and mineral case data for actions involving the public lands. The BLM ITIB has approved an E-Government initiative to provide web-based permit application, payment, and status services to our customers using the LR2000 system as the foundation. This initiative will enable public users to submit electronic applications, pay application fees and rentals electronically and monitor the status of such transactions. Building off the LR2000 foundation and other work, BLM has completed an analysis for re-hosting the Automated Lease Management System (ALMS) into an electronic process for permitting rights-of-way and calculating rental fees. LR2000 is currently undergoing an E-Government Strategy Review to identify other business processes that can be conducted electronically at the customer level.

-Capital Planning and Investment: aligning mission and program technical requirements with budget formulation and execution of IT capital investment acquisitions. The LR2000 operation and maintenance are aligned with the Bureau's land management Mission and Goals to provide the best available technology at minimum investment to accomplish business responsibilities.

BLM Mission and Strategic Goals: LR2000 supports BLM's mission and strategic goals of managing the public lands by providing attribute data extracted from land and mineral case files to the National Integrated Land System (NILS) for displaying federal land ownership status. This will provide the foundation for decision-making, analysis and management to meet the requirements of BLM's mission and goals.

I.B.2 President's Management Agenda strategic goals supported:

Strategic Management of Human Capital LR2000 supports making government citizen-centered, by providing citizens with direct access to records of BLM land and mineral transactions via the Internet. Citizens are no longer required to travel to BLM Public Rooms to obtain access to the information. Information is centralized in digital form and easily accessible for reporting and distribution, while consolidating system administration activities. To ensure that BLM records are as complete and accurate as possible, data management plans are being implemented across the agency, recording the case knowledge of retiring employees. LR2000 is helping BLM DOI improve overall customer service, performance and citizen satisfaction, while improving customer confidence in the information they receive.

Competitive Sourcing While the processing and management of use authorizations represented in LR2000 are inherently government processes, LR2000 supports improving and expanding competition, by utilizing competitive performance-based contracts for systems design, development and maintenance.

Improved Financial Performance The LR2000 interconnections with BLM's Collection and Billing System (CBS) and Management Information System (MIS) support timely and accurate financial transactions involved with the management of Federal lands.

Expanded Electronic Government LR2000 supports the advancement of the E-Government strategy by providing citizens with direct access to records of BLM land and mineral transactions via the Internet. LR2000 is contributing to improving DOI's use of the Web and moving to a comprehensive enterprise-wide e-government business organization. An E-Government Strategy Review is currently underway to identify each of the LR2000-related business processes that are initiated by customers and by BLM officials, to serve as candidate processes for electronic transactions. The LR2000 System is participating in the efforts to identify common business lines for exploring common IT solutions (aggregate cost savings from shared process solutions). LR2000 is providing the capability for capturing and displaying BLM's land and mineral case data in an electronic environment with the potential for multi-agency consideration, reducing the costs of managing Federal lands.

Budget and Performance Integration LR2000 is providing the capability to track performance measures associated with the management of BLM's land and mineral cases. LR2000's interconnection with the Management Information System is providing DOI BLM managers with the reportable performance units accomplished at each level of the organization, providing a crucial component in achieving accountability and performance-based budgets.

I.B.7 Agencies and organizations affected by this initiative:

U.S. Department of Agriculture Department of the Interior

I.B.8 Investment cost reduction or efficiency improvement:

BLM conducted a post deployment Cost Analysis, resulting in the identification of an annual savings of \$600,000. This savings is primarily from the reduction in staffing required to maintain a centralized system, instead of previously partially distributed legacy systems.

Investment in the LR2000 System provides:

- Capturing and displaying of Federal land and mineral case data in an electronic environment,
- DOI BLM Managers with timely and complete case information for consideration in land use management decisions,
- Citizens with readily accessible records of Federal land and mineral transactions. Information is in digital form and easily accessible for reporting and distribution,
- Opportunities to reduce costs of managing federal lands,
- Improved customer confidence in the information they receive,
- Opportunities to improve use of the Internet and move to a comprehensive enterprise-wide e-government business organization.
- Opportunities to identify common business lines for exploring common IT solutions

I.9.a List all other assets that interface with this asset. DOI BLM Automated Fluid Mineral Support System (AFMSS) DOI BLM National Integrated Land System (NILS) DOI BLM Collection and Billing System (CBS) DOI BLM Management Information System (MIS) DOI MMS MRM Financial System

I.9.b Have these assets been reengineered as part of this investment (Yes/No) Yes

Requested Investment Summary of Spending for Project Stages (\$Millions)

BY 2005 Planning Resources:	.00
BY 2005 Acquisition Resources:	.60
BY 2005 Maintenance Resources:	1.64
BY 2005 Total, All Stages Resources:	2.24
Life Cycle Total, All Stages Resources:	25.55

DOI BUDGET YEAR 2005 IT INVESTMENT OVERVIEW

Investment Identification

Agency: Department of the Interior
Bureau: Bureau of Land Management
Location in Budget: Summary of IT Investments
Account Title: Management of Land and Resources
Account Identification Code: 010-04-14-1109-0
Program Activity: Minerals, Realty and Resource Protection
Name of Investment: [National Integrated Land System](#)
Unique Investment Identifier: (IT Only)(see section 53) 01004010301040400117057

Investment Justification

I.A Investment Description: The National Integrated Land System is a service-first initiative of the Bureau of Land Management (BLM) and the U.S. Forest Service (FS). The Project Charter was signed in March 1999 by the four Project Sponsors, Jack Arthur, Director, IRM and Jack Craven, Director, Lands, for the Forest Service and Gayle Gordon, Assistant Director, IRM and Pete Culp, Assistant Director, Minerals, Realty & Resource Protection, for the Bureau of Land Management. The NILS Project is directed and managed by the BLM and FS in partnership with a consortium of other federal, state and local governments, and other interested parties active in the fields of surveying and parcel management. The BLM, FS, and Consortium, in cooperation with Environmental Systems Research Institute (ESRI) is developing a common data model (based on Federal Geographic Data Committee (FGDC) standards) and a toolset for managing land records in a Geographic Information System (GIS) environment. The data model and toolset would fulfill BLM and FS core business requirements critical to meeting the common mission objective of both agencies. Deployed as a national system, NILS would facilitate the collection, management and sharing of survey and title record information (OMB Circular A-16 lead responsibilities) across all levels of government and the private sector while protecting and enhancing current investments in cadastral data. GeoCommunicator, the first NILS module, was deployed in June 2001. The first release of the Survey Management and Measurement Management (SM/MM) modules was deployed September 30, 2002. The second release of SM/MM and the first release of the Parcel Management (PM) module will be deployed on September 30, 2003.

I.B.1 Agency mission and strategic goals and objectives supported: The National Integrated Land System (NILS) is a joint project between the BLM and the USDA Forest Service in partnership with states, counties, and private industry to provide business solutions for the management of cadastral records and land parcel information in a Geographic Information System (GIS) environment. The goal of NILS is to provide a process to collect, maintain, and store survey and parcel-based land information that meets the common, shared business needs of land title and land resource management (OMB Circular A-16 lead responsibilities). The BLM and Forest Service vision is to make parcel-based land information available for managers, specialists and the public in an organized automated system. An automated NILS will provide agencies, our partners and the public with better tools for efficient multiple-use management of the national forest and public lands. NILS will provide the user with tools to manage land records and cadastral data in a Field-to-Fabric manner. The user will be able to exchange data between field instruments and the enterprise database, manipulate this data into lines and points, and create legal land and parcel descriptions to be used in mapping and land record maintenance. Data and information will be accessible via the Internet for research and analysis. NILS involves the development of a common data model that unifies the worlds of surveying and GIS. This unification is fundamental for land records managers and maintainers of cadastral mapping databases to improve the accuracy and quality of the data to create standard land descriptions and cadastral data that can be used by anyone.
OMB Circular A-16, revised August 19, 2002, designated DOI's Bureau of Land Management as the lead agency for: Federal Land Ownership Status: Federal land ownership status includes the establishment and

maintenance of a system for the storage and dissemination of information describing all title, estate or interest of the federal government in a parcel of real land mineral property. The ownership status system is the portrayal of title for all such federal estates or interests in land. (NILS and LR2000) Public Land Conveyance (patent) Records: Public land conveyance data are the records that describe all past, current and future right, title and interest in real property. This is a system of storage, retrieval and dissemination of documents describing the right, title and interest of a parcel. (NILS and LR2000) Cadastral: Cadastral data describes the geographic extent of past, current, and future right, title, and interest in real property, and the framework to support the description of that geographic extent. The geographic extent includes survey and description frameworks such as the Public Land Survey System as well as parcel-by-parcel surveys and descriptions. The NILS project will provide a system of storage, retrieval and dissemination of the previously identified efforts that OMB Circular A-16 has designated for the BLM.

NILS supports the Department of the Interiors mission The U.S. Department of the Interior mission is to protect and manage the Nations natural resources and cultural heritage; provide scientific and other information about the resources; and honor its special responsibilities to American Indians, Alaska Natives and affiliated Island Communities. NILS supports this mission by providing geospatial records of the extent of the Nations land and mineral ownership and use authorizations.

NILS supports the Secretarys vision The Secretarys vision for effective Interior program management focuses on conservation, cooperation, consultation and communication. NILS supports conservation of our Nations land and its resources by providing geospatial records of past and current activities authorized on public lands. NILS supports cooperation in terms of interaction, collaboration and partnerships with others by providing Internet access to geospatially display of federal land ownership records and interfaces to other Bureau and Department systems to facilitate the exchange of data in support of the management of our Nations resources. NILS supports consultation with others to provide geospatial records of the most current information associated with the use of our Nations resources. NILS supports communication to reach out to others in the geospatial display and exchange of information relevant to the use authorizations of our Nations resources. NILS supports the DOI Strategic Goals:

Resource Protection and Resource Use - NILS will provide a spatial representation of the nations public lands. Data to support the geometry will be linked to the GIS data. Survey data, parcel data, status, ownership will be available for analysis via the Internet. The NILS tools will provide management with the appropriate information to effectively manage resource protection and use.

Recreation - The data in NILS will provide accurate and reliable sources of information to create recreation maps and provide data to Internet sites.

Serving Communities The NILS requirements and specifications were determined in a public environment which included not only federal government representatives, but with technical experts from state, county and community governments. The NILS data model, when employed by others, will provide the excellent service of cadastral and parcel data exchange. With the rapidly expanding private use of lands and growing human habitats, this is an excellent community outreach.

NILS supports the DOI IT Strategic Goals: Interiors Information Architecture modeling the Departmental and bureau business enterprise and future technical direction. NILS has been correlated with the Bureau Architecture at a high level. The Analysis phase provides the information to allow the NILS modules to be correlated, in more detail, to the lower levels of the Architecture. IT Security assuring continuous information to Interior customers especially for mission critical systems;

NILS application and data security is divided into 3 levels: System access and security measures applied to the National Information Resources Management Center (NIRMC) computer system. Users local computer local computer and office security Application The NILS applications and data will require an additional security screening. Also, NILS will employ various user access levels, assigned by responsibility. NILS has implemented the BLM Application Security System (BASS), which is a component-based security module. BASS will manage user passwords and access to BLM web-based applications and will provide a reusable module to replace the application-specific login procedures.

NILS supports the BLMs mission and all the strategic goals for managing the public lands by providing an accurate, reliable and unique earth-based reference for its resources. This will provide the foundation for decision-making, analysis and management to meet the requirements of BLMs mission and goals:

Preserve Natural and Heritage Resources Understand the Condition of the Public Lands Restore At-Risk Resources and Maintain Functioning Systems Provide Opportunities for Environmentally Responsible Recreation Provide Opportunities for Environmentally Responsible Commercial Activities Reduce Threats to Public Health, Safety and Property

E-government providing customer-centric services, information, and products using the Internet, the World Wide Web, and other electronic media. A major concept of NILS is Field to Fabric. From data collection to final product, NILS will provide a BLM, Intranet-based work environment in which data and transactions will be handled electronically; data analysis and retrieval will be available to managers via the Intranet;

GeoCommunicator will provide a data and task information sharing environment for the BLM and public.

Capital Planning and Investment aligning mission and program technical requirements with budget formulation and execution of IT capital investment acquisitions. The NILS planning and investment requests were aligned with the Bureaus land management Mission and Goals to provide the best available technology at minimum investment to accomplish business responsibilities.

I.B.2 President's Management Agenda strategic goals supported:

NILS supports the Presidents Management Agenda of competitive sourcing, strategic management of human capital, improved financial accountability, expanded e-government and budget and performance integration by: Capturing BLM cadastral and land resource management business rules and tasks in software Providing the public and other agencies with access to the electronic representation of the PLSS for use with GIS Re-engineering survey management and parcel management; the manual business tasks will be re-created in a computerized GIS environment and eliminate the current manual environment Creating a common, Bureau-wide, centralized depository of land resource management data. This will provide a one-point data access for

managers and customers Managers will have timely and complete information with which to monitor Standardizing methods of cadastral and parcel data analysis Providing citizens with truly user-friendly access to BLM land record data (via the Internet). Information will be in digital form and easily accessible for reporting and distribution Reducing the costs of managing federal lands Improving customer confidence in the information they receive Providing a greater employee focus on performance by improving the work environment tasks will be automated; users will not be required to be software experts; tasks will be sequenced and tracked by a Work Flow Manager Improving the BLM s use of the Web and moving to an enterprise-wide e-business organization Providing the public with federal land status via the Internet

I.B.7 Agencies and organizations affected by this initiative: The BLM and U.S. Forest Service, through an Interagency Agreement, are working with states and counties and private industry to develop a common data model and software tools for the collection, management, and sharing of survey data, cadastral data, and land records information. The Minerals Management Service (MMS) and Bureau of Indian Affairs (BIA) participated in the requirements definition. Additional bureaus in DOI could potentially use the NILS application and/or data for land records management. BLM is the lead for this initiative.

I.B.8 Investment cost reduction or efficiency improvement: NILS will reduce costs and improve efficiencies by being the foundation for other resource information and providing decision support. NILS has four modules, Survey Management, Measurement Management, Parcel Management, and GeoCommunicator. These modules represent re-engineered business processes that deal with managing land records from field to fabric. By automating complete business processes, BLM will be able to replace these processes with automated processes. This will improve the quality of BLMs land and title information, and provide this information to the public via the Internet. The following is a brief summary of these modules and the business processes that will be automated:
 Survey Management: An integrated set of automation objects that will be embedded into compatible survey data collection software packages. This will support the capture of measurement features and metadata directly into a GIS database format. The goal is to minimize the need for data conversion and re-construction as measured features are incorporated into the land records management system and to improve the quality of BLMs land information. This will improve the efficiency of BLMs Survey Program and provide higher quality data to the public.
 Measurement Management: Allows users to produce a new feature coordinate solution by performing a weighted planimetric-geodetic adjustment according to the qualitative characteristics of individual feature elements in the working set. This will enable users to create a higher-quality control network database for both PLSS, and metes and bounds land environments. This will greatly increase productivity and time required to process survey data and conduct data quality reviews.
 Parcel Management: Provides a process for managing land records and cadastral feature data stored in the database model. It will provide custom feature classes, tools, and procedures for editing land records in a transactional, history-tracking environment. Support will be provided to allow users to construct and edit legal description fabrics, and to create required parcel fabrics from them. Parcel fabrics may include ownership, land use rights, tax assessment, and others. This module will enable BLM to automate land records management and improve the quality of data provided to the public via the Internet. This will improve record keeping efficiency, provide digital data, and improve data quality.
 GeoCommunicator: A proactive Internet subscription (no fee) Web site for sharing information about data and activities of interest to land managers. Map navigation and content filters will allow users to discover information that meets their needs such as available parcel data, upcoming surveys, and potential cost-sharing partners. The goal of the GeoCommunicator is to provide a portal to BLM's GIS information in order to facilitate data sharing and collaborative efforts among land managers. This will reduce redundant data collection; improve data sharing and potential partner slips.

I.9.a List all other assets that interface with this asset. NILS will, in the future, link with a number of BLM's alphanumeric systems and provide a system of storage, retrieval and dissemination of documents describing the right title and interest of land using GIS. The primary link will be with BLM's LR2000 system, which stores land and mineral case attribute information. Future links include the Facilities Asset Management System, the Rangeland Administration System and the Automated Fluids Minerals Support System.

I.9.b Have these assets been reengineered as part of this investment (Yes/No) Yes

Requested Investment Summary of Spending for Project Stages (\$Millions)

BY 2005 Planning Resources:	.00
BY 2005	.00

Acquisition
Resources:

BY 2005
Maintenance
Resources:

2.44

BY 2005 Total,
All Stages
Resources:

2.44

Life Cycle Total,
All Stages
Resources:

31.30

DOI BUDGET YEAR 2005 IT INVESTMENT OVERVIEW

Investment Identification

Agency: Department of the Interior
Bureau: Bureau of Land Management
Location in Budget: Summary of IT Investments
Account Title: Management of Land and Resources (MLR)
Account Identification Code: 010-04-14-1109-0
Program Activity: BLM Land Use Planning
Name of Investment: [E-Government for Planning and NEPA \(ePlanning\)](#)
Unique Investment Identifier: 01004010301040900117057
(IT Only)(see section 53)

Investment Justification

I.A Investment Description: The Bureau of Land Management's (BLM) land use planning process establishes the basis for every action and approved use on the public lands, including 262 million acres of surface lands and 700 million acres of mineral estate. Planning emphasizes a collaborative environment, in which local, State, and Tribal governments, the public, local user groups, and industry work with the BLM to identify appropriate multiple uses of the public lands.

Starting in FY 2001, BLM began its largest and most concentrated effort in land use planning in more than 15 years, with national, regional, and local expectations. Over the next 10 years, BLM plans to update its entire planning base, consisting of more than 160 land use plans. BLM is further challenged by this workload in that the agency is called to conduct land use planning in a highly collaborative manner. BLM involves stakeholders, partners, cooperating agencies, and constituents at every step of the process, often years before the land use planning process begins. Planning encompasses all resources areas in BLM, including fish and wildlife, energy, wild horses and burros, recreation, lands and realty, protection and response, rangelands, cultural/fossil resources, and tribal consultation.

BLM has learned that as it embarks on a new era of planning, it has become necessary to leverage information technology (IT), especially the application of the World Wide Web, to create more efficient business practices while encouraging an open and collaborative process. To address this need, BLM has launched the IT Support for Resource and Minerals Land Use Planning project, or ePlanning. ePlanning was developed as a result of a comprehensive analysis of existing BLM IT applications and software and a gap analysis conducted on those systems. The result of this process is a consolidation of numerous previously separate programs into one integrated package that incorporates multiple functionalities and encompasses the large amount of innovation that has been demonstrated at the BLM Field Office level.

Project Overview: IT Support for Resources and Minerals Land Use Planning, or ePlanning, is a project initiative that delivers and allows user-initiated manipulation of land use planning information that consists of fully integrated text with intelligent and interactive maps and map layers. To accomplish this, ePlanning provides automated tools and information technology so that planning teams can simply create these integrated documents as BLM does land use planning. Some related goals are to: Provide a common look, feel, and functionality for BLM planning documents through enterprise solutions, establish a new and efficient method for public participation in the planning process, create reusable data for processing post-planning actions, create an administrative record, and move land use planning from a project to a process. ePlanning establishes a new mechanism for land use planning that allows for an openly participative, collaborative, and community-based land use planning system envisioned in the BLM Planning Manual.

ePlanning modernizes data management to support the digital publication of land use planning data while maintaining traditional paper output. Ultimately, ePlanning intends to treat data for land use planning and subsequent NEPA decisions as an asset and not an expense. Currently, large amounts of time and funding are expended to re-input data into a digital medium after the land use planning process in order for that data to be available in a centralized database; ePlanning aims to shift that paradigm. This new way of planning is facilitated by dynamic web-based documents in which users both within the BLM, as well as the public, will be

able to read Resource Management Plans, submit comments, and view maps related to these plans. Interactive documents link specific sections of text to specific features on maps and allow users to click on map features to view relevant text, as well as to identify specific document text and connect where on the landscape that text is relevant. ePlanning allows for the public to submit on-line comments on planning documents. Geography is central to planning, and ePlanning makes geographic data available to anyone with a computer and an Internet connection.

If the Bureau is to be successful in its current land use planning efforts, resource specialists must acquire, organize, document, maintain, and professionally analyze information on widely ranging topics and then effectively communicate this knowledge to our customers. Cutting-edge communications and visualization techniques facilitate these efforts in a manner not available previously. The Bureau's new planning era began in FY 2001, which gives us both the opportunity and responsibility to evaluate new and existing tools for land use planning. Included in this are the state-of-the-art geospatial tools needed to implement data standards within the land use planning effort.

Other requirements of the Bureau that drive the ePlanning project include: The need for mechanisms to enhance collaborative learning with constituents The need for a consistent and supported technology implementation across BLM The need to solicit more substantive comments on planning activity and to manage those comments more effectively The need to manage common work flow processes and keep them reproducible The need to transition our land use plans and supporting data from paper-based to interactive digital format

The long-term goal of this project is to extend the one-stop portal concept into other Federal agencies. Meeting this goal will require more federal partners and publishing planning as a geographic activity on a website. BLM is currently focusing on transitioning the ePlanning pilot project to an enterprise solution. To accomplish this goal, BLM is developing a detailed implementation plan for approval by the Information Technology Investment Board (ITIB), which will be based on individual plan time lines. Other long-term goals of this project including increasing the use of the Internet for building and publishing planning and NEPA documents and collaborating with constituents; increasing partnerships with other land management agencies, and modernizing data management to support interactive digital publication while maintaining traditional paper output.

ePlanning as both a Planning and NEPA Tool Land use plans in the ePlanning system ultimately result in the ability to publish both paper and digital plans, comment management and analysis tools, the ability to update and maintain the land use plan over time, a mechanism for planners to make spatial queries using ArcIMS (Internet Map Server) technology, and the installation of a database to support downstream activities such as permitting, lease sales, and activity level planning. Users of all disciplines can then tier subsequent NEPA analyses off of the digitally stored, living documents contained with the ePlanning system. Thus, ePlanning is not just a planning tool, but rather a NEPA tool. For example, one component of the ePlanning tools is the development of an automated, NARA-compliant administrative record. Because land use plans are the vehicles for leasing and any other land use allocation, they therefore become the foundation for implementation. ePlanning thus serves as the means to integrate NEPA into land use planning and also implementation of Environmental Assessments (EAs), Environmental Impact Statements (EISs), and Categorical Exclusions (CXs). ePlanning provides a digital realm to carry land use plan decisions into implementation, and stores the decisions and assumptions made throughout the planning process.

Relationship to E-Gov Initiatives ePlanning is part of a bigger BLM E-Government/Government Paperwork Elimination Act (GPEA) initiative. As a result of this project, public burden hours should be significantly reduced. The public currently must request a printed document (when they are available), request BLM natural resource data for use in their own spatial display and analysis purposes, prepare and submit written comments on the document, etc. In this project (as demonstrated in the prototype in Alaska), members of the public can view/download the document on-line, manipulate spatial data on-line, and electronically submit comments. All of these functionalities reduce time spent in this arena. In addition, ePlanning establishes a new process for land use planning that yields an openly participative, collaborative, and community-based land use planning system thus fostering G2G data and services interchange, consistent with the President's Management Agenda.

Long-term and pending ITIB approval, ePlanning aims to develop system interfaces designed to ease workload and eliminate redundant coding. These interfaces are as follows:

E-authentication of comment and protest submissions: BLM is developing this capability under another contract to build the E-Authentication system. E-authentication is a Global Enterprise Architecture solution for the Federal Identification Cards, Digital Biometric Signatures, Physical and Logical Access and in use in many other venues. The overarching goal is to have a single platform and standard for interoperability between all Government agencies, financial institutions, transportation industries, hardware and software industries, Sun, IBM, Microsoft, etc. to facilitate process redesign for electronic authentication of an individual, regardless of location or industry. This project is being performed on behalf of GSA, the managing partner for the e-authentication Quicksilver initiative. BLM's 2001 pilot of physical access for E-authentication has been a success, and as a result, several other agencies (Dept. of State, DOD, GSA, and DOT) have adopted the methodology for enterprise implementation. As part of the project, E-authentication establishes a 3rd party trusted certificate authority to meet the requirements of GPEA (figure 2). Bob Donelson, BLM Washington Office, (202-452-5190), and Tina Chandler, BLM Washington Office, (202-452-5036), manage this project and will advise the ePlanning integrated team on how to best incorporate E-authentication into the system, as well as timing and technical implications.

E-forms for protests: ePlanning intends to offer forms through the system to make the protest period during the land use planning process more efficient and electronically available. The protest process requires that a protesting party send a written protest with an original signature. E-forms will enable the protesting party to authenticate an electronic signature and send the protest through an interface in the E-authentication system (figure 2). Users of ePlanning Intended users of this system are both internal to the Bureau, as well as the public. Internally, users include BLM staff at the Field Office, State Office, and Washington Office level. As planning is an interdisciplinary process, employees of all disciplines are expected to use this system. Users who will most intensively utilize the ePlanning system are land use planning Team Leads, Writer Editors,

Authors, Interdisciplinary (ID) team members, and GIS specialists. The system is designed so that contractors hired to develop BLM land use plans and NEPA analyses, as well as cooperating agencies, are able to fully use the ePlanning tools.

In addition, there is a public component to ePlanning. Members of the public will be able to access land use plan information and comment on this information via the web. Estimating the number of concurrent users relies on the assumption that at full enterprise implementation, all 150 Field Offices developing approximately 162 land use plans will be using ePlanning. During peak plan development, it is estimated that approximately 300 BLM employees and 100 contractors/cooperating agency employees will be concurrently using the system. Externally, approximately 600 public users will be concurrently using the system to view, manipulate, and comment on land use planning data (based on average number of hits per day to the NW NPR-A pilot site). Estimated number of total users within BLM is 5,000. What hardware and software are used? The ePlanning project is based on the ESRI suite of GIS software, which are part of the BLM COTS package and have been enhanced to provide for the required planning-related functionality. ePlanning depends heavily on storage of all data using a Relational Database Management System (RDBMS) (Informix databases managed by ESRI's ArcSDE software), as well as use of ArcIMS to provide the Internet connection. Citrix Metaframe software is also part of the software suite, which addresses network management considerations.

Two new technologies are being utilized: ArcIMS and ArcSDE (Spatial Database Engine). ArcIMS is a tool used to build map-based websites. ArcSDE is a tool that allows us to store GIS data in a relational data base management system (RDBMS), solving many data management issues and reducing bandwidth requirements of ArcIMS. Both technologies have been purchased and are starting to be used by a few State Offices (SO). To achieve a "common look and feel", it is critical that BLM centrally manage the implementation of both technologies for planning. Existing GIS data must be converted to Informix using ArcSDE. This transition should be done only once, so it is critical that National data standards be implemented at the same time. National data standards are being implemented under the aegis of BLM's Data Management Plan, which was approved in 2001.

ePlanning will use the server-based solution being deployed as part of the E-GIS effort, with large servers at the national level and at state offices. In what stage is this project? The ePlanning core team works closely with the Systems Coordination Office and the Portfolio Manager to ensure that the project complies with the processes, activities, and outputs identified by the Capital Planning and Investment Control Guide (CPIC). ePlanning is committed to ensuring that the project is well conceived, cost effective, and supports the agency's mission and business goals. Within the CPIC process, ePlanning has recently exited the Select Phase on June 11, 2003, and is working towards Control Phase milestones by extending the pilot efforts into Phoenix, AZ, and Moab, UT, pending additional documentation and cost figures requested by the ITIB at the June 11, 2003 meeting in Washington, DC.

As part of the Select Phase, ePlanning obtained approval from the ITIB as an IT investment; the project has been entered into the budget process. A rapid prototyping development was used to build some of the tools which will eventually be implemented Bureau-wide in the Control Phase. The pilot site chosen to test the tools of ePlanning is located at <http://www.ak.blm.gov/nwnpra>. The pilot land use plan chosen to showcase this project is the Northwest National Petroleum Reserve-Alaska (NW NPR-A), which is a Time Sensitive Plan that will provide management for 8.8 million acres of public lands in Alaska. This pilot project features a text area to read planning documents, integrated with a map mode for viewing many different types of spatial information, and a comment submission tool. The pilot will be used as a platform to develop the ePlanning tools using a launch and learn approach in collaboration with the Northwest NPR-A Planning Team. A Lessons Learned / Experience Report is currently being prepared to document the challenges the AK pilot faced, solutions to overcome those challenges, and other lessons gained from piloting the ePlanning tools in Alaska. As part of the Select Phase, the ePlanning project performed the following actions: Conducted mission analysis; Developed concept; Developed a preliminary business case; Obtained ITIB approval for the mission analysis and concept; Identified funding sources; Obtained approval for the Integrated Project Team; Developed an Exhibit 300

In preparing to move into the Control Phase, the ePlanning team will meet all exit criteria of the select phase by taking the following actions: Establish performance goals and quantifiable performance measures Develop project plan (including objectives, acquisition schedule, project deliverables, and projected and actual costs) Establish security Conduct Section 508 accessibility Schedule a Privacy Act assessment Establish architecture goals and measures Obtain ITIB approval to enter the Control Phase

As part of the Control Phase, the project is committed to doing the following: Establish and maintain project costs, schedule, benefits, and risks, and technical baselines Maintain current project costs, schedule, technical and general status information Assess project progress against performance measures Prepare quarterly/milestone control review documents Evaluate quarterly/milestone control review documents Review control documents and recommend appropriate action Make final control review decisions Implement decisions Initial Results/Lessons Learned Many lessons learned came out of the pilot project in Alaska. These lessons are currently being documented in an Experience Report; the results of this report should inform Field Office Managers, State Directors, and planning staff of the costs, benefits, challenges, and technical requirements of using ePlanning for a planning and/or EIS process. At a conceptual level, the ePlanning project has showcased BLM planning data. In the past, land use planning teams produced many output maps that were printed in the many planning documents, with many copies of maps for public meetings, requiring a host of special techniques to create the perfect output. In the digital realm of ePlanning, the various techniques along with the actual GIS data are readily available to anyone with access to the Internet. This approach should change the way BLM uses GIS in support of land use planning.

The project will address the very difficult and time-consuming effort of handling tens of thousands of inquiries, comments, and protests on individual plans, and will ease the burden of local and headquarters staff. There is high demand in government for preparing NEPA documents, planning documents, and geospatial data. Other agencies and the administration have shown great interest in using these tools that BLM develops. In addition, contractors of BLM land use plans are expressing interest in gaining access to these tools, as well as being trained on the system.

I.B.1 Agency mission and strategic goals and objectives supported:

ePlanning supports the Missions of DOI and BLM: The mission of the Department of the Interior is "To protect and provide access to our Nation's natural and cultural heritage and honor our trust responsibilities to tribes." The Bureau of Land Management's mission complements that of the Department and encompasses "Sustaining the health, diversity, and productivity of the public lands for the use and enjoyment of present and future generations." Both missions are tied to the public lands, the resources, uses, information, decisions and that are tied to points on the ground. BLM does not, and cannot plan without others' involvement. The Bureau is required to collaborate and participate in decision making with the public, interests, stakeholders, users, and local communities during planning. Therefore, it is imperative that geographic (map) information and document handling systems technology be used to the greatest extent possible to gather data, organize information, generate knowledge, collaborate with our public, and support effective decision making. The ePlanning investment facilitates and speeds the sharing and handling of map and plan information over the web.

ePlanning supports EPCA: The Energy Policy and Conservation Act Amendments of 2000 (EPCA) directed the Secretary of Interior to conduct an inventory of oil and natural gas resources beneath Federal Lands. The result of that inventory, released and delivered to Congress in 2003, is a report containing a national inventory of all oil and gas resources and reserves beneath federal lands in five major geologic basins in the western U.S. and constraints that may limit development of these energy resources. The inventory serves as a primary planning tool for BLM. The report is a critical step in evaluating whether existing rules are appropriate, or need to be changed, either to provide greater protection to the environment or to promote appropriate resource development. Once evaluated, land use planning will serve a critical role in implementing the outcomes of the EPCA inventory in that land use plans and their associated NEPA analyses may need to be revised, amended, or supplemented. ePlanning will serve as an important tool for responding to the EPCA inventory recommendations by providing land use planners and resource specialists with the tools to analyze spatial data, create alternatives, collaborate with the public, and publish revised/amended Resource Management Plans in a digital format. In addition, ePlanning will enable use authorizations to be carried out using the data contained with the ePlanning system.

ePlanning supports 3 Strategic Plans: There are three strategic plans that apply to ePlanning, as well as a Secretarial Initiative. The goals in each plan may appear distant from the purpose of ePlanning, however, upon drilling down into the plans and examining the end outcomes and measures identified in the plans, the relationships become apparent. Question I.C. shows these.

ePlanning supports the DOI Strategic Goals: Successful completion of land use plans is critical to accomplishment of end outcomes identified in the Department's Strategic Plan within the mission areas: Resource Protection; Resource Use; Recreation; and Serving Communities. (1) Protect the Nation's natural, cultural, and heritage resources. ePlanning will provide the public with access to a spatial representation of the nation's public lands. The ePlanning tools will provide management with the appropriate information to effectively manage resource protection.

(2) Manage resources to promote responsible use and sustain a dynamic economy. ePlanning will provide the public with access to a spatial representation of the nation's public lands and opportunities for resource use. The ePlanning tools will provide management with appropriate information to identify opportunities for resource use (energy, non-energy minerals, forage, and forest products) and effectively manage those resources while promoting responsible use.

(3) Provide recreation opportunities for America. The data in the ePlanning system will provide accurate and reliable sources of information of recreational opportunities on public land and BLM's management of those lands through the land use planning process.

(4) Serve communities. The ePlanning requirements were determined in a public and collaborative environment. When deployed, the ePlanning system will serve as a community outreach tool not only to federal government representatives but also state, county, and community governments, as well as industry, non-profit organizations, associations, and individuals.

The draft DOI Strategic Plan states that as the Internet expands, there will be an increasing demand for on-line government services, possibly resulting in an increasing demand for involvement in decision-making, information and transparency, and coordinated and seamless services provided by the Department. ePlanning provides an invaluable commodity for government to citizen and government to government services by web-enabling the process of doing land use planning, as well as placing our geospatial data behind land use plans in a transparent, on-line system. This publishing of land use planning text and data on the web will in turn increase the accountability of our land use planning process, as the assumptions made in the process will be documented and stored in a database that can be referenced years after the planning process in a living document. Tools to make the business of land use planning more efficient, collaborative, and citizen-centered via a web-based medium will help the Department achieve the goals outlined in the Strategic Plan.

The DOI Strategic Plan also cites an increasing rise in the demand for oil, gas, and coal. To meet these needs, the Department is a major participant in the National Energy Plan process by managing and providing appropriate access to development, reduce the cycle times of operating plan reviews and permitting processes, and support access through reducing the backlog of rights-of-way and corridor requests. ePlanning will support this goal by hosting geospatial and textual data of a land use plan in a relational database system, which in turn will serve as a basis for making leasing decisions using automation for years after the land use planning process. This data will also allow the DOI to continue its conservation practices, restore and mitigate damage from development, and reduce the environmental footprint of energy development.

ePlanning supports the BLM Strategic Plan (FY2000 FY2005):

The ePlanning project will contribute to accomplishing the strategic goals listed below by providing a means to efficiently store, access, process, and distribute spatial data and information; manage all planning and NEPA activities; create and maintain planning and NEPA documents authored by a variety of interdisciplinary specialists; create digital integrated documents designed to encourage and facilitate BLM partner participation; allow for the submission of substantive public comments through issues education; automatically assemble and electronic record of administration with transactions tagged with descriptive metadata; and create multiple

output products in various media.

The ePlanning project will supply tools that will help to meet the following goals and objectives:

1.0 Serve Current and Future Publics 1.1 Provide Opportunities for Environmentally Responsible Recreation
1.2 Provide Opportunities for Environmentally Responsible Commercial Activities 1.3 Preserve Natural and Cultural Heritage Resources 1.4 Reduce Threats to Public Health, Safety, and Property 1.5 Provide Land, Resource, and Title Information 1.6 Provide Economic and Technical Assistance
2.0 Restore and Maintain the Health of the Land 2.1 Understand and Plan for the Condition and Use of the Public Lands 2.2 Restore At-Risk Resources and Maintain Functioning Systems
Management Strategies to Improve Organizational Effectiveness

By supporting land use planning and revision of existing plans, the ePlanning tools enable the Bureau to meet the above goals related to land health and use. When plans are not current, no new use authorizations are allowed (such as logging, coal mining, oil and gas etc.). This inability to authorize use dramatically reduces the agency's ability to provide opportunities that the public demands.

ePlanning supports the BLM 2002 Annual Performance Plan The 2002 Annual Performance Plan identifies measures in support of the goals in the BLM Strategic Plan (shown above). These are identical. In the future, the BLM performance Plan will address the Department's goals; however, because those are currently in draft, they cannot be identified at this time. Land use planning is also one of the primary work processes in the Department of Interior's Activity Based Costing Management.

ePlanning supports the DOI IT Strategic Plan The BLM IT Strategic Plan contains three goals closely related to ePlanning:

Improve Management of IT Assets. BLM selects IT applications that directly support the BLM Mission in accordance with the Bureau Enterprise Architecture. ePlanning is being managed as a project and is evaluated periodically, in accordance with this goal.

Enhance the Transformation of Data in to Knowledge. ePlanning creates standards and procedures that govern the creation, protection, and interpretation of data that is used in decision-making, and documents decisions related to the BLM Mission. ePlanning creates geographic and narrative data and metadata, and encourages sharing of information over the web.

Support the BLM's Mission by Increasing the Effectiveness and Timeliness of Service Delivery and Effectiveness of its Human Capital. ePlanning delivers value to BLM employees and the public by expediting communication and data sharing over the web, and establishing an electronic record. As some plans get tens of thousands of public comments, the tools in ePlanning reduce the workload of employees who must review and respond to each sender, and carefully document the concerns associated with the plan.

ePlanning supports the Secretary's Four C's Initiative The Secretary of Interior has outlined a Four C's (Conservation, Cooperation, Consultation, Communication) initiative for improving effectiveness of program management and accomplishing the Department's mission. The "4 C's" reflect the Secretary's goal of involving others, including communities, partners, customers, contractors, volunteers, and stakeholders in carrying out our mission by actively working with them, and obtaining feedback and input on our program and business processes, plans, and practices. The "4 C's" effectively applies to all aspects of the Department's mission. The ePlanning project fulfills the goals of the 4 C's initiative as follows:

Conservation: ePlanning identifies land use decisions that support goals and objectives for specific uses of the land. ePlanning also ties decisions to the geography of the land and conservation efforts to protect natural resources.

Cooperation: ePlanning allows for BLM, the public, and cooperating agencies to partner together in writing, work flow management, and administration of the land use planning process and associated NEPA analyses. The integrated, digital document format of this application, and the comment analysis module, provides a means for the public to submit comments during public comment periods, particularly more substantive comments through issues education and pre-categorizing of content subject. This functionality allows for comment submissions to relate directly to text and to locations on the ground.

Consultation: The publication module of ePlanning allows for data and information to be input once into a database that can generate multiple output products the paper document, the interactive document (web/CD-ROM-based), and presentation materials. These publication materials can then be used to efficiently consult with partners within and outside of the Department of Interior to exchange information and gather knowledge that will most effectively guide the management of public lands through the land use planning system.

Communication: ePlanning provides for a web-based means of allowing our cooperators, partners, stakeholders, and the general public to communicate (issues, concerns, data, feedback, etc. in both document and map form) electronically throughout the planning process (2-4 years), and makes those communications part of the public and administrative record, access federal geospatial data assets contained within BLM Resource Management Plans.

I.B.2
President's
Management
Agenda
strategic goals
supported:

While ePlanning contributes to five areas of the President's Management Agenda (PMA), it is most closely related to electronic government. E-Government encourages federal agencies to develop IT solutions that ensure that business processes produce better, faster, and cheaper results, focus on the ultimate customer the citizen/taxpayer, and create a government that works better and costs less. The E-Government component of the PMA operates on the principle that citizens should be able to obtain services or information in minutes or hours, which is an advantage that the Internet brings us. In addition, government employees should be able to do their work as easily, efficiently, and effectively as their counterparts in the commercial world. The BLM ePlanning project meets these goals by providing access to the federal government's geospatial data assets in a single location and helps make state and local spatial data assets more accessible. In addition, citizens can manipulate spatial data/information without further BLM involvement, thus increasing the value of the business process. This effort ultimately promotes collaboration, reduces duplicative efforts, saving money, and forms cost-sharing partnerships. ePlanning addresses the three principles of E-Government: citizen centered (through on-line mechanisms to view, manipulate, and comment on planning and NEPA analysis); results-oriented (by providing measurable improvements for citizens by bring land use planning into the digital

medium); and market-based (via the use of COTS and the active promotion of innovation). In FY 2001, with a Congressionally-backed and funded initiative, the BLM began to update all the Bureau's 162 land use plans. To do this, the ePlanning project emerged as the medium to develop tools for collaboratively preparing land use plans in a timely manner and to implement BLM's architectural vision of the re-use of data. As described earlier, this re-use of data will make the BLM more efficient in its day-to-day execution of its responsibilities by increasing on-line transactions and decreasing burden hours. ePlanning is a strategic value to the Bureau. While not a \$35 million system (as defined in the E-Gov Scorecard), it qualifies against the criteria as a significant multi-agency project and a DOI strategic system that helps meet the PMA and GPRA Strategic Performance Plan.

In the PMA, the goals of the E-Gov Task Force are identified as follows: Create easy-to-find single points of access to government services for individuals. Share information more quickly and conveniently between the federal and state, local, and tribal governments. We must also do a better job of collaborating with foreign governments and institutions. Automate internal processes to reduce costs internally, within the federal government, by disseminating best practices across agencies. Reduce the reporting burden on businesses; businesses should not have to file the same information over and over because government fails to reuse the data appropriately or fails to take advantage of commercial electronic transaction protocols.

ePlanning accomplishes the first 3 of the 4 goals noted above by providing a web-based portal for easy location of planning and NEPA documents and maps, enabling information to be shared via the world wide web between collaborators, stakeholders, citizens, and partners in the land use planning process, and automating the work flow processes of doing the business of land use planning by providing common project management and spatial analysis tools for planning teams.

Developing and implementing the Digital Document concept for land use planning provides a mechanism for an openly participative, collaborative, interactive, community-based land use planning system envisioned in the new BLM Planning Manual. The Digital Document concept takes traditional BLM planning and provides innovative techniques to develop, access, and display planning documents and associate spatial data in a simple digital interface. The Digital Document also provides a way for the public to be involved in the, analyzing and solving natural resource issues on public lands by submitting spatially referenced comments via email and then provides the BLM with a method to track and analyze these comments.

Finally, ePlanning is results-oriented because the outcomes of the ePlanning project are directly aligned with the expected results of E-Gov, as outlined in the PMA: Provide high quality customer service regardless of whether the citizen contacts the agency by phone, in person, or on the Web; Reduce the expense and difficulty of doing business with the government; Cut government operating costs; Provide citizens with readier access to government services; Increase access for persons with disabilities to agency web sites and E-government applications, and; Make government more transparent and accountable.

ePlanning particularly lends itself to making government more transparent and accountable by publishing land use planning data and decisions on the Internet and allowing citizens to access and analyze data used to make land use planning decisions.

Criteria by which ePlanning qualifies as an E-Gov accomplishment for the Bureau

The Office of Management and Budget (OMB), in addition to DOI and BLM, outline several criteria used to rate E-Gov initiatives and how they meet or fail to meet the goals outlined by E-Government in the PMA. These criteria are listed below, along with rationale for how ePlanning meets these criteria:

OMB Scoring Criteria Degree to which project is integrated with cross-agency service delivery ePlanning partners with the U.S Forest Service and the Council on Environmental Quality. Within BLM, ePlanning works to align itself with E-GIS, NILS, E-authentication, and Bureau Enterprise Architecture. Degree to which project is aligned with DOI E-Gov efforts, especially GeoSpatial One-Stop. ePlanning is directly aligned with GeoSpatial One-Stop. All land use plans created in the ePlanning system will be published by GeoSpatial One-Stop. ePlanning will populate GeoSpatial One-Stop with more substantive map services faster than any other means. Role-up reporting tools will be built to query the GeoSpatial One-Stop metadata server to produce comprehensive, real time planning status reports across all Federal agencies. Recreation.gov will also be able to use the ePlanning map services.

General OMB Direction on E-Government Degree to which project benefits Government to Business, Government to Citizen, and Government to Government efforts. ePlanning meets all three segment benefits.

Amount of internal efficiencies achieved ePlanning cuts down on staff time and money needed for public comment receipt, tracking, and response; preparation of administrative record; making plan available for comment and protest, data conversion and input; distribute approved plan/ROD; workflow management and document and map production; versioning; printing expensive color maps.

BLM Specifics Number of annual transactions project is to address (See Performance Measures, Section I.C. of this document) Citizen/business expressed priority by survey/comment card/etc. The public is increasingly requesting a means to gain information on BLM land use planning and the ability to comment on the plan via the Internet, as evidenced by 2002 Time Sensitive Plan Meetings with the public in Denver, CO, and Washington, DC.

Degree to which project consolidates and promotes consistent service delivery across states and programs (one face to public) ePlanning serves as a central repository for planning and NEPA data for resource programs throughout the Bureau.

ePlanning serves as a GPEA project for the BLM Once implemented Bureau-wide, ePlanning will represent a major Government Paperwork Elimination Act (GPEA) accomplishment for BLM by providing a one-stop service delivery, minimizing the burden on businesses and governments by re-using data previously collected or using ebXML or other open standards to receive transmissions, and obtaining productivity improvements by implementing customer relationship management. The electronic collection of external RMP scoping criteria and issues identification; comments on draft and final RMPs; and protest submission and responses serves as a means to implement GPEA.

I.B.7 Agencies Although BLM is the lead agency for this project, ePlanning is a multi-agency, collaborative project because of

and organizations affected by this initiative:

the very nature of land use planning. The Secretary of the Interior's 4 C's initiative challenges BLM to prepare land use plans in a cooperative, consultative, and communicative manner, in the service of conservation. The Director of BLM recognizes the value of collaboration in the business of land use planning, and therefore emphasizes the use of cooperating agencies to increase our involvement with other federal agencies affected by BLM's land use planning effort. Community collaboration in a land use planning effort often takes the form of BLM organized working groups to address particular issues, community or interest group organized groups, and/or groups organized under the auspices of a state's Resource Advisory Council. The various forms are likely to vary, depending on the communities and issues involved. In all cases, however, BLM works to ensure through the planning process that all interested parties are provided with the opportunity to be involved in the collaborative planning process. Formal consultation also takes place, in parallel, with tribal governments and with the State Historic Preservation Office and the U.S. Fish and Wildlife Service, in accordance with legal requirements. In addition, state, county, tribal, and local governments are typically invited to participate in the planning effort as cooperating agencies. Much of the BLM staff time is dedicated to working with organizations, associations, tribal communities, student groups, the media, elected officials, permittees, and rights-of-way holders. The collaborative relationships developed during these early stages will continue throughout the planning process and into the implementation phase. Therefore, any IT project that enhances the level of communication and cooperation with the aforementioned parties qualifies as a collaborative project. The BLM is engaged in close coordination with DOI agencies and the U.S. Forest Service in the area of NEPA and planning tools. Agencies within the Department of Interior that could be affected by this project due to similar land management activities, and may eventually partner with BLM in this project include the National Park Service, Fish and Wildlife Service, and the Minerals Management Service. Outside of DOI, the U.S. Forest Service has been directly involved in this project from the beginning (see question 7a) and it is anticipated that a formal partnering strategy will be developed with the agency as the project moves to BLM enterprise implementation. Because this project is just now transitioning out of a pilot application, no partnering strategies have been developed. However, the level of interest and communication that has taken place over the past two years indicates that there are multiple opportunities for partnering. We anticipate that other organizations doing business with the BLM will also be affected by the ePlanning project, including Federal agencies outside of DOI and Agriculture, state and local governments, Indian tribes, academia, and non-profit organizations and businesses in the private sector. Because BLM does the business of land use planning in such a highly collaborative manner, involving numerous partners, stakeholders, and collaborators, there are many opportunities to use the ePlanning tools to enhance the collaborative process of doing planning, particularly through the use of cooperating agencies. Finally, BLM has been working closely with the Council on Environmental Quality (CEQ) to develop a comprehensive system for potential use throughout the federal government as a planning and NEPA tool. CEQ has been assisting the BLM with identifying further requirements to enhance ePlanning, and shows strong support for the project and its implementation across multiple federal agencies.

I.B.8
Investment
cost reduction
or efficiency
improvement:

The current business process At the present time, each land use planning team (150+) develops their LUP documents in the format that they choose. Because these skill levels vary widely across the BLM, planning teams rely on local skills only. The current business process of creating the land use plan, releasing the Notice of Intent (NOI), distributing the Draft Resource Management Plan(RMP)/Draft Environmental Impact Statement (EIS) for public comment, receiving, tracking, and responding to comments, making the Proposed Resource Management Plan/Final Environmental Impact Statement available for protest, and finally, distributing and posting the Approved Resource Management Plan/Record of Decision are all manual tasks that are time-consuming, data intensive, and involve numerous stages of data input. The creation of the planning document itself is currently accomplished using a variety of methods. Most planning projects use a form of word processing and some may even place the document on a shared drive for access. Delays inevitably occur when only one person at a time can access and edit the document, while others need to wait to edit his/her portion of the document. In those instances in which several individuals write multiple sections, one person is responsible for merging those sections together, manage and control multiple versions, and then print, copy, and manually distribute the merged document for review. Due to the high cost of printing color maps within the planning documents, most plans only print one of two usually in the Draft RMP/EIS. Because of the limitations of page size maps, only so many shading patterns are available, and thus only a few resources can be displayed on an 8 1/2 x 11 map. The receipt and recording of comments is currently a manual process in nearly every planning effort. There have been several attempts to semi-automate this process due to the volume of work that can be generated by the larger-scale planning efforts. The Forest Service Content Analysis Team (CAT) has become a frequently used contractor for comment analysis; the team estimates that it spends \$12.00 per comment to sort, track, document and respond. Taking into account the fact that the NW NPR-A Draft Integrated Activity Plan/EIS received 96,000 comments, even advanced solutions for comment response and tracking are quite expensive for the Bureau. The capability to tie specific comments to spatial location information within the planning area has never been automated and is often quite arbitrary. Estimates for doing business using the current method were arrived at by the Grand Staircase-Escalante National Monument (GSENM). In completing the planning effort for establishment of the monument, the planning staff printed the NOI in the Federal Register, with copies in all of the local newspapers plus a GSENM newsletter. The GSENM produced a CD-ROM version of both the Draft RMP/EIS and the Approved RMP/Record of Decision. The CD-ROM version of these documents was comprised of a PDF format of all printed documents, the Draft RMP/EIS, the Proposed RMP/EIS, and the Approved RMP/Record of Decision. About 4,000 copies of the Draft RMP/EIS were printed at a cost of \$25,000, while about 3,000 copies of the Approved RMP/Record of Decision were printed at a cost of \$22,000. At total of 1,500 CD-ROMs were produced at a cost of \$1,500. The GSENM team had assistance from the BLM's National Science and Technology Center (NSTC) in preparing the documents for printing. NSTC converted data for the documents, and also prepared the

documents for printing. The planning team found that they received 7,000 comments, 30% of which were sent via email. These numbers suggest that a large percentage of the public using the Internet to gain information about this particular land use planning effort.

What ePlanning proposes to do to eliminate time-consuming and costly processes

The objectives of the ePlanning project (to serve data and analyses information through an IMS on planning web sites with a common look, feel, and functionality; to store, organize, and enable access to geospatial data through a relational data base management system; to provide tools for land use planning decisions via state-of-the-art GIS tools) address the shortcomings and pitfalls encountered in the conventional land use planning and publishing process described in the Grand Staircase-Escalante example. ePlanning facilitates an openly participative, interactive land use planning methodology with a minimum of paperwork. ePlanning also ensures that all of BLM's LUP efforts will have a common look, feel, and functionality. Finally, ePlanning places all data into a relational database management system, which will further the standardization and automation across the Bureau.

The ePlanning project re-engineers the entire planning process to make it easier and more efficient for the ID team to create, review, and update the LUP documents. The LUP documents will be automatically converted into the desired format without having to do a lot of data conversion. Because of the Integrated Digital Document concept, the ePlanning project will help ensure that the land use plan is a living document. Plan maintenance and evaluation will be made easier, and public land stakeholders will find it easier to participate meaningfully in the planning process, which will ultimately create more transparency and accountability for the BLM's decision-making process in the realm of land use planning.

Developing tools in a modular format will allow these tools to be deployed, after the implementation plan is approved by the ITIB, to Field Offices, as they need them so these offices do not have to pay contractors to do the same development. The tools will be developed once instead of 150+ times, thus saving the government dollars.

The high cost of printing color maps will no longer be a concern when maps are displayed on the Internet or on a CD-ROM. FGDC standards and guidelines in the collection and display of metadata will be enforced and applied more consistently as our data enters the fishbowl of the ePlanning digital environment. The use of the Web will allow any and all BLM employees to access the data needed for performing their jobs.

Finally, communication with the public, which has traditionally been limited to printed documents and paper maps, will be greatly improved upon via the automation of the LUP process and access to the Web. The development of the common look and feel will improve the BLM image and increase customer and stakeholders' efficiencies while reviewing and commenting on RMP documents.

I.9.a List all other assets that interface with this asset.

This project interfaces with a number of other projects, as well as BLM's IT infrastructure: Programmatic interfaces: ePlanning has benefited from recent activity in the land use planning program (1610), in which the business processes related to planning were evaluated and newer processes were identified, including such areas on ensuring greater public participation and better dissemination of proposals. The results of these exercises have been placed in handbook and manual format. The ePlanning project thus was able to take advantage of this work, and did not need to conduct its own business re-engineering process. Current and expected planning work in the field: A high level of activity is in progress across the Bureau with numerous land use plans. Part of this involves the work of the planning staff itself, such as performing the scoping, developing the proposed plan alternatives, obtaining public input, etc. A major part of the work going on behind the scenes, however, is the collection and analysis of natural resources data, such as wildlife, soils, T&E, etc. The results of that analysis feed into the products that are displayed on the ePlanning websites for public comment and analysis. Projects: Existing planning-related applications whose functionality will be included in ePlanning. This includes Turbo NEPA, as well as a proposed (yet unplanned and not accounted for in schedule and budget) module to bring in the functionality of CARAT (Computer-Assisted Resource Assessment Tool); NEPA-related projects, such as Nobility software; data from completed land use plans will be available for use in Nobility; and E-GIS (ePlanning depends on the spatial infrastructure being deployed as part of the E-GIS project beginning in FY 05). As the sites become functional, the ePlanning tools and the data will be loaded onto the respective servers. See the previous discussion related to hardware availability (section I.A.2). Originally, the E-GIS and ePlanning projects were synchronized so that E-GIS machines would be available at the same time the ePlanning tools were being deployed for a particular state or series of planning locations. However, because the E-GIS project has had to deal with a number of constraints, full deployment of the new infrastructure will not begin in time for some of the planning starts, some of which high priority Time Sensitive plans. In these few cases, states with sufficient resources may dedicate machines to host ePlanning, or in some cases ePlanning funds may be spent to provide an initial infrastructure compatible with both e-GIS and ePlanning. Relationship to other programs and applications Identification and review of available alternative software solutions was undertaken at the outset of the ePlanning project. Though a number of alternative solutions were found that could be and have been employed to support various pieces of the BLM ePlanning vision, no single solution was found that could perform the integrated range of functions required to completely realize the vision and its consequent efficiencies and benefits. A review of BLM projects not in the IT Clearinghouse indicates that there are twenty-seven other systems identified as supporting the land use planning process. These projects do not integrate text and maps in an Integrated Digital Document, nor do they provide tools for collaboration with stakeholders (see the Business Case for a more in-depth review of these systems). Potential alternative solutions were identified in the context of 52 interconnected environmental analysis, management, planning, and project review support requirements established by BLM SMEs. The identification of the potential alternative solutions took the form of a gap analysis based on the established requirements and overall ePlanning solution envisioned. The gap analysis included consideration of candidate solutions submitted by the SMEs, ESRI consultants, analysts from the BLM NSTC (National Science and Technology Center) Washington Office, and other BLM analysts who responded to an on-line survey. The result of the requirements-based gap analysis was that several of the previously developed solutions nominated were selected for integration into the ePlanning solution to perform specific functions. These

solutions are as follows: Selected Custom Applications and Programming Code BLM GeoCommunicator Interactive Document code previously developed for Chugach National Forest Pilot Project Data model for comment tracking and analysis developed by U.S. Forest Service Comment Analysis Team COTS Software Informix Internet Explorer and Netscape ArcGIS Enterprise Suite I Planet Web Server (IBM) Apache Tomcat IIS (MS) All of these selected solutions were determined to be supportive of and compatible with the required ePlanning structural and operational coherence. BLM did not select a single comprehensive alternative solution to meet the established set of ePlanning requirements because none was found to exist. BLM did find, however, that a number of existing solutions are available to support individual pieces of the overall ePlanning solution. Where these existing solutions have been found to perform required functionality and where they have been found to perform that functionality in a way that is compatible with and supports other related ePlanning elements; they are being incorporated into the overall solution. Where existing solutions that appear to perform individual functions envisioned as part of the ePlanning solution have been found to be conceptually or structurally incompatible with the overall ePlanning vision, they have not been selected for incorporation. Relationship of the ePlanning to ongoing projects in the national applications portfolio: The land use plans disseminated through ePlanning reflect the wide variety of natural resources the BLM manages (such as oil and gas, cultural, forestry, etc.). ePlanning is thus dependent on virtually all the national (and even state) portfolios to provide the quality data and analysis that are then brought forward in the various plan alternatives. For example, data from AFMSS (Automated Fluid Minerals Support System) will likely be critical to a planning effort in Casper, while data from the new Wild Horse and Burro Program System (in development) will be essential in future Nevada Resource Management Plans. ePlanning also has a strong link to the National Integrated Land System (NILS), with its four major modules (GeoCommunicator, Survey Management, Measurement Management, and Parcel Management). E-Government. ePlanning has a very strong E-GOV component with its outreach to BLM's multiple publics for comment and analysis in a collaborative environment. ePlanning will also thus be involved in e-authentication activities. GeoSpatial OneStop. ePlanning will contain a mutual link with the GeoSpatial OneStop effort. (BLM/DOI) Web Redesign. ePlanning will coordinate with any web redesign at the BLM, DOI, or interagency level in order to increase compatibility and greater public use of the information made available by ePlanning. E-GIS: The E-GIS project will provide the foundation for the ePlanning project. A critical component of the E-GIS project is the recommended System Architecture for the BLM. The ePlanning project is dependent upon this successful implementation and deployment of the architecture. Another component of E-GIS project that is critical to ePlanning is the DOI enterprise licensing with ESRI. This contract with provides the COTS software needed to implement ePlanning. E-Authentication: The ePlanning project currently plans to interface with the E-authentication project in line with the goals of the Government Paperwork Elimination Act (GPEA). One proposed module for ePlanning is to include the capacity for secured comment submission through the ePlanning portal.

I.9.b Have these assets been reengineered as part of this investment (Yes/No) No

Requested Investment Summary of Spending for Project Stages (\$Millions)

BY 2005 Planning Resources:	.00
BY 2005 Acquisition Resources:	.50
BY 2005 Maintenance Resources:	.50
BY 2005 Total, All Stages Resources:	1.00
Life Cycle Total, All Stages Resources:	7.29

DOI BUDGET YEAR 2005 IT INVESTMENT OVERVIEW

Investment Identification

Agency: Department of the Interior
Bureau: Bureau of Land Management
Location in Budget: National Fire Plan -- Accountability
Account Title: Wildland Fire Management
Account Identification Code: 010-02-01-0411-0
Program Activity: DOI - Office of Wildland Fire Coordination
Name of Investment: [National Fire Plan Operations and Reporting System](#)
Unique Investment Identifier: 01004010501041100104008
(IT Only)(see section 53)

Investment Justification

I.A Investment Description: In the aftermath of the disastrous wildfire season of 2000, the Clinton Administration tasked the US Department of Interior and US Forest Service with responsibility to prepare a report that offered recommendations for how best to prevent future catastrophic wildfires. The outcome of the Agencies' work was a report, known as the National Fire Plan, which identified a cohesive strategy for responding to the severe fires, reducing the impacts of these wildland fires on rural communities, and ensuring future firefighting resources.

The National Fire Plan identified accountability with respect to oversight, coordination, program development, and monitoring of work as critical components for successful implementation of the Plan's mandates. While each Agency had some processes in place to meet these accountability requirements, the Agencies did not, as a whole, have an overarching system capable of providing sufficient analysis and reporting functionality. To address these shortcomings, each Agency, first Forest Service, then DOI, teamed with a contractor to develop systems capable of meeting basic analysis and reporting needs identified in the National Fire Plan. These projects resulted in the development of several systems designed to meet the needs of each Agency:

Forest Service
NFPInfo: Based on the FASTRACS system developed in Region 6, the Forest Service NFPInfo system focuses on collection of data for burned area rehabilitation, hazardous fuels reduction, and community assistance. Data are collected at a detailed level, with an emphasis on reporting planned versus actual accomplishments for projects and their associated activities.
NFP Data Mart: Integrates financial data from the Foundation Financial Information System (FFIS) with data collected in NFPInfo. Brio is then used to perform reporting and analysis functions.

Department of Interior
An inter-bureau team of technical experts was commissioned by the DOI Office of the Secretary, Office of Wildland Fire Coordination to (1) study existing bureau systems and identify sources of data for the National Fire Plan (NFP) reporting system, (2) to research existing technical approaches, and (3) to recommend a technical approach for developing a departmental NFP information system. The technical team recommended, and the bureau directors [Bureau of Indian Affairs (BIA), Bureau of Land Management (BLM), Fish and Wildlife Service (FWS), and National Park Service (NPS)] agreed that a departmental NFP information system modeled after the Department of Agriculture Forest Service NFP reporting system was the best technical approach.

NFPInfo: DOI's version of NFPInfo, in contrast to the Forest Service system, focuses on capturing only high-level information associated with workload measures. In this sense, the tool automates existing data call processes, rather than allowing field users to track detailed project and activity information.
Integrated Fire Occurrence Reporting Database: Fire occurrence data from SACS and BLM Fire Reporting (1202) were integrated into a single database structure to address fire occurrence-related workload measures.
Integrated FFS Reporting Database: Financial data relating to the National Fire Plan were extracted from the respective DOI FFS systems and integrated into a single database structure.
Given the close partnership between DOI and USFS in executing the mandates of the National Fire Plan, the Agencies decided to collaborate on development of a single integrated system. This system would leverage

lessons learned from each of the previous development efforts in essence leap-frogging past work to provide a system which augmented overall functionality while incorporating the best features of the existing tool set. To carry out this effort, the Offices of Wildland Fire Coordination in the USFS and DOI have signed a Memorandum of Understanding (MOU). This MOU serves as the basis for the joint development of an interdepartmental National Fire Plan Operations and Reporting System (NFPORS). The scope of NFPORS system is to provide a common, interdepartmental, electronic information system. Development of the system will include tools that field offices use to plan, execute, and monitor hazardous fuels reduction and burned area rehabilitation projects. Development of such a system will facilitate the Government's accountability for NFP activities planned and accomplished and for the funding of those activities.

NFPORS combines high level NFP information and allows production of a single report for all five federal fire agencies. Information is consistent and reliable so that there is no significant need use data qualifiers or disclaimers for individual bureaus or agencies.

In addition to generating the congressional reports, the NFPORS will provide managers with the ability to answer discrete NFP questions at national, bureau, regional, state, and field offices. Readily available information will allow managers to respond to both strategic (GPRA) and day-to-day questions and issues. The ability to relate financial and program data will enable implementation of sound activity-based costing and other performance measurements.

I.B.1 Agency mission and strategic goals and objectives supported:

As evidenced in their respective strategic plans, the U.S. Department of the Interior (DOI) and U.S. Department of Agriculture Forest Service (FS) are committed to managing wildland fire as part of their mission to shape and maintain healthy ecosystems. To increase DOI and FS capabilities to conduct fire management activities on our nation's lands, Congress provided both Departments with additional funding in 2001, and required that each Department implement action and financial plans to ensure accountability for the funds appropriated. In response, FS and DOI prepared the National Fire Plan (NFP), which described the proposed work to be accomplished, and offered proposals for allocating and spending the appropriated funds.

Accountability (for monies spent and results achieved) is expected and is closely monitored, from within and outside the Departments. The first NFP Accomplishments report was delivered to Congress in December 2001, but each Department, using their respective data collection and tracking processes, compiled their part of the report separately. The final report was manually assembled and presented to Congress.

To successfully track and report accomplished work and allocation of funds requires that each Department collect and compile information from all federal wildland fire management bureaus in the DOI [i.e., Bureau of Indian Affairs (BIA), Bureau of Land Management (BLM), Fish and Wildlife Service (FWS), and National Park Service (NFPs)]; and the Department of Agriculture Forest Service (FS). The most effective and efficient method of compiling this information is to collect it in a common electronic information system.

Currently, no interagency or interdepartmental tracking systems are in place to meet the Departments' mission. Agencies have responded to project management accountability requirements in different ways: many have forced accountability reporting onto pre-existing administration tools; others have simply failed to develop adequate tools. Ultimately, there is still no method for most field managers to consistently and rapidly respond to status requests from any level in the organization.

The current environment is representative of project deficiencies identified in the President's Management Agenda (PMA). In his government-wide Budget and Performance Integration initiative, the PMA specifically cites that:

Managers responsible for producing public services often do not have control over the resources they use or flexibility to use them efficiently; authority is not aligned with accountability.

Managers do not have timely and complete information with which to monitor and improve their results. Information is collected and filed away for use somewhere else.'

NFPORS will directly address these issues by providing managers with the information they need to effectively assess and manage their programs by providing a common, interdepartmental, electronic information system. Development of the system will include tools for field offices to plan, execute, and monitor hazardous fuels reduction and burned area rehabilitation projects. Development of such a system will facilitate the Government's accountability for NFP activities planned and accomplished and for the funding of those activities.

Additionally, the PMA states, "Over time, agencies will be expected to identify high quality outcome measures, accurately monitor the performance of programs, and begin integrating this presentation with associated cost". In order to establish and track program performance, it is essential to have adequate reporting tools in place. This need is even more critical when the program spans multiple Agencies, and even multiple Departments, as is the case with Federal wildland fire management. NFPORS will provide the tools necessary for program tracking and accountability and the system benefits line up with the PMA's expected results of:

Better performance, based on an assessment of the expected outcomes relative to what is actually being achieved, including results expected from the President's electronic government initiative.

Better control over resources used and accountability for results by program managers. This is consistent with the President's strategic management of the human capital initiative, which increases staff and responsibility at the front line of service delivery and links rewards to performance.

Standard, integrated budgeting, performance, and accounting information systems at the program level that would provide timely feedback for management and could be uploaded and consolidated at the agency and government levels. This would facilitate the goals of the President's initiative to improve financial performance. Eventual integration of existing segregated and burdensome paperwork requirements for measuring the government's performance and competitive practices with budget reporting.

As a cross-agency investment, NFPORS will greatly facilitate the coordination and accountability across the wildland fire management bureaus. NFPORS will provide managers with the ability to relate financial data with fire management activities. This integrated information will allow managers to respond to both strategic (GPRA) and day-to-day questions and management issues. The ability to relate financial and program data will

enable implementation of sound activity-based costing and other performance measurement.

I.B.2 President's Management Agenda strategic goals supported:

See I.B.1 (above)

I.B.7 Agencies and organizations affected by this initiative:

NFPORS is a multi-agency initiative that includes the U.S. Department of Interior (DOI) and U.S. Department of Agriculture Forest Service (FS). The wildland fire management bureaus in DOI are the Bureau of Indian Affairs (BIA), Bureau of Land Management (BLM), National Park Service (NPS), and Fish and Wildlife Service (FWS). These four bureaus, along with the Forest Service, constitute the five federal wildland fire management divisions. These bureaus are committed to shaping and maintaining healthy ecosystems through burned area rehabilitation, hazardous fuels reduction, community assistance, and research, as well as fire suppression. The Project Manager is from the Department of the Interior.

I.B.8 Investment cost reduction or efficiency improvement:

The time spent responding to data calls will decrease dramatically under the new environment. It is estimated that the DOI wildland fire management bureaus currently respond to an average of 60 data calls per year and Forest Service responds to an average of 20 data calls per year. With the implementation of NFPORS, the number of manual data calls to the field units is expected to decrease to approximately 20 (for DOI and FS combined). It is also estimated that the time responding to data calls will decrease from 3 hours to 1 hour per data call. These estimates are at the unit level, and additional savings have been estimated at the region, bureau, and department levels. All told, the timesaving associated with NFPORS are estimated to total \$7.5 million per year in labor efficiencies. In addition to the labor efficiencies responding to data calls, there will also be a reduction in cycle time from this investment. Instead of having to wait for the manual data call to be collected and compiled, information will be available much faster. The current turnaround hours per data call at the field unit level is estimated to be an average of 20 hours. Under the new environment, this turnaround time is estimated to be an average of 3 hours, which is an 85% reduction in turnaround time. Additionally, reduction in turnaround time is estimated to be 77% (reduction) at the region level and 58% (reduction) at the bureau level. Table available in ITIPS Library

I.9.a List all other assets that interface with this asset.

Other Asset: BLM 1202 Reengineered? No Other Asset: BLM FARS Reengineered? No Other Asset: BLM - MIS Reengineered? No Other Asset: BLM/FS-FASTRACs Reengineered? Yes Other Asset: NPS - PMIS Reengineered? No Other Asset: NPS-FirePro Reengineered: No Other Asset: FAADS Reengineered? No Other Asset: FWS - FMIS Reengineered? No Other Asset: SACS Reengineered? No Other Asset: IPDS Reengineered? Yes Other Asset: FFS Reengineered? No

I.9.b Have these assets been reengineered as part of this investment (Yes/No)

Yes

Requested Investment Summary of Spending for Project Stages (\$Millions)

BY 2005 Planning Resources:	.00
BY 2005 Acquisition Resources:	.00
BY 2005 Maintenance Resources:	.70
BY 2005 Total, All Stages Resources:	.70
Life Cycle Total, All Stages Resources:	7.10

DOI BUDGET YEAR 2005 IT INVESTMENT OVERVIEW

Investment Identification

Agency: Department of the Interior
Bureau: Bureau of Land Management
Location in Budget: Summary of IT Investments
Account Title: Management of Land and Minerals at Assistant Director
Account Identification Code: 010-04-14-1109-0
Program Activity: Fluid Minerals Program (Oil and Gas, Geothermal)
Name of Investment: [Automated Fluid Minerals Support System \(AFMSS\)](#)
Unique Investment Identifier: 01004010301041700107021
(IT Only)(see section 53)

Investment Justification

I.A Investment Description: The Automated Fluid Minerals Support System (AFMSS) is a bureau-wide Fluid Mineral (oil and gas, geothermal and helium) authorized use and inspection/enforcement workload support system of the Bureau of Land Management (BLM). The Project was chartered in May 1993. AFMSS consists of two primary components, the AFMSS Internal Functionality and the Well Information System (WIS). The following is a brief description of each of these components:

AFMSS Internal Functionality (Oil, Gas and Geothermal Lease Operations on Federal and Indian Trust Lands, Post-lease Operational Approvals, Well and Facility Data, Inspection and Enforcement Data, Undesirable Event (Spills), and Display of Minerals Management Service (MMS) collected well production data (OGOR). Also included is data on customers (operators). A number of reports supporting BLM business requirements are also included on a Field Office, State Office and National basis. Also included are features to control security access and a variety of administrative functions.

Well Information System (WIS). BLM's Well Information System (WIS) is an existing AFMSS module that is comprised of web-based well permit/report forms and an underlying Federal onshore well database that is derived from AFMSS. The AFMSS WIS module resides outside of BLM's firewall and is used to support electronic commerce (E-Government) well permit/report submissions and approvals between BLM and our customers who include the oil and gas industry, permit agents, other Federal agencies and state governments.

Future AFMSS modules include:

Handheld Inspection Capture: This will allow Field Offices to increase inspection presence by capturing data in the field. This will reduce manual data entry by allowing automatic uploads from the field device to the main database.

External Interfaces with Bond & Surety and LR 2000: This will eliminate redundant data entry between AFMSS and the two LR 2000 systems for commonly used data sets. Enhanced Government to Business Electronic Commerce: This will improve the existing WIS application by allowing batch transfers of permit data, improved interface with State governments and improved edits on submissions.

Over 1,100 BLM personnel access AFMSS on a daily basis. These personnel are located in 31 Field Offices and 9 State Offices, supporting Fluid Mineral program activities on Federal lands. This activity includes oil and gas, geothermal and helium operations on the National Forests (USFS), Indian Trust Management lands

(allotted, tribal and BIA) and other Federal lands including the National Petroleum Reserves (DOE) and military reservations (DOD). AFMSS supports BLM's authorized use regulatory well permitting/reporting and field operations inspection/ enforcement workload processes through an Informix-based client-server environment

The modules of AFMSS were deployed in 1996 and have been improved by numerous system enhancements. The electronic commerce capability for the Fluid Minerals program was established with the deployment of the AFMSS WIS module in 2000. To date, WIS has supported the electronic submission of over 18,000 well permits and reports from over 400 oil and gas industry trading partner operators.

In summary, AFMSS facilitates the collection, management and sharing of oil and gas, geothermal and helium authorized use regulatory well permits/reports and field operations inspection/ enforcement data across Federal onshore operations. AFMSS users include BLM, MMS, USFS, BIA, DOE, State government and the private sector. AFMSS is considered business critical to support Bureau's ability to meet the requirements of the President's National Energy Policy.

I.B.1 Agency mission and strategic goals and objectives supported:

AFMSS supports the Department of the Interior's Mission

The U.S. Department of the Interior mission is to protect and manage the Nation's natural resources and cultural heritage; provide scientific and other information about the resources; and honor its special responsibilities to American Indians, Alaska Natives and affiliated Island Communities. AFMSS supports this mission by providing use authorization and associated inspection/compliance support for the Nation's natural resources.

AFMSS supports the Secretary's Vision

The Secretary's vision for effective Interior program management focuses on conservation, cooperation, consultation and communication.

AFMSS supports conservation of our Nation's land and its resources by providing a record of past and current activities authorized on public lands.

AFMSS supports cooperation in terms of interaction, collaboration and partnerships with others by providing access to AFMSS and interfaces to other Bureau and Department systems to facilitate the exchange of data in support of the management of our Nation's resources.

AFMSS supports consultation with others to provide the most current information associated with the use of our Nation's resources by providing access to AFMSS and full data exports to our partners in land management.

AFMSS supports communication to reach out to others in the exchange of information relevant to the use authorizations of our Nation's resources.

AFMSS supports the Secretary's key business principles

Key business principles guiding Interior's operations are customer value, accountability, modernization and integration.

AFMSS supports customer value by providing a record of past and current use authorization and inspection / enforcement actions for our Nation's resources, a foundation that enables management decisions that ensure effective use of the resources.

AFMSS supports accountability by collecting clear performance measures associated with use authorizations and inspection / enforcement actions on our Nation's lands and minerals, providing reportable units via interface with the Bureau's Management Information System (MIS).

AFMSS supports modernization by employing innovative resource enhancing strategies to facilitate the ongoing evolution of use authorization and inspection / enforcement processes that rely on common, re-usable components in the management of our Nation's resources.

AFMSS supports integration thru the identification and consolidation of repetitive processes among AFMSS's component systems and other Bureau and partner systems to achieve economies of scale and enhance

customer service/confidence.

AFMSS supports the Department's draft Strategic Plan for FY 2003 FY 2008:

The draft Strategic Plan is organized around the Department's principal mission areas: Resource Protection; Resource Use; Recreation; and Serving Communities.

The Department's stewardship responsibilities involve the complicated task of determining where, when, and to what extent renewable and non-renewable economic resources on public land should be made available. AFMSS supports Resource Protection and Resource Use by providing a record of mineral resource use authorizations and inspection / enforcement activities for the Nation's public lands, providing management with the appropriate and timely information to effectively promote/manage resource protection and use while sustaining a dynamic economy. With the Nation experiencing unprecedented demands for oil, natural gas and coal, employees of the Department make daily decisions that affect the well being of our nation and quality of life of our citizens (effectively manage and provide efficient access and development/production). As a national major application, AFMSS provides the tools/data (improved technical assistance) to enable the BLM to field a highly skilled, accountable, modern, functionally integrated, and citizen-centered results oriented workforce (improved resource management and stakeholder satisfaction).

AFMSS supports Serving Communities by providing use authorization and inspection / enforcement information from our Nation's mineral estate cases. As the Internet expands, there will be an increasing demand for online government services. AFMSS WIS currently supports electronic commerce capabilities for use authorization business processing which results in support for serving communities and industry.

AFMSS directly promotes the achievement of the agency mission goal of Resource Use and the agency end goal of Manage resources to enhance public benefit, promote responsible use, and ensure optimal value.

The following table illustrates how the AFMSS investment directly supports BLM's agency mission, strategic goals and objectives. Please note for the table below, BLM's agency mission, strategic goals and objectives are described in columns 1, 2 and 3 and AFMSS support toward these criteria are described in column 3 in italics font. (See table in ITIPS Library)

AFMSS supports the DOI IT Strategic Goals:

Interior's Information Architecture: modeling the Departmental and Bureau business enterprise and future technical direction. AFMSS has been correlated with the Bureau Architecture at a high level. The Analysis phase provides the information to allow the AFMSS systems to be correlated, in more detail, to the lower levels of the Architecture.

IT Security: assuring continuous information to Interior customers especially for mission critical systems; AFMSS application and data security is divided into 3 levels:

System access and security measures applied to the NIRMC computer system.

Users' local computer local computer and office security

Application: The AFMSS applications and data require additional security screening. Also, AFMSS controls user access, assigned by responsibility.

E-government: providing customer-centric services, information, and products using the Internet, the World Wide Web, and other electronic media. AFMSS currently provides Internet access to external customers requesting use authorization actions involving the public lands. The BLM ITIB has approved an enhanced AFMSS G2B E-Permit E-Government initiative to provide end-to-end full automation of BLM's Fluid Mineral authorized use business process using the AFMSS WIS system as the foundation. This initiative will enable public users to submit batch volumes of electronic well permit / report applications with ease and monitor the status of such transactions.

Capital Planning and Investment: aligning mission and program technical requirements with budget formulation and execution of IT capital investment acquisitions. The AFMSS operation and maintenance are aligned with the Bureau's land management Mission and Goals; to provide the best available technology at minimum investment to accomplish business responsibilities.

I.B.2 President's AFMSS supports the President's Management Agenda of competitive sourcing, strategic management of

Management
Agenda
strategic goals
supported:

human capital, improved financial accountability, expanded e-government and budget and performance integration by:

Capturing BLM's use authorization and inspection/enforcement business rules and tasks in software,

Re-engineering use authorization and inspection/enforcement; the manual business tasks will be re-created in a computerized GIS and other software support environments and eliminate the current manual environment,

Improving a Bureau-wide, centralized repository of authorized use and inspection/enforcement data. This will provide a one-point data access for managers and customers,

Managers will have timely and complete information with which to monitor and

Standardizing methods of use authorization and inspection/enforcement data analysis,

Providing industry and the public with improved access to BLM resource data (via the Internet). Information will be in digital form and easily accessible for reporting and distribution,

Reducing the costs of managing federal lands.

Improving customer confidence in the information they receive,

Providing a greater employee focus on performance by improving the work environment, tasks will be automated; users will not be required to be software experts; tasks will be sequenced and tracked by a Work Flow Manager, and

Improving the BLM 's use of the Web and moving to an enterprise-wide e-business organization.

AFMSS specifically supports five key tasks of BLM's Implementation Plan of the President's National Energy Policy Act (NEP) which include:

BLM will identify ways to expedite the process of approving Applications for Permit to Drill. This includes identifying and implementing process improvements, utilization of information technology (IT) to greatly facilitate more efficient well permit processing through electronic commerce with industry and regulatory agencies as well as greatly improved National Environmental Policy Act (NEPA) analysis capabilities through utilization of Geographic Information System (GIS) technology. (BLM NEP Task 8).

BLM will enhance inspection and enforcement capabilities to ensure that inspections are completed and lessee/operators are notified of corrective action requirements in a timely manner to ensure that the public resources are protected (BLM NEP Task 41).

BLM will look for opportunities to improve and streamline the management of the NEPA process for all energy resource proposals with all surface-management bureaus, offices, and affected agencies (BLM NEP Task 36).

BLM will issue guidance to ensure meaningful consultation with Federally recognized Tribal governments when assisting in the development of Tribal energy resources; when implementing energy tasks which might affect trust resources and treaty rights; when energy tasks might affect areas on public land of concern to Tribal communities; or when developing energy-related regulatory policies on matters that significantly or uniquely affect Tribal communities (BLM NEP Task 39).

BLM will explore other regulation and policy change relative to liability and reclamation, including the lease assignment approval policy and process, and the orphan well policy relating to legacy wells. BLM will also consider a single bond and common stipulations for both lease and related off-lease facilities and roads (BLM NEP Task 7).

I.B.7 Agencies
and
organizations
affected by this
initiative:

As stated in Section 1.B.1 above, the current AFMSS e-permitting capability is based on the ANSI X-12 EDI Transaction Set 625 Well Information Transaction Set collaboration between BLM, MMS, State agencies, and industry; but only addresses a subset of the derived requirements and has only been implemented in BLM (with some partnering with some states). MMS is now prepared to develop these capabilities for their offshore oil and gas program. Before proceeding, MMS is now defining their Enterprise Architecture (EA). MMS and BLM are in the process of developing a framing document, which is intended to describe well e-permit project

coordination between the agencies. Specifically, the framing document will describe what can and cannot be performed through e-permit project coordination.

I.B.8 Investment cost reduction or efficiency improvement:

BLM conducted a post deployment return on investment report for AFMSS in February 28, 2000. The report identified four major areas of cost reduction or improved efficiency:

Data Integrity. The quality controls associated with AFMSS have significantly improved the accuracy of the data. System error detection has proved effective in achieving a level of accuracy above the level possible under the former systems. AFMSS eliminated hard copies of applications. All the data is stored in a database and updated in a timely manner. The system can generate hard copies of applications on an as-needed basis. As part of the AFMSS project, the Bureau cleaned up, standardized, and collected data to be used in the new system. This data will be usable long after the life cycle for the AFMSS effort is over. As a result, there will not be a required data clean up or collection for the system following AFMSS. Hence, a residual value for benefit of the data is applied.

Data Sharing. Benefits to other federal and state agencies were measured. Data can easily be made available to MMS as well as other states the Bureau partners with in the regulation of the oil and gas industry. The cost of manual generation from several sources was reduced by an integrated system. The quality of data in 1999 was over 95 percent in most offices. This integrated system avoids the manual effort and integration of data for sharing.

Processing. Under the former system, extensive travel to and from remote locations was required in order to process an application. AFMSS provides access to complete data processing at a site or customer location for applications. AFMSS eliminated the time consuming task of determining acceptable or unacceptable applications. The travel was \$35,000 in 1993, while there were no travel costs in 1999. AFMSS also eliminated extensive manual file searches necessary to complete the processing of an application.

Prompt and easier access to the application data via AFMSS has improved the Bureau's ability to monitor lessee's compliance with terms of the agreement, and improved monitoring of areas to avert serious environmental problems and costly solutions to those problems. After an application is approved, the Bureau tracks and monitors all activities (i.e., the activities for competitive oil and gas leasing). These activities involved a complex, paper-laden workload and were manually transmitted to MMS. The updating of manual files and copy for distribution was eliminated via AFMSS.

AFMSS has made it possible to compile and manipulate data into management reports, which were not feasible using the manual system. This expanded reporting capability is used to perform trend analyses that enable the Bureau to identify, at an early stage, the types of changes in applications requiring reassignment of staff or redistribution of resources. Customers also have benefited from trend analyses with more reliable data for long range planning. The reporting of accomplished workloads helps to accurately project for future planning. The legacy environment was imprecise and mostly a manual effort. The response time was reduced to numerous inquiries regarding the application or compliance monitoring activity and reduced the Bureau staff's ability to provide more pressing service to other federal agencies, customers, or the public. In the former environment, the typical query time exceeded several minutes to check the manual records and provide a reply. AFMSS reduced the query response times because the majority of the data required for an inquiry is contained in the system and accessible throughout the Bureau via the network.

Improved Service. Many of the benefits now seen in the AFMSS were not anticipated in the 1993 Project Plan. AFMSS is seeing a number of increased benefits due to application functions driven by user demands not anticipated in the original plan or requirements. These benefits included increased data quality from edits and data conversion processes, improved data access through Bureau networks, and removal of manual data backup and distribution processes.

Also unanticipated was the increased number of users, both internal and external, now using AFMSS on a daily basis. Estimates of the number of users in 1993 were low. Although the size of the Bureau staff has been reduced since 1993, we are seeing an increase in the number and types of AFMSS users. There is an increasing number of Bureau users outside the oil and gas staff such as lands staff (oil and gas related ROW's) and increased management or oversight-level users. MMS also has increased the number of users by at least 25 percent, and more are expected in light of the reengineering effort. Recently, we have seen an increase in users within state and tribal governments as well as commercial data vendors.

In addition, AFMSS has seen a number of unanticipated functionality improvements. These increased improvements have been driven by user change requests as well as program office-level directives to address weaknesses in the field such as re-vitalization of the inspection and enforcement program, increased attention to orphan and abandoned well liability and bond level review, and increased efficiency of application processing for improved customer service.

Future investments in AFMSS will continue to reduce costs or improve efficiencies by:

- Utilizing an integrated business process improvement approach by working directly with the Bureau Enterprise Architecture (BEA) technical support staff. The AFMSS modules will realize, for a major area of BLM emphasis, the BA goal of streamlining business processes from end-to-end starting (see the following response to Section E on Enterprise Architecture);
- Coordinate and normalize business process improvement and IT support with other Department agencies, specifically the Minerals Management Service for Offshore well permit/report processing;
- Continue and enhance e-Permit work process improvement partnerships with the Interstate Oil and Gas Compact Commission (IOGCC), Groundwater Protection Council, State oil and gas regulatory agencies from Alaska, California, Colorado, New Mexico, Montana and Wyoming as well as Federal agencies such as the Minerals Management Service as mentioned above.
- Leverage previous electronic standards partnership work from oil and gas industry, government and the American Petroleum Institute (API). This timely partnership resulted in the development of an American National Standards Institute (ANSI) X-12 File Exchange Standard: Transaction Set 625 - Well Information

Report. The AFMSS Project platform will also utilize and support ongoing work associated with the Bureau's Data Management Plan work break down structure. Sustain and greatly leverage the very productive continuous improvement environment that exists within the AFMSS O&M environment. Utilize existing knowledge management equity that has been derived to reduce costs and improve efficiencies as a result of recent insights and experience. Utilize existing information technology as much as possible. Buy rather than build while ensuring that such technology meets the constraints of BLM's technical architecture (using the guidelines of the Technical Reference Manual Volumes 1 and 2). Apply and utilize formal and integrated project management methodology and practices as required by BLM's System Coordination Office for the entire AFMSS Project platform. This includes proactive coordination with DOI and OMB to ensure coordination and participation with emerging initiatives such as E-Gov. In summary, the AFMSS Project management and owner/sponsor must take effective and proactive IT management action to ensure that the oil and gas program achieves a much higher level of performance as required by the National Energy Policy. To reach this next higher level of performance will require aggressive steps as described above that will result in cost reduction and improved efficiencies as intended.

I.9.a List all other assets that interface with this asset. The following table lists the assets that interface with the AFMSS: DOI MMS MRM Financial System DOI MMS OGOR (Monthly Well Production Reporting) DOI BLM Management Information System DOI BLM Legacy Rehost 2000 Case Recordation System DOI BLM Legacy Rehost 2000 Bond & Surety System DOI BLM National Integrated Land System

I.9.b Have these assets been reengineered as part of this investment (Yes/No) No

Requested Investment Summary of Spending for Project Stages (\$Millions)

BY 2005 Planning Resources:	.00
BY 2005 Acquisition Resources:	1.25
BY 2005 Maintenance Resources:	1.14
BY 2005 Total, All Stages Resources:	2.39
Life Cycle Total, All Stages Resources:	14.58

DOI BUDGET YEAR 2005 IT INVESTMENT OVERVIEW

Investment Identification

Agency: Department of the Interior
Bureau: Bureau of Land Management
Location in Budget: Summary of IT Investments
Account Title: Wildland Fire Management
Account Identification Code: 010-04-14-1125-0
Program Activity: Wildland Fire Preparedness
Name of Investment: [Incident Qualifications and Certification System \(IQCS\)](#)
Unique Investment Identifier: 01004010501042000104008
(IT Only)(see section 53)

Investment Justification

I.A Investment Description: On July 7, 1998, the (Department of the) Interior Fire Coordinating Committee (IFCC), decided future action needed to be taken on the Incident Qualifications and Certification System (IQCS). The Fire Directors (IFCC) decided a formal engineering study was necessary to evaluate and define IQCS' current Program, information, and operational requirements. The National Wildfire Coordinating Group (NWCG) sanctioned the IQCS Information Engineering Investment Study in October 20, 1999 as its guide for identifying requirements and future actions. Based on the findings of the Investment Study, in June 2001 NWCG chartered the IQCS Acquisition and Design phases with BLM as the lead agency. As part of the Charter an RFI and RFQ was completed for solution selection. KPMG was chosen as the contracting agency for completion of the Design phase with options for Construction and Implementation. Work was initiated on the Design phase April 30, 2002 and Complete September 30, 2002. Work on Construction began Oct 01, 2002 and is expected to complete Oct 01, 2003.

The success of the Federal fire mission depends on the Incident Qualification and Certification (IQC) Program information. IQC is a critical function for managing the fire program's risk, primarily in the areas of health, (life) safety, and legal liability. Currently, the Department of Interior, Forest Service and State Programs have three separate computerized databases of fire personnel qualifications, including "Red Card," information. In support of the qualification and certification process, these systems document the training and development, experiences, and qualifications of the 60,000 fire fighters. It is anticipated that other risk (i.e. oil spills, HAZMAT, etc) and incident-related personnel that perform emergency response duties will be included in the IQC database.

The IQC Program is a performance-based certification process. A job qualification is based on documented performance of required skills, knowledge and abilities (that may be gained through many avenues, such as training, simulated and life experiences). The IQC Program mitigates the potential for loss of life, personnel injuries and fire management liability by assuring that only qualified personnel are assigned to incident duties. The IQC training activities provide specialized developmental opportunity. Certification is the documentation of management's periodic assessment and reassessment of qualified personnel.

The Incident Qualifications and Certification System (IQCS) investment is chartered to develop (design, construct, and implement) an information system that tracks training and certifications for Wildland Firefighters. Fundamental high-level business processes and functions include:

Repository management of incident (example: wildland fire) positions performance standards and their respective qualification and certification requirements. Training management that includes items such as: course/offering descriptions, learning objectives, pre-course requirements, class schedules, student registration and class participation information. Workforce analysis that accurately reports in a timely manner the disposition, status and deficiencies of positions throughout the incident response community Tracking of personnel information related to an individual's qualification and certification currency and history that includes information such as: positions, position performance, training, physical fitness status, and external warrants. The Construction Phase is a culmination of the activities that have occurred during the five-month Design Phase. During the Design Phase, the investment team refined the business requirements and estimated the

level of effort necessary to build the IQCS so that it will meet the expectations of the IQCS user community. During this time the technical team has been engaged with the Subject Matter Experts (SME's) to clearly articulate the system requirements, identify the level of work to configure the Software application as well as the level of work necessary to customize the delivered package. After the business requirements were further defined, the technical team reviewed each of the documented business requirements. The purpose of this review was to perform a fit/gap analysis and to identify the level of work necessary to support each of the documented business process steps.

The investment is currently in the 6th month of the Construction Phase with approximately 6 months remaining. Construction Phase tasks can be broken down into four primary phases, they include Configuration, Construction, Testing, and Implementation Planning: 1. Configuration includes the setup and build-out of the Control tables used by the application. 2. The Construction Phase is where conversion, interfaces, modification, and customizations are built and unit tested by the technical staff. This activity is critical to the success of the final deliverable and serves to refine the system functionality. 3. System testing includes full Integration testing, User Acceptance testing, Load, Balance and Communication testing. 4. Detailed planning for the production roll out of the IQCS system.

I.B.1 Agency mission and strategic goals and objectives supported:

Mission (GPRA) Justification Component:

The Incident Qualification and Certification (IQC) Program information directly supports two of the five DOI Government Performance Reporting Act (GPRA) mission goals. The goals are as follows:

Goal 1: "Protect the environment and preserve our nation's natural and cultural resources." This qualification and certification system ensures that only qualified individuals are assigned to protecting the environment and preserving our nation's natural and cultural resources. This protection responsibility is a primary mission for the Bureau as well as the Department of the Interior. Goal 3: "Manage natural resources for a healthy environment and strong economy." This system ensures that only qualified individuals are assigned management roles in the oversight for natural resources to ensure the health of the environment. These management activities are conducted by individuals qualified and certified to conduct wildland fire suppression activities as well as prescribed burns and fuels reduction management activities.

Presently, there are three (3) non-networked incident qualification and certification systems in more than 100 locations being used by the wildland fire community. This redundancy has created data management problems for field units. There is high-level support from both senior management and the field for development of a single qualifications and certification system or systems that are interoperable which meets the needs of all participating agencies and the states. The success of the Federal fire mission depends on the Incident Qualification and Certification (IQC) Program's information. IQCS is a mission essential system because it can mitigate the potential for loss of life, personnel injuries and fire management liability.

I.B.2 President's Management Agenda strategic goals supported:

As per the Presidents Management Agenda the IQCS investment contributes directly to Competitive Sourcing, Strategic Management of Human Capital, Improving Financial Performance, and Expanding Electronic Government. 1. Competitive Sourcing has been accomplished by evaluating and hiring Contract Staff for the Design and Construction of the investment. A feasibility study was performed which evaluated and ranked both in-house and external staff, and the greatest value was found to be through external staffing (depth of knowledge, flexibility of hours, cost) 2. Strategic Management of Human Capital will be through the effective workforce management functionality inherently designed within the system. IQCS will be able to efficiently and easily generate forecasting and current availability of all workers within the Federal and State Fire system. 3. Improving Capital Performance is accomplished by combing multiple disparate platforms into one single operating system thereby reducing the physical overhead of hardware and software in addition to the resources necessary to operate them. This creates a year on year lower operating cost. 4. Expanding Electronic Government is contributed by the reduction of the manual and paper tasks necessary in the current system. All transactions will be available at all times through a Secure Internet Connection, each transaction will be documented and recorded electronically, and reports can be generated to track trends and forecasts in transactions.

I.B.7 Agencies and organizations affected by this initiative:

Yes this is a multi-agency investment. Bureau of Land Management is the Lead and Managing Agency. Parties involved are the Department of the Interior, Bureau of Indian Affairs, National Park Service, Fish and Wildlife Service, Bureau of Land Management, U.S. Forestry Service, Department of Agriculture, and National Association of State Foresters.

I.B.8 Investment cost reduction or efficiency improvement:

As per the Presidents Management Agenda the IQCS investment contributes directly to Competitive Sourcing, Strategic Management of Human Capital, Improving Financial Performance, and Expanding Electronic Government. 1. Competitive Sourcing has been accomplished by evaluating and hiring Contract Staff for the Design and Construction of the investment. A feasibility study was performed which evaluated and ranked both in-house and external staff, and the greatest value was found to be through external staffing (depth of knowledge, flexibility of hours, cost) 2. Strategic Management of Human Capital will be through the effective workforce management functionality inherently designed within the system. IQCS will be able to efficiently and easily generate forecasting and current availability of all workers within the Federal and State Fire system. 3. Improving Capital Performance is accomplished by combing multiple disparate platforms into one single operating system thereby reducing the physical overhead of hardware and software in addition to the resources necessary to operate them. This creates a year on year lower operating cost. 4. Expanding Electronic Government is contributed by the reduction of the manual and paper tasks necessary in the current system. All transactions will be available at all times through a Secure Internet Connection, each transaction will be documented and recorded electronically, and reports can be generated to track trends and forecasts in transactions.

There are three (3) incident qualification and certification systems being used by the wildland fire community. This multi-system operation generates redundancies in business and information management functions. The estimated contracted maintenance and operations cost of these systems is currently \$600k per year. The estimates for internal data-entry and record upkeep are \$1,650,000.

The IQCS Definition Phase (Requirements Analysis Study) determined the best value (cost & functionality) solution to meet the fire community's business requirements. The chosen new IQCS system will effectively combine the current platforms, thereby reducing the cross platform inefficiencies. (i.e.) multiple data entry, multiple training requirements, additional hardware requirements, etc.

As stated in the investment charter, "goals include providing a thorough and comprehensive study of interagency incident qualifications and certification program requirements to:
 explore the development of a best solution(s) for an interagency Incident Qualifications and Certification (IQC) Program; so that: interagency field units and personnel are better served; and investments in wildland fire IRM applications are optimized."

The existing charter is currently under revision to convey the current status of the investment, which has moved into the Design Phase as of May 2002. The new revisions will carry forward the original charter theme, ensuring that interagency units are provided a solution that helps to save lives, minimize response time, and decrease overall cost of ownership.

I.9.a List all other assets that interface with this asset. ROSS (Resource Ordering and Sourcing System)

I.9.b Have these assets been reengineered as part of this investment (Yes/No) No

Requested Investment Summary of Spending for Project Stages (\$Millions)

BY 2005 Planning Resources:	.00
BY 2005 Acquisition Resources:	.00
BY 2005 Maintenance Resources:	1.00
BY 2005 Total, All Stages Resources:	1.00
Life Cycle Total, All Stages Resources:	10.76

DOI BUDGET YEAR 2005 IT INVESTMENT OVERVIEW

Investment Identification

Agency: Department of the Interior
Bureau: Bureau of Land Management
Location in Budget: Summary of IT Investments
Account Title: Management of Lands and Resources, Oregon & California
Account Identification Code: 010-04-14-1109-0
Program Activity: Business and Fiscal Resource Directorate
Name of Investment: [Management Information System \(MIS\)](#)
Unique Investment Identifier: 01004010101042100402124
(IT Only)(see section 53)

Investment Justification

I.A Investment Description: The MIS is a data warehouse designed to integrate financial, workload, and performance measurement; costing; and resource management information. The Federal Financial System, which contains the official accounting records for the Bureau, is the source of the financial data for this system. The initial MIS financial reporting system has been expanded to include performance and workload measurement, cost management, collections and billings, budget and fund status, customer surveys, budget planning, and property, space, and vehicle systems. Over time, the percentage of the data that is financial will decline as resource program and other types of management information and capabilities are interfaced. The system fully supports the President's E-Government initiative by enabling the public to purchase items from the BLM and by enhancing coordination with States and Indian organizations. Capital planning has been an integral part of the investment since its inception. Although the system is fully operational, any costs for future enhancements will be tracked and approved by the Bureau's Investment Board which is composed of senior BLM management. Operational costs are being tracked through the accounting system. All MIS subsystems' costs are being tracked and monitored. Labor and operational costs, such as software and hardware costs, are recorded in the Federal Financial System and are tracked on a daily basis. Reports are produced daily showing the cost incurred on the MIS system. The MIS has a project leader and a staff of 20 individuals in an in-house interdisciplinary team to assure that the system is operating as designed, that the data is accurate, and that project costs are in line with estimates.

I.B.1 Agency mission and strategic goals and objectives supported: The MIS investment supports BLM's mission and strategic goals and objectives by directly addressing three specific goals identified in BLM's Strategic Plan for FY 2000 - FY 2005. These internal strategies to improve organizational effectiveness are as follows:
Goal 3.03 Provide cost information to assist in decision making and improve cost-effectiveness and performance results. Goal 3.04 Enhance BLM's MIS to better monitor and manage performance. Goal 3.05 Collect and assess customer, stakeholder, and employee feedback. Additionally, the MIS investment significantly supports the BLM's other mission goals by giving both rank-and-file employees and managers at all levels of the organization accurate, up-to-date information on the costs of outputs/outcomes and the budgetary resources available. These mission goals are as follows:
Goal 1.01 Provide opportunities for environmentally responsible recreation. Goal 1.02 Provide opportunities for environmentally responsible commercial activities. Goal 1.03 Preserve natural and cultural heritage resources. Goal 1.04 Reduce threats to public health, safety, and property. Goal 1.05 Provide land, resource, and title information. Goal 1.06 Provide economic and technical assistance. Goal 2.01 Understand the condition of the public lands. Goal 2.02 Restore at-risk resources and maintain functioning systems.
The MIS plays a key role in enabling the BLM to meet its GPRA performance targets for all of the above-listed mission goals. These BLM mission goals, in turn, relate and contribute directly to the Department's

overarching strategic goals.

The MIS also provides management information on total BLM costs for contracts and operations. These activities are tracked according to Bureauwide priorities and were developed to meet the CFO's reporting requirements under the GPRA. The system is designed to integrate data inputted into Federal financial systems and to serve as a management information tool. The system generates data provided by other Federal systems, including the FFS and the Federal Personnel and Payroll System (FPPS).

The Government Performance and Results Act of 1993 requires each agency to prepare an annual performance plan covering each program activity set forth in the budget of such agency. Annual performance plans must: - establish performance goals to define the level of performance to be achieved by a program activity; - express such goals in an objective, quantifiable, and measurable form; - briefly describe the operational processes, skills and technology, and the human, capital, information, or other resources required to meet the performance goals; - establish performance indicators to be used in measuring or assessing the relevant outputs, service levels, and outcomes of each program activity; and - provide a basis for comparing actual program results with the established performance goals.

As noted above, the MIS significantly enhances the BLM's ability to meet its annual performance targets for all of its mission goals (see listing above).

In addition, the Federal Accounting Standards Advisory Board (FASAB) has established accounting standards for each agency to establish a managerial cost management system. These standards are designed to provide reliable and timely information on the full cost of Federal programs, i.e. their activities and outputs. This cost information is to be used by the Congress and Federal executives in making decisions regarding resource allocation. The MIS generates the cost information that is absolutely critical to the BLM's ability to report to Congress and other Federal executives.

The Deputy Assistant Secretary of the Interior has required each Bureau within DOI to implement a managerial cost management system by fiscal year 2004. The BLM's MIS meets all of the Deputy Secretary's requirements. Additionally, MIS modules have been designed and developed to provide BLM managers and employees with data that is essential to meeting other key FASAB, OMB, and internal requirements.

I.B.2
President's
Management
Agenda
strategic goals
supported:

The MIS plays a key role in enabling the BLM to support several goals from the President's Management Agenda (PMA). First and foremost, the MIS supports the President's Management Agenda strategic goal for Financial Management Improvement. Specifically, it supports Criterion 1, Meet Accelerated (November 15) Deadline For Audited Financial Statements. It also supports DOI Criterion 3, Accurate and Timely Financial Information, by producing accurate internal financial status and transaction reports for BLM managers within 24 hours of processing a financial event. Additionally, the MIS supports Criterion 4, Provide Useful Financial and Performance Information, by (a) providing activity-based costing data through its Cost Management MIS subsystem (derived from the Performance/Workload Measures subsystem and the Budget and Funds Status subsystem), and (b) providing both cost and other financial data that is updated nightly, thereby enabling virtually real-time management access and analysis.

The MIS Project also directly supports the President's Management Agenda strategic goal for Expanded Electronic Government to enhance the Federal government's value to the citizen through citizen-centered E-Government. The MIS supports the E-Government effort by providing a web-based application that offers customer services to the public through the Internet. One example is a program that permits the public to purchase recreational permits online for the Lower Deschutes River Management Area; the Bureau is partnering with the State of Oregon's Park's Department and the Confederated Tribes of Warm Springs on this effort. The MIS receives the data from the public and sends data to the accounting system, the Department of the Treasury, and the BLM's partners.

The MIS provides workforce data that could be used to support yet another President's Management Agenda strategic goal, the Strategic Management of Human Capital. And, as noted above, the MIS is playing a key role in the Bureau's ability to support a fourth President's Management Agenda goal, Budget and Performance Integration, by providing the activity-based costing data that is fundamental to truly and effectively integrating budget and performance throughout the Bureau.

Because of its success, the MIS is the model from which the Department is attempting to create a Departmentwide MIS. Additionally, OMB officials have praised the results that the Bureau has achieved in using its MIS.

I.B.7 Agencies
and
organizations
affected by this
initiative:

N/A

I.B.8
Investment
cost reduction
or efficiency
improvement:

The MIS provides a web-enabled business information, budgetary, financial, and program performance system so that simple data analyses can be performed that benefit the entire Bureau. Additionally, the MIS meets the Government Performance and Reporting Act (GPRA) and Chief Financial Officer (CFO) Act requirements for information on actual performance vs. goals. Thanks to its MIS data, the Bureau has become more efficient in presenting financial and GPRA data. Because of MIS, the Bureau has reduced its Cobol programming staff by 80 percent. The time to get meaningful financial reports has been reduced by 85 percent since financial data is now available the next day after the data has entered into the financial system. The Bureau estimates that over \$3 million dollars was saved by implementing MIS in FY 1999 alone.

As noted previously, the MIS system is a data warehouse designed to integrate financial, workload, and performance measurement; costing; and resource management information. The Federal Financial

System (FFS) contains the official accounting records for the Bureau. The FFS is the official source for financial data in the MIS. The initial MIS financial reporting system has been expanded to include performance and workload measurement, cost management, collections and billings, budget and fund status, customer surveys, budget planning, and property, space, and vehicle systems. Over time, the percentage of the data that is financial will decline as resource program and other types of management information and capabilities are interfaced.

I.9.a List all other assets that interface with this asset. Federal Financial System Interface, Oregon Lower Deschutes River Permit System Interface, Arizona Aravaipa On-Line Permit System Interface, General Land Office Interface, Rangeland Administration System/CBS Interface, Recreational Management Information System Interface, National Interagency Fire Center Interface, Land and Resources Project Office Interface, Land and Resources Project Office Mining Claims Interface, Timber Sale Information Interface, Automated Lease Management System Interface, Interagency Payment and Collections Interface, Bar Coding Interface, E-commerce for LR2000 Filing Fees Interface, MMS Interface Phase I & II, Wild Horse & Burro Interface, Workload Measures Interface, IDEAS, Legacy Rehost 2000, and Alaska Land Information System.

I.9.b Have these assets been reengineered as part of this investment (Yes/No) Yes

Requested Investment Summary of Spending for Project Stages (\$Millions)

BY 2005 Planning Resources:	.00
BY 2005 Acquisition Resources:	.00
BY 2005 Maintenance Resources:	2.25
BY 2005 Total, All Stages Resources:	2.25
Life Cycle Total, All Stages Resources:	34.47

DOI BUDGET YEAR 2005 IT INVESTMENT OVERVIEW

Investment Identification

Agency: Department of the Interior
Bureau: Bureau of Land Management
Location in Budget: Summary of IT Investments
Account Title: Wild Horse and Burro Management
Account Identification Code: 010-04-14-1109-0
Program Activity: Wild Free Roaming Horse and Burro Act
Name of Investment: [Wild Horse and Burro Program System](#)
Unique Investment Identifier: 01004010301042700117057
(IT Only)(see section 53)

Investment Justification

I.A Investment Description: The Bureau of Land Management (BLM) is directed by the Wild Free-Roaming Horse and Burro Act of 1971 (Public Law 92-195), as amended, to manage these animals as part of the natural system of the public lands, and to ensure humane care of excess animals through their capture, removal, shipment, and adoption; until death or passage of title. The information generated by these activities is necessary for the oversight of the animals' care. Later legislation (Public Rangelands Improvement Act, Public Law 95-514) provides additional Bureau responsibilities, including facilitating the removal and disposal of excess animals, and the transfer of title of adopted horses and burros to individuals.

The purpose of this project is to re-host existing functions and add additional functions to provide more effective automation support to all components of the Wild Horse and Burro business process that offer positive returns on the investment. The project is currently in the Select Phase of the BLM CPIC process. The re-design of a comprehensive program information system was approved by the BLM's IT Investment Board (ITIB) on June 11, 2002, after successfully passing through the Bureau's IT Investment Proposal process and full Business Case development. The latter included detailed project planning, alternatives analysis, and estimation of Return on Investment in conformity with OMB Circular A-94. The system was also presented to, and approved by, the Department's Investment Review Board on August 2, 2002. The project was approved with stipulations that required certain coordination actions, recalculation of the ROI for later information, and completion of a fully-resourced project plan. These actions all have been taken as of May 2003, and a request is pending to the ITIB to approve entering the Control Phase of the CPIC process.

The existing system does not address all the business processes and requirements of the Wild Horse and Burro Program, and forces users to rely partially on paper records. Five separate applications exist but are not well linked to one another. The system is not implemented consistently throughout the Bureau, and each office has its own database. Finally, the software product providing the presentation layer of the system is no longer supported, which presents a risk of system shutdown and sudden emergency development requirements. Enhancement of the system was requested by the General Accounting Office in its recent assessment of the program, and beginning in FY 03 we have undertaken a redesign of the automated systems that support this program, as detailed in this Exhibit 300.

The system will support the DOI strategic goal of protecting resources. Components of the system will support a total of five of the President's Management Agenda Initiatives, as detailed in section I.B.2, below, including expanded e-government. The system will also help fulfill BLM's goal to "manage wild horse and burro populations consistent with land health standards and healthy herds,

to achieve and maintain a thriving natural ecological balance, and to ensure that wild horses and burros continue as living symbols of the historic and pioneer spirit of the West.”

All activity at this time is directed to defining requirements, software system architecture, system specifications, and viable alternatives, to the degree required for a competitive Request for Proposals to design and develop an improved system, all in accordance with the Acquisition Plan dated 24 October 2002. Issuance of that RFP is planned for early FY04.

To minimize risk and ensure user satisfaction, the successor system will be designed and implemented through an iterative process. A national user team, which includes representatives of three Federal agencies, has been established and has started work on defining user requirements. The first of three planned business process re-engineering workshops was conducted in March 2003 by the Bureau Enterprise Architecture Team’s Business Process Reengineering Laboratory (BPR Lab). Results are being compiled in the Bureau-standard architecture modeling software tool, System Architect, and are pending review and further development by the user team. The second workshop, in June 2003, continued the BPR efforts and began an intensive activity to define user requirements.

In a related effort, the Data Architecture team of the System Coordination Office (as part of the Bureau Enterprise Architecture) is well into a complete quality profiling and modeling of all the Wild Horse and Burro data bases. Their current version of the data model is under review by the user team at this time. The “to-be” business processes from the BPR effort, and the data model from the data review effort will provide important information for defining functional requirements later this fiscal year, and will be incorporated into the Bureau Enterprise Architecture by the Architecture team.

Rapid prototyping is being used to ensure that user requirements are properly identified and can be conveyed accurately to a design and development contractor.

The BPR Lab is funded to perform additional tasks to ensure that the system concept, architecture, and implementation remain at all times consistent with the Bureau Enterprise Architecture’s Process, Data, Applications, and Technology Architecture components. They also are tasked to make recommendations to ensure that any resulting design is consistent with the Departmental and Federal Enterprise Architectures.

This project has strong interagency components. The Wild Horse and Burro management function is a requirement for both the BLM and the Forest Service. However, the BLM maintains much of the data for both agencies under a National Level Memorandum of Understanding, and manages all horse and burro preparation and adoption steps for the Forest Service. The Forest Service reimburses BLM on a per horse basis for the services provided to the Forest Service by BLM. Accordingly, the Forest Service is represented on the user team, and is participating in process and data modeling, and the definition of user requirements. Forest Service information systems for range management are under consideration as an alternative starting point for these system improvements. In addition, the USDA Animal and Plant Health Inspection Service (APHIS) supports BLM on horse and burro health matters. APHIS is also represented on the user team by a veterinarian, who is helping to define the information needs and system interfaces to support cooperation by the two agencies.

The program already provides Web access to public information about horse and burro adoptions, and about the processes for adoption by the public. Requirements for the improved system are very likely to include full E-Government capabilities, to include completing application for adoptions on-line, tracking of animal shipments, and other information of concern to adopters and the public in general.

I.B.1 Agency mission and strategic goals and objectives supported:

The existing and proposed systems directly support the DOI strategic goal of Resource Protection, and the BLM mission goals of Resource Protection and Sustaining Biological Communities. Wild free-roaming horses and burros have been declared by Congress to be part of America’s natural heritage, and, as such, must be protected from exploitation and damaging competition for resources. The BLM Wild Horse and Burro Program System is needed to assist in the cost-efficient execution of those responsibilities. Without significant improvement of the program’s information management and sharing capabilities, there is increasing risk that unfavorable herd area, horse, and adoption management decisions may occur.

I.B.2 President’s Management

The Wild Horse and Burro Program System will contribute directly to achievement of the President’s Management Agenda, and in particular, to enhancing Competitive Sourcing, Strategic Management of Human Capital, Improving Financial Performance, Expanding Electronic Government, and Budget

Agenda
strategic goals
supported:

and Performance Integration. In addition, this project has a strong interagency component.

1. Competitive Sourcing will be supported in part by hiring private contractors through competitive bidding for the design and development of the project, and possibly for the long-term maintenance of the system. A benefit of the formal business process modeling approach is that, by clearly defining tasks and information requirements, it becomes far more feasible to consider outsourcing elements of program support. Well-defined chunks of the work can be broken off and evaluated for competitive sourcing. This would be far more difficult at present, because the business processes are closely intermingled.

2. Strategic Management of Human Capital will be accomplished in two ways. The first is through more efficient use of our workforce that the new system will facilitate. Formal Business Process Re-engineering is underway to streamline and improve current Wild Horse and Burro business practices, both automated and manual. Enhanced automation will reduce labor-intensive manual and paper tasks necessary in the current system; reduce or eliminate multiple entry of data; and provide automated quality control edit checks. Secondly, automating much or all of the Wild Horse and Burro business process, using easily-learned workflow enhancement software, will help address the President's concern with the aging and retirement of the existing Federal workforce. New hires will experience a much shorter learning curve for data processing and records management than is currently the case. 3. Improving Financial Performance will be accomplished by combining disparate platforms into one single web based system that will provide efficiencies by reducing paperwork, and significantly reducing the amount of staff time necessary to respond to public inquiries, and to serve the public. In addition, erroneous billings and payments will be minimized by establishing the proposed interconnections between Wild Horse and Burro adoption processes and the BLM Collections and Billing System.

4. Expanding Electronic Government will be supported by providing appropriate public access to national and state BLM information, and by implementing on-line adoption processing. A member of the public interested in adopting a horse or burro will not need to know whether some particular program in BLM, the Forest Service, or another agency manages adoptions; through FirstGov.gov, they will obtain ready access to all the information needed, and be able to apply for adoption, pay fees, and execute electronic signatures. All functions will be available at all times through a secure Internet connection.

5. The new system will provide direct, automatic links between the wild horse and burro data bases that track Annual Work Plan Performance Measures such as (numbers of animals removed, in facilities, and adopted; and compliance with adoption requirements), and the Bureau's Management Information System (MIS). MIS tracks the budget and accomplishment of Performance Goals, which will greatly enhance budget and performance integration that is sought by the President's Management Agenda.

I.B.7 Agencies
and
organizations
affected by this
initiative:

OMB E-GOV Initiatives: USA Services, EZ Tax Filing, Online Access for Loans, Recreation One-Stop, Eligibility Assistance Online, E-Vital, E-Grants, Disaster Assistance and Crisis Response, Geospatial Information One-Stop, Wireless Networks for Emergency Communications, Federal Asset Sales, Online Rulemaking Mgmt., Simplified and Unified Tax and Wage Reporting, Consolidated Health Informatics, One-Stop Business Compliance Information, International Trade Process Streamlining, E-Training, Recruitment One-Stop, HR Data Network, E-Clearance, E-Payroll HR Integration, Integrated Acquisition Environment, Electronic Records Management, E-Travel, E-Authentication and Digital Signature (Infrastructure), and Federal Architecture.)

This initiative is not directly a part of the OMB E-Gov Initiatives, but we anticipate that the public information and Internet adoption elements will conform to and be included within the Geospatial Information One-Stop and the Recreation One-Stop. We anticipate using the E-Authentication infrastructure within the overall security framework of the new system.

The project is managed solely within BLM, and is not a formal partnership. However, it will serve important needs of the needs of the Forest Service and the Animal and Plant Health Inspection Service in respect to their Wild Horse and Burro activities. Although the BLM and the Forest Service both have management responsibilities for wild horses and burros under the authorizing Acts, by MOU the BLM manages the animals for both agencies. For this reason, a Forest Service representative from the INFRA information system project is serving on the WHBPS user team. The Animal and Plant Health Inspection Service supports BLM with direct veterinarian services, and is also represented on the user team to ensure that animal health data needed by all the agencies can be stored and accessed efficiently.

I.B.8 Investment cost reduction or efficiency improvement: The disposal element of the current system was originally implemented in 1985, to track the location and status of animals placed in adoptive care. Since that time, the system has been expanded to track, in part, the capture, shipment, preparation, and maintenance of excess animals, and compliance activities associated with adoptive care (1999). However, herd and habitat information, and information on adoption applicants, is currently maintained on paper records in field offices, or in locally PC-based databases. This information is not available to other field offices, or to the national office, and as such must be compiled and reproduced with each request. None of the wild horse and burro information is currently available electronically to other systems that need it, such as the Collection and Billing system, Management Information System, Activity Based Costing, and/or Lawnet. Therefore, labor-intensive re-entry of data is routinely required. Most animal census, capture, and other field-acquired data is recorded on paper forms, and later re-entered into the existing information system (or filed in paper form, if needed for one of the major program functions that are not now automated.) The proposed re-engineering will provide direct communication and data sharing among these systems, and thus eliminate multiple data entry, create a single store for each data element, reduce entry errors and associated rework, implement field data entry technologies, and provide nationwide access to authoritative information on customers, adoption status, shipping status, and compliance with animal welfare regulations. In addition to reducing administrative costs for the Wild Horse and Burro Program, these improvements will assure that procedures and rules for protection of animals can be uniformly applied throughout the United States. The Net Present Value of all such improvements is currently (May 2003) calculated at \$5.4 million.

I.9.a List all other assets that interface with this asset. The existing Wild Horse and Burro Information System interfaces manually with the Management Information System (MIS) and Collections and Billings System (CBS). The proposed Wild Horse and Burro Program System will provide automated data sharing and transfer to some or all of the following existing or emerging systems: Collections and Billings System (manual) Facilities Asset Management System (proposed) Rangeland Administration System (proposed) Management Information System (manual) National Integrated Lands System (in development) E-GIS Geographic Information System (GIS) architecture (in development) Worldwide Web (proposed for significant expansion of WH&B functions) In addition, the project will achieve consolidation of numerous State-level data bases and applications that perform portions of the WH&B business process that are not served by the legacy WHBIS. A significant output of the current Business Process Re-engineering effort will be more detailed specification of the exact nature of required system interconnections; e.g., data flows, transactions, verification checks, audit trails, etc.

I.9.b Have these assets been reengineered as part of this investment (Yes/No) No

Requested Investment Summary of Spending for Project Stages (\$Millions)

BY 2005 Planning Resources:	.00
BY 2005 Acquisition Resources:	.63
BY 2005 Maintenance Resources:	.00
BY 2005 Total, All Stages Resources:	.63
Life Cycle Total, All Stages Resources:	2.42

DOI BUDGET YEAR 2005 IT INVESTMENT OVERVIEW

Investment Identification

Agency: Department of the Interior
Bureau: Minerals Management Service
Location in Budget: Offshore Minerals Management- Information Management Program
Account Title: Royalty and Offshore Minerals Management
Account Identification Code: 010-06-14-1917-0
Program Activity: Outer Continental Shelf (OCS) Lands
Name of Investment: [OCS Connect \(formerly e-Government Transformation\)](#)
Unique Investment Identifier: (IT Only)(see section 53)
01006010301060100107021

Investment Justification

I.A Investment Description: The Offshore Minerals Management (OMM) Outer Continental Shelf Connect Project, OCS Connect, entails a reengineering of core business processes with process owners. The project implements the reengineered processes in a secure web-enabled environment by leveraging Commercial Off-the-Shelf (COTS) software and best practices. OCS Connect aligns business processes with regulated industry and collaborates with international, federal and industry stakeholders. The project also provides online access to appropriate OMM information for staff, industry and the public.

OCS Connect is important for several reasons. The project directly supports the President's Management Agenda and stands as a model for bureau and agency-level e-Government development. OCS Connect is aligned with the DOI Enterprise Architecture (EA) guidelines and security architecture and the project has been DOI approved and OMB funded for FY03. OCS Connect directly supports the National Energy Plan (NEP), works with international, federal and state agencies, and provides significant financial benefits to both industry and OMM.

The entire Outer Continental Shelf (OCS) Connect project is focused on the delivery of Citizen-Centered e-Government and IT management. The business processes of the OMM are being reengineered and converted to online business applications to increase the quality of data received, the applications used in the analysis of that data, and the resulting programmatic decisions. This will increase the visibility of the bureau's processes, as well as the accountability for its actions.

OCS Connect will replace the existing legacy system, TIMS, by automating data exchange capabilities, improving operating efficiency, and providing the agility and flexibility to adjust to and meet future business conditions and demands. The transformation will directly address several important federal mandates and business drivers, including: the Government Paperwork Elimination Act; the Government Information Security Reform Act; the Clinger-Cohen Act; the Government Performance and Results Act; the Privacy Act; the Federal Records Act; the Computer Security Act; the Freedom of Information Act; the Disabilities Act; and Section 508 of the Rehabilitation Act. The OMM OCS Connect effort will also directly respond to the direction and guidance provided by the Administration and Congress to: improve mission performance and service delivery; better manage and maintain a competent and capable federal workforce; and to capitalize on opportunities to outsource support and services necessary to conduct and improve business operations.

Specifically, the transformation effort will help OMM:

- Transform Offshore Program business processes, which generate \$5 – 10 billion per year in federal revenues;

- Design and implement an integrated corporate database, working collaboratively with state and federal agencies, industry, and citizens to enable MMS to better achieve its strategic goals—safe and environmentally sound offshore operations;
- Deliver web-based, paperless transactions in near real-time;
- Introduce "Knowledge Management" tools to electronically collect, store, receive, and distribute information from or to internal and external stakeholders, and to help minimize knowledge loss from retiring employees by capturing tacit knowledge on areas of expertise and specialized business practices;
- Coordinate workflow for the regulatory process to reduce redundant requests and maximize stakeholder reviews, again promoting more efficient analysis and shorter cycle times;
- Support multiple federal and state requirements surrounding regulation of the offshore oil and gas industry; and
- Provide a standard data model for industry and stakeholders, which may apply to other domestic and international processes in other agencies.

Benefits

- Make the domestic offshore program more attractive in a global competitive environment;
- Make OMM more accessible through the Internet to all stakeholders;
- Provide increased citizen participation through online responses for National Environmental Protection Act (NEPA) and regulatory processes;
- Provide for improved tracking of performance goals;
- Streamline and integrate business processes so that valuable personnel time can be allocated to business operations, rather than data management;
- Improve performance and redirect resources of the Offshore Safety Inspection process;
- Within the next 18-24 months, implement enabling technology to optimize results from reengineering the Manage and Administer Leasing Program, the Protect Environmental Resources program, and Analyze and Coordinate G&G Reviews and Interpretations;
- Implement a public commenting system to enable public access and participation in programmatic processes across the OMM program, including leasing, environmental compliance, rulemaking (until the government-wide Rulemaking system is fully developed), among others;
- Reform and more fully automate key business processes (such as permit requests, safety and environmental reporting, public commenting, monitoring and inspections, and lease management) to respond to increased workload, information exchange, and analytical requirements;
- Realize reduced time between filing and bureau action; faster approvals; decreased "rework"; savings on data purchases; more accurate valuations; reduced information collection burdens; minimized redundant reporting; better preventative reporting to reduce safety risks; reduced need for government resources to validate and verify data;
- Speed up reviews and achieve time savings for cross-agency oversight due to better collaborative tools and faster access to information for multiple co-regulator state and federal agencies, the scientific community, industry, and private groups; and
- See benefits in the first year of implementation. According to the independent cost-benefit study in the OMM OCS Connect Business Case and Capital Plan, benefits begin in FY03, with full internal payback in FY05. When monetized benefits to the industry are considered, the payback occurs in FY04.

CPIC Status

As part of the Capital Planning and Investment Control (CPIC) process, the OCS Connect project was approved by DOI Management Executive Council in the "select" phase during the FY03 review cycle. Planning was the focus of FY02 efforts with implementation fully underway beginning in FY03. The project entered the "control" phase in FY03. The business case follows DOI IT CPIC guidelines and is under review by the project manager, Integrated Project Team, Information Resource Management, Information Management Council, Department OCIO, Information Technology Management Council and others to ensure systematic and timely reporting. Additionally, quarterly project status information has been reviewed by the IT Investment Review Board to ensure that the project is within its cost, performance and schedule goals.

Due to a rescoping and reprioritization effort, the alternatives analysis, risk inventory and assessment, performance measures, and enterprise architecture sections of this document have been revised to accommodate the change in project scope and sequencing.

Milestones

FY02

Two major milestones accomplished in FY02 were the offshore program completion of preparations and planning for its multi-year OCS Connect project that will dramatically reform and streamline business operations by FY08. OMB approved the project's FY03 Business Case and IT Capital Plan, giving it the highest score and offering it to other agencies as a model case.

FY03

The accomplished milestones include rescoping and reprioritizing clusters of business processes to maximize benefits in a reduced funding scenario. OMM completed planning of re-engineering of the first tier of prioritized clusters of processes, with goals to move them from a paper-based data stream to a web-based data stream. The Offshore Program also began hardware and software acquisition for an OMM implementation of an electronic Public Commenting System and security and portal systems, to provide the public with the capability to participate online in the OMM programmatic processes. The implementation of the Electronic Public Commenting System is in the installation/user training phases. And finally, the Offshore Program began planning and implementing program management of OMM information resources from an enterprise-wide perspective. The first task order issued with Booz|Allen|Hamilton started on May 20, 2003 for program management, change & workforce management, and technology, as well as data management and modeling, and public commenting capability development & implementation. Significant accomplishment list below:

- Completed project funding plan, Business Process Re-engineering sequence plan and change management plan.
- Developed Earned Value Management System with integrated master schedule and performance measurement baseline.
- Developed the OCS Connect change readiness survey to ascertain OMM staff perspectives of the project.
- Built development environment and began integrating portal, security and Public Connect systems.
- Mapped OCS Connect project and OMM to Federal Enterprise Architecture (FEA) Business Reference Model (BRM), Service Component Reference Model (SRM) and Technical Reference Model (TRM).
- Defined approach for developing the data management implementation plan and the logical data model.
- Developed system requirement specification, system design specification and system acceptance plan for developing the Public Connect application.

The 2nd task order has started late October 2003, which includes the following tasks:

- Business process re-engineer and systems integration of re-engineered processes of cluster 1 which includes lease adjudication and financial responsibility activities as well as developing the 5 year leasing program and preparing for individual lease sales.
- OCS Connect Technical Architecture
- Certification & Accreditation (C&A) Implementation
- Operations & Maintenance and Help Desk

FY04

- Continue re-engineering selected re-prioritized clusters of business processes. These include *Protect Environmental Resources* and *Analyze & Coordinate Geological & Geophysical Reviews & Interpretations*.
- Have the Electronic Document Management System (EDMS), fully functional for those processes re-engineered in FY 2003 and FY 2004 and expand implementation of the EDMS to additional processes as they are re-engineered. This will include integration with the DOI Electronic Records Management System (ERMS).
- Implement a data management strategy that improves the quality and integrity of the data that OMM uses and releases to the public.
- Implement an external-facing portal that provides a single access point to the public for secure access to OMM business processes and public domain data. The portal is secure and customizable by the user to retain automatic access to points of interest. It will provide controlled access and centralized authority, retain entitlements, and provide for audit trails all the way to the data to ensure accountability and responsibility.
- Expand the supporting infrastructure to enable integration into the live environment as the enabling technology that supports the re-engineered processes are developed and enhancements of existing capabilities are implemented. For example,
 - The electronic Public Commenting System will be enhanced to provide expanded document management capabilities, internal commenting, and collaboration, as well as scanning.
 - An OMM Standard Logical Data Model (SLDM) will be developed to consolidate "best-of-breed" industry resources such as models, standard specifications, and reference dictionaries.

- Development will begin on a webXML data exchange protocol that will serve as the basis for a standard for the exchange of regulatory oil and gas data at all levels of government - federal, state and international. The OMM will work with the Bureau of Land Management, producing states, international regulators, the oil and gas industry, and relevant standards bodies on this effort.

In FY05 and FY06, planned milestones for this project will encompass continuation of re-engineering the next tier of clusters and prioritized processes. As enabling technology that supports the re-engineered processes are developed and enhancements of existing capabilities are implemented, the supporting infrastructure will be expanded to enable integration into the live environment.

I.A.2. *What assumptions are made about this project and why?*

- The commitment by OMM managers to support changes to the ways in which the offshore program conducts its business;
- Complete initial OCS PCS implementation with FY03 funding, expected November 2003;
- Effective communications and change management will smooth the way for employees and stakeholders to embrace change. Training will ease adoption of new technology;
- OMM processes can be dramatically improved by BPR and adoption of new processes and technology
- New, more flexible technology will continue to play a key-enabling role in business process reengineering.
- Lifecycle cost estimates include \$0.6M in government personnel that will not be paid for through the PMO's budget, but rather represent the cost of personnel key to BPR efforts whose salaries are accounted for elsewhere in OMM's budget.

I.A.3. *Provide any other supporting information derived from research, interviews, and other documentation.*

Increased Complexity in Business Operations

With increasing pressures on the energy markets, continuing dependence on foreign oil supplies and recent media coverage of the nation's energy policy, the oil industry is facing new opportunities as well as challenges to meet the demand for additional domestic gas and oil production. Given the limited area available for lease in the Gulf of Mexico, the Pacific, and Alaska areas of the continental shelf, the oil and gas industry has been forced to move into deeper waters within the OCS. This action increases the cost and complexity of operations and activities associated with oil and gas exploration, development, and production.

Problems with Data Management and Information Exchange

Federal and state government agencies and industry continue to struggle with the online exchange of data, especially data that are proprietary. Ready access to accurate, consistent, and combinable data is essential to the OMM mission. The data access problem is typified by numerous physical networks of people; paper-intensive processes; and the enormous volume of complex information that is involved in the oil and gas decision-making and development process. These problems are compounded by the lack of appropriate data exchange standards.

Inefficient Business Processes

In spite of the increased complexities associated with its business operations, OMM relies very heavily on paper-based, "stove-piped," redundant, and antiquated processes and systems. Consequently, the staff spends too much time collecting and distributing data. In many major processes, OMM employees spend approximately 75% of their time on information-related tasks. While a large portion of this time is spent on essential analysis, more than half is consumed with non-valued added analysis such as finding, cleaning and distributing data. OMM needs to streamline and integrate existing business processes to better allocate valuable personnel time to reengineered, smooth running, and customer oriented business operations.

Global Competition for Exploration, Development, and Production Dollars

The global oil and gas industry is keenly interested in spending their limited exploration and development dollars wisely. They often are frustrated by inefficient and costly processes that constrain their "time to market," which unduly delays returns on large up front capital expenditures. The investment to establish more efficient customer oriented business processes will help to make the U.S. offshore program more attractive within the global competitive environment.

The Solution

OMM is assessing its current and future IT systems to align them with changing oil and gas industry practices and trends, customer needs, and public policy. In doing this, OMM uses the term e-Government in the

broadest sense, recognizing that its business encompasses not only government-to-public but also government-to-business and government-to-government interactions. OCS Connect cannot address all of the issues, but it will give OMM automated data exchange capabilities, operating efficiencies, and flexibility to meet future demands.

For OMM, OCS Connect is about transforming the way it does business rather than moving the existing bureaucracy online. OMM understands that customers will drive improvements, and that new applications may require the redesign of business processes, and even a change in culture. Within OMM, OCS Connect will:

- Automate key processes (requests, reporting, commenting, inspections, lease management) to respond to increased workload and information exchange requirements;
- Electronically capture, store, and distribute information to both internal and external stakeholders to minimize knowledge loss from retiring employees; decrease delivery, data entry, and searching costs; and increase the potential for meaningful analysis;
- Coordinate workflow for the regulatory process to reduce redundant requests and maximize stakeholder reviews, again promoting more efficient analysis;
- Support multiple state and federal requirements;
- Make OMM more accessible through the internet to all stakeholders (GPEA, Section 508); and
- Develop data exchange standards with appropriate industry standards groups.

This approach is consistent with the administration's focus on the use of e-Government to improve delivery of the mission:

I will expand the use of the internet to empower citizens, allowing them to request customized information from Washington when they need it, not just when Washington wants to give it to them. True reform involves not just giving people information, but giving citizens the freedom to act upon it.

George W. Bush

I.B.1 Agency mission and strategic goals and objectives supported:

With increasing pressures on the energy markets and recent media coverage of the nation's energy policy, the oil industry is facing new opportunities as well as challenges to meet demand. In response to the need for additional domestic gas and oil production and given the limited area available for lease on the Gulf of Mexico shelf and in the Pacific and Alaska, the oil and gas industry is being forced to move into deeper waters on the Outer Continental Shelf (OCS). This raises the cost for finding, extracting, managing, and regulating these resources and increases the time it takes to bring discoveries into production.

The leasing of federal lands and subsequent development of mineral assets has made the OCS a major source of the nation's supply of crude oil and natural gas. In the Gulf of Mexico alone, approximately 1.3 million barrels of oil and 13.8 billion cubic feet of gas are produced each day. Since the OCS Lands Act (OCSLA) of 1953 (67 Stat. 462, as amended (43 U.S.C. 1331 et seq. (1988)) established the federal OCS leasing program, the market value of oil and gas produced has totaled more than \$460 billion. Since these oil and gas resources, although abundant, are ultimately exhaustible, the MMS must manage these resources in a manner consistent with sustainable development.

The department has identified five broad goals that provide a framework for the numerous and diverse responsibilities of its bureaus:

- Resource Protection
- Resource Use
- Recreation
- Serving Communities
- Management

Reflective of these goals, the MMS mission is to provide environmentally sound and safe management of mineral resources on the OCS and to collect, verify, and distribute mineral revenues from federal and Indian lands in a timely manner.

The OMM goal of 'resource use to provide access for responsible use and optimal value of both energy and non-energy resources' is in alignment with the Services For Citizens and Mode of Delivery business areas in the Business Reference Model (BRM). This is reflected by two performance measures that align with the Mission & Business Results measurement area in the Performance Reference Model. One aligns the Energy line of business in the BRM and the other aligns with the Public Goods

Creation (or Knowledge Creation and Management) line of business.

The three primary facets of the MMS mandate Congress enacted in OCSLA are to:

- Make OCS lands available for mineral development to meet national needs;
- Ensure that any mineral development occurs in a safe and environmentally sound manner; and
- Ensure that the public receives fair market value for making these mineral resources available.

In FY 2002, OMM initiated a foundation study to describe the conditions and considerations supporting the OCS Connect Project. Several issues were identified through the study;

- Primary paper based processes;
- Stovepipe organization and supporting systems;
- Issues with multi-task handoffs, sequential analyses and processes cross organization lines;
- OMM processes out of synch with parallel stakeholder processes;
- Old system (TIMS) is over 10 years old;
- Not leveraging internet technology; and
- No leveraging of best practices.

Therefore, MMS must impose complex requests and reporting requirements on the oil and gas industry. It must also share information and analysis with other government and public entities. Together, these management responsibilities create intense pressure to automate many recurring processes. To fulfill each of its mandated tasks, within a complex network of stakeholders (industry, other agencies, states, and the public), MMS must facilitate the exchange of OCS-related information. That fact is the basis of OMM's OCS Connect vision.

OMM's OCS Connect framework consists of investment in core infrastructure, such as a regulatory data model, redesigned web-enabled corporate database, document management, security, and a data warehouse to support its business functions. A strong OMM infrastructure will support web-based, customer-responsive solutions; facilitate internal analysis; and set a foundation for future integrated systems. Additional investments will support processes such as permitting inspections, fulfilling FOIA requests, public commenting, and industry reporting. To ensure that the foundation is flexible, capabilities will be built in a coordinated and modular fashion, using COTS and outsourcing when feasible. The approach is driven by customers and stakeholders, focused on mission and strategy process-efficient, and technology-enabled systems.

Department and OMM goals are supported and achieved by the OCS Connect vision and plan. An overarching goal is resource use to provide access for responsible use and optimal value. The mission goals include ensuring safety in OCS development, ensuring the OCS development is environmentally sound, and ensuring that the public receives fair market value for OCS mineral development.

Ensuring Safety - The ensuring safety goal is to maintain or show a decrease in the average annual accident index of .594. This measures industry's performance related to the overall level of safety. The OCS Connect vision includes automated inspections, which would allow for less time to be spent on auditing and more time on value-added testing of equipment and increased analysis, communication, and information exchange. The result will be a more safety-conscious industry with a decrease in the accident index.

Ensuring Development is Environmentally Sound - The long-term goal with regard to ensuring development is environmentally sound is two-fold;

- Show a decrease in the amount of oil spilled to below the 1992–1996 average of 5.09 barrels spilled per million barrels produced; and
- Show a decrease in the environmental impact index from the 2000 baseline.

The OCS Connect vision includes the automation of information and the ability to integrate information types (e.g., geospatial and textual) to improve OMM analytic capabilities, resulting in better environmental monitoring, decision-making, and policy-making.

Ensure That the Public Receives Fair Market Value - The long term goal related to fair market value requires OMM to maintain the ratio of high bids received for OCS leases to the greater of the MMS estimate of value or the minimum bid at 1.8 (+.4) to 1 from 2000-2005. The related OCS Connect vision includes the following:

- Automating requests and reporting allows improved access to data and information, more time spent on analyzing resources and reserves versus data collection and entry, and thus more

accurate valuations for sale and royalty relief; and

- Better industry access to complete OCS and tract-related information may increase the value of the asset, raise sale prices, or encourage increased competition by attracting smaller operators who may not be able to conduct analysis or purchase commercially available information.

Finally, investment in OCS Connect supports the Secretary's Management Agenda for the Department. Through this investment, OMM will ensure that managers and employees are accountable for results and that this investment adds value to mission delivery, ensures effective use of resources, and identifies opportunities to avoid duplication and achieve economies of scale. Support of this agenda is also demonstrated through the investment's support of the President's Management Agenda, as discussed below.

I.B.2
President's
Management
Agenda
strategic goals
supported:

The President has called for "active, but limited" government: one that empowers states, cities, and citizens to make decisions; ensures results through accountability; and promotes innovation through competition. According to the President's *Blueprint for New Beginnings*, if reform is to help the federal government adapt to a rapidly changing world, its primary objectives must be a government that is citizen-centered, results-oriented and market-based. The President's Management Agenda includes five components that share a common purpose for government improvement that is citizen centered and focused on delivering results that matter to the American public. Funding of OMM's OCS Connect is justified by its support of one of the five key elements in the PMA. The PMA's Expanded eGovernment component is aimed at enabling citizen-centered government. Agencies are charged with advancing strategies that support performance gains across agency boundaries and managing their projects via a strict IT capital planning process. The OCS Connect project's primary goals focus on delivering expanded eGovernment and meeting the President's eGovernment goals.

The OCS Connect effort will directly respond to the direction and guidance provided by the PMA: improve mission performance and service delivery, better manage and maintain competent and capable Federal workforce, and capitalize on opportunities to outsource for support and services necessary to conduct and improve business operations.

Citizen centered - OCS Connect will provide a single point of access (via an Internet portal) for a) commenting on rulemaking activities, environmental impact statements, Five Year Programs; b) purchasing publicly available data online; c) registering requests, submitting reports, and accessing OCS related textual and geospatial data via searchable databases; d) facilitate the sharing of information and avoid redundancies through the use of standard data models, exchange schemas, and business rules for online applications. Results Oriented - create internal efficiencies and effectiveness by using modern technology to reduce costs and improve quality of Federal government agency administration, by using industry best practices in areas such as supply-chain management, financial management, and knowledge management. Market Driven - actively promote innovation through the use of COTS or other industry-based solutions, and compete various elements of the transformation to stimulate innovation and competition.

Funding of OMM's OCS Connect project is justified by its support of one of the five key elements in the President's Management and Performance Plan – *Expanded Electronic Government*. As articulated by the Office of Management and Budget, "the vision of OCS Connect is an order of magnitude improvement in the federal government's value to citizen." To enable this vision the President's e-Government Taskforce identified initiatives in four categories: Service to Individuals; Service to Businesses; Intergovernmental Affairs; and Internal Efficiency and Effectiveness. The breadth of the OMM OCS Connect Project impacts each of these categories or business lines.

Citizen Centered - The Government-to-Citizens (G2C) objective creates easy-to-find single points of access to government services for individuals. The Government-to-Business (G2B) objective reduces the reporting burden on businesses, for example, businesses should not have to file the same information over and over because government fails to reuse the data appropriately or fails to take advantage of commercial electronic transaction Protocols. The Government-to-Government (G2G) objective promotes sharing information more quickly and conveniently between the federal and state, and local governments. OCS Connect will address these objectives and provide increased access to OCS-related information, more transparent processes, and improved public awareness of OCS activities and understanding of the OMM mission by:

- Providing a single point of access (Internet Portal) for:
 - Registering requests
 - Submitting reports;
 - Commenting on rulemaking activities, environmental impact statements, and 5-year plans;
 - Accessing information in a more convenient and timely fashion;
 - Purchasing publicly available data via an online store;
 - Receiving customized services based on needs;

- Accessing OCS related textual and geo-spatial data via searchable database (such as ESPIS) and web-based GIS;
- Delivering a centrally coordinated outreach process with strong stakeholder support functions;
- Coordinating outreach efforts that support OMM-wide contact management;
- Shorter cycle times for reviews and approvals, therefore reduced costs to industry;
- Better stakeholders access to information, reducing costs and increasing resource value; and
- Lower reporting burden on industry.
- Facilitating the sharing of information and reduction of redundancies through the use of standard data model, exchange of schemas, and business rules for online applications
- Ensuring equity in access to services through compliance with Section 508

Results-Oriented - A results oriented focus uses Internal Efficiency and Effectiveness (IEE) to make better use of modern technology to reduce costs and improve quality of the federal government agency administration, by using industry best practices in areas such as supply-chain management, financial management and knowledge management. OCS Connect will provide results-oriented processes as follows:

- Utilize a knowledge management subsystem to support enterprise-wide knowledge gathering, organizing, searching, analyzing, and sharing
- Automate inspections to decrease time spent on auditing and increase time spent on value-added testing of equipment and analysis, communication, and information exchange
- Improve OMM analysis through automated information and the ability to integrate information types
- Incorporate performance-based contracting into the OMM OCS Connect Project Acquisition Strategy
- Incorporate an Integrated Project Team and Independent Verification and Validation into program management to ensure successful implementation and management
- Develop appropriate performance measures and evaluate results on a quarterly basis
- Re-align workforce allowing time to be directed to value-added activities that better support mission satisfaction

Market Driven - Actively promoting, not stifling, innovation and competition promotes a market-driven objective. OCS Connect will provide the following:

- Proposed architecture that relies extensively on the use of COTS; and
- An acquisition strategy that incorporates competition.

I.B.7 Agencies and organizations affected by this initiative: Not applicable. This is not a multi-agency initiative.

I.B.8 Investment cost reduction or efficiency improvement: A detailed process analysis showed that in many key areas approximately 75 percent of employee effort was spent on information-related tasks that are paper-based. Less than half of that time is spent on essential analysis; the rest is spent on finding, cleaning, and distributing data. With the transformation, which will automate data exchange capabilities, improve operating efficiency, and provide the agility and flexibility to adjust to and meet future business conditions and demands, work processes will be greatly simplified and more effective when the flow of information is automated. It will reduce redundant requests and reporting, minimize OMM data entry, and reduce back-and-forth communications through built-in business rules, increased access, and ultimately improve data accuracy and analysis. Key aspects of automated information flow include automatic receipt and processing, collaboration, and workflow capabilities and reporting feeds. The transformation will also accelerate the movement of FTE's from re-engineered process areas to other program areas where there are existing unfilled resource needs.

I.9.a List all other assets that interface with this asset. The OCS Connect system will encompass all the OMM business activities. While the system architecture has not been completed, it is envisioned that there will be a potential interface to MRM's Royalty Management system, whose process was reengineered via the MRM Reengineering and RIK project. There is also a potential interface with USCS.

potential interface with USCS.

OCS Connect will replace the TIMS legacy system. It is envisioned that interfaces will be required prior to full conversion from the TIMS system.

I.9.b Have these assets been reengineered as part of this investment (Yes/No) No

Requested Investment Summary of Spending for Project Stages (\$Millions)

BY 2005 Planning Resources:	4.7
BY 2005 Acquisition Resources:	9.6
BY 2005 Maintenance Resources:	1.6
BY 2005 Total, All Stages Resources:	15.9
Life Cycle Total, All Stages Resources:	94.7

DOI BUDGET YEAR 2005 IT INVESTMENT OVERVIEW

Investment Identification

Agency: Department of the Interior
Bureau: Minerals Management Service
Location in Budget: Minerals Revenue Management, Revenue and Operations
Account Title: Royalty & Offshore Minerals Management
Account Identification Code: 010-06-14-1917-0
Program Activity: Minerals Revenue Management
Name of Investment: [Minerals Revenue Management Program Reengineering](#)
Unique Investment Identifier: 01006010101060200407189
(IT Only)(see section 53)

Investment Justification

I.A Investment Description: The integrated Reengineered Systems are the Mineral Revenue Management's core system support for the implementation of new royalty management business processes for the 21st century. The new systems were developed around reengineered more effective and efficient business processes and replaced multiple non-integrated mainframe systems running on obsolete software technology. The new, more flexible IT technology delivered by this investment played and will continue to play a key-enabling role in business process reengineering. Without flexible IT, achievement of key business process improvements including further integrating processes, aligning the organization along process centered lines focused on outcomes, and the ability to make it less costly and able to be more easily changed to meet new and changing requirements cannot be achieved. This IT investment is allowing improved financial management including improved timeliness, usefulness, and reliability in obtaining and sustaining a clean audit opinion. Additionally, it is allowing the stretch goals of accelerating disbursement of revenues for financial and exception-based processing to be implemented for compliance.

This investment was approved by the Department of the Interior and Office of Management and Budget for the FY 1999 budget cycle in accordance with requirements in place at the time and is subject to periodic Exhibit 300 status reporting. The investment completed development and was successfully implemented in November 2001. It is now in Steady State and delivering benefits envisioned. As part of the capital planning and investment control (CPIC) process, the MMS Information Technology Investment Review Board (ITIRB) has rated and ranked the MRM Reengineering project using established criteria and has approved it for inclusion in the bureau budget request. Additionally, quarterly project status information has and is reviewed by the ITIRB. The MRM was created in 1982 to ensure that all revenues from Federal and Indian mineral leases are effectively, efficiently, and accurately collected, accounted for, and disbursed to recipients. These revenues are substantial, averaging over \$5 billion a year for the period 1997-2001. They are distributed and disbursed to 38 States, 41 Indian Tribes, some 20,000 Indian mineral royalty owners, and to U. S. Treasury accounts. The MRM Program is a high visibility proactive minerals revenue program within the Department of the Interior and has a broad base of constituents including State Governments, Indian Tribes and allottees, and companies within the extractive minerals industry.

As explained above, this project modernized the MRM systems infrastructure to support reengineered business processes. MMS engaged Accenture, LLP, to develop two new royalty management systems – a financial system and a compliance and asset management (CAM) system. A relational database, a data warehouse, and a variety of technology tools were developed to support both systems. The systems infrastructure and technical architecture was built so that it could support additional systems and functionality in the future like the RIK system.

A major component of the MMS mission is to ensure that all revenues, whether derived in value or in kind, from Federal and Indian leases are efficiently, effectively and accurately collected, accounted for, verified and disbursed in a timely manner. The IT investments implemented directly contribute to mission accomplishment which by statute is an inherently a Federal Government function. It was critical that the enabling IT environment and tools were put in place by this project and maintained. The MMS is beginning to see that the past and future

investments will significantly improve the overall efficiency and effectiveness of the royalty management process and produce positive benefits in the form of accelerated cash flows, dramatically reduced business cycle times, increased certainty that fair market value has been received, and streamlined information collection. Some of the benefits of the systems have been obscured by the Court-ordered shutdown of the Indian Trust systems including these Reengineered Systems for approximately four months in late 2001 and early 2002. This shutdown, coming a month after the systems went into production, totally disrupted operations and resulted in a very substantial backlog of work.

The MRM Program Reengineering System consists of three subsystems; the Financial which is PeopleSoft COTS based with an underlying Oracle database, the Data Warehouse which uses Brio as the query/report tool with an underlying Oracle database, and the Compliance Asset Management which is an extension of the Data Warehouse and provides Compliance-specific tools.

The Financial accounts for all Federal and Indian minerals rents, royalties, bonuses and their distribution/disbursement to the Treasury, States (receive generally 50 percent of revenues collected in their state), and Indians (receive 100 percent). The revenues transferred to the States and Indians are an important source of income to these stakeholders and are used to fund schools, infrastructure and many services. Disruption of these transfers very adversely impacts both, but particularly individual Indian allottees. The Financial also issues bills for late or non-payment of royalties. Most of the input data for the Financial consists of royalty reports and production reports received from industry electronically via an electronic reporting contractor. Total revenues accounted for currently are approximately \$5 billion per year.

The Data Warehouse provides a repository of historical financial and production information used by internal users, BLM and other agencies as well as State and Tribal entities that do audit under contract for MRM of leases within their jurisdiction. The Data Warehouse also provides an electronic means for industry to get reports back on the results of their royalty and production reports and for State and Tribal revenue officials to get reports on revenues received and disbursed.

The Compliance Asset Management extends the Data Warehouse with a number of tools aimed at assuring that MRM is paid all the revenues owed. These tools include targeting tools and other specialized tools for finding anomalies in reporting for follow-up. Compliance activities yield a varying stream of revenues based on when individual settlements of reporting/payment issues occur.

2. *What assumptions are made about this investment and why?*

Several major assumptions affect this investment:

- Relative business model stability, i.e. that there would not be major changes in the two principal ways (royalty in value and royalty in kind) that minerals royalties are collected, the Federal Government would continue to manage the collection of royalties utilizing the resources of the MMS and State and Tribal governments under contracts.
- There would not be major organization changes, i.e. MRM would continue to be the principal manager of mineral revenue collections for the Federal Government.
- There would continue to be adequate funding for MRM.

The business model was considered to be relatively stable and would change only incrementally over time. However, it was also assumed that the marketplace for mineral commodities would continue to evolve thus changing royalty calculations and requiring technology solutions that were flexible and adaptable to change. When MRM's mainframe systems were implemented some 20 years ago long-term relatively simple fixed-price contracts were the norm in the minerals industry for commodity sales. Now the norm is complex short-term spot sales contracts that are sensitive to monthly, and even daily, changes in market prices. The mainframe systems were difficult if not impossible to change to support the evolving markets and changes in business processes. The current technology investment provides the flexible systems that are adaptable to changes in the domestic commodity markets and contract structures utilized in the sale and other disposition of mineral products. The flexible systems also mitigate and are much more adaptable to any potential business process or organizational change.

Because these systems are integral to the collection of a substantial amount of revenue (\$5 Billion per year) for the Federal Government and are also an important source of revenue for States and Indians, we feel that adequate funding would be available for MRM.

3. *Provide any other supporting information derived from research, interviews, and other documentation.*

The reengineering initiative addressed all core MRM business processes including financial, accounting, compliance and supporting computer systems. MRM management expected the reengineering team to ultimately produce new business processes and support systems that are:

- Highly integrated
- Process centered
- Focused on outcomes
- Less costly
- Well positioned to meet current and future mission requirements.

The reengineering team first examined the current MRM business environment. It also conducted extensive benchmark surveys to identify "best practices" for consideration in the design of future business processes. In addition, Performance Engineering Corporation (PEC) was awarded a contract to assess MRM information systems and make recommendations that would support reengineered business processes. These efforts culminated in a new concept of operations. Prototyping and piloting activities further refined these concepts which feature improvements to:

- Reduce the MRM business cycle from 6 years to 3 years, consistent with expected industry standards.
- Align the MRM multiple functions into two core end-to-end business processes.
- Establish organizational accountability for compliance and asset management outcomes at the producing property level.
- Simplify regulatory reporting requirements to reduce reporting burdens to both MRM and industry.
- Modernize the MRM IT environment.

Throughout all of the steps above, there was extensive interaction and discussions with all MRM stakeholders

both internally and externally. This includes the Department of Interior, the Administration, and Congress along with extensive outreach and coordination through direct visits, attendance and briefings at meetings including Industry, State, and Tribal representatives such as the Royalty Policy Committee and the Petroleum Institute. There were presentations to all Stakeholders throughout the whole development of the project. Several State and Tribal representatives joined the project during development and actively participated in the requirements definition and user testing with MRM end-users.

I.B.1 Agency mission and strategic goals and objectives supported:

The initiative for MRM Reengineering fully supports the DOI agency and strategic goals with the following:

- Resource use strategic mission: "Provide access for responsible use and optimal value (Energy)"
- Serving communities: "Fulfill Indian trust responsibilities"

This investment directly supports the agency mission, its strategic goals and objectives, and elements of both the President's National Energy Policy and the President's Management Agenda. The MRM primary strategic goal is "to provide timely, accurate, and cost effective mineral royalty collection and disbursement services.

Key performance objectives of MRM are:

- Assure compliance with applicable laws, lease terms, and regulations for all leases in the shortest possible time, but no later than three years from the due date. This performance measurement is key to ensuring the government and our Indian communities get optimal value.
- Provide revenue recipients with access to their money within 24 hours of the due date. This performance goal is a key measurement of our success of serving our Indian community.

I.B.2 President's Management Agenda strategic goals supported:

This investment supports aspects of the all goals in the President's Management agenda, but in particular that of improved financial performance and the ability to increase the integration of budget and performance of the MRM.

The MRM Program is a high visibility proactive minerals revenue program within the Department of the Interior and has a broad base of constituents including State Governments, Indian Tribes and allottees, and companies within the extractive minerals industry.

- Improved Financial Performance was a key reason for implementing the reengineered business processes and support systems. MRM's former systems were obsolete, inflexible, and required a number of offline processes including manual and personal computer spreadsheets to meet changing requirements. A number of audit reports were issued on its shortcomings. MRM with the new systems implemented with this project corrected these shortcomings.
- Improved timeliness by reengineering reporting processes including use of web-based reporting by industry that greatly reduces paper reports and reporting error rates, instituted quarterly financial statements, accelerated end-of-year reporting thru the elimination of off-line processes, and are now able to assure improved accurate and timely compliance with OMB and Treasury requirements.
- Enhanced usefulness by meeting requiring comparative financial reporting, reporting on financial performance measures, and increased financial and performance integration. The new system meets all current financial system standards.
- Ensured reliability by resolving a number of past audit findings and obtaining a clean audit opinion for the new system this year.
- With the follow on implementation of its RIK capability which is approaching full implementation, MRM is utilizing RIK as a business approach to further accelerate cash flows to the Treasury and decrease business cycle times both for the Government and the industry.
- The investment's supported business area is Management of Government Resources (Cross-Agency) because it is upstream in the collection and accounting for minerals revenues that are shared with the Treasury, States and Tribes. Its primary line of business is Financial Management (Cross-Agency). It has a non-primary mapping to the top two FEA levels; specifically Mode of Delivery, Transfers to States & Local Governments and specifically includes Tribal Governments.
- The reengineered systems allow MRM to identify and track high quality outcome measures for its program performance which are principally financial management of minerals revenues. With the ability to accurately monitor these outcome measures and then to join the measures with associated costs from MMS's Activity Based Cost system, the agency can improve its capability for demonstrating successful program performance and achievement of stated end outcome objectives. Furthermore, the integration of performance indicators with financial accountability will support more effective management decision-making and improved allocation of resources and management attention to areas in need of improvement to achieve maximum performance.
- The MMS has from its very beginnings supported the concept of competitive sourcing by contracting out activities that can more efficiently be handled by the private sector. These have principally been in the area of systems development and operation where many skills are only required temporarily as during development and where the government cannot always hire the best and most experienced with the right skill sets. With this project MRM continued contracting out most of its systems development and operation and added outsourcing to an Application Service Provider the provisioning of hardware and its basic support including security. This latter was a key move as it provided a state-of-art security environment for MRM

systems which the court-appointed Special Master reviewed and approved to be reconnected after the shutdown.

- MRM management reform initiatives are an integral part of its business operations and directly support the PMA area of Human Capital. This Reengineering initiative with its redesigned work processes and continued use of technology to achieve program efficiencies and attain goals has challenged MRM to develop new skill mixes in its staff. The reengineering initiative also involved the documentation of a considerable knowledge base of a number of employees approaching retirement. This knowledge base was critical in the redesign of more efficient end-to-end business process that was workable in practice, not just in theory. These new business processes were developed and placed into operation with retrained, redirected staffs in FY 2002. MRM has now had a number of retirements and has found that it is able to continue its operations with fewer employees thereby improving efficiency. As MRM gains further experience with the new systems, it will be looking for further areas for improvement.
- Electronic Government is essential to MRM operations. With the implementation of its new financial and compliance systems, constituents, including Industry reporters and payors, States, Tribes and allottees, and the public will all have improved access to MRM through the Internet. Prior to this project, much of the interaction required paper submissions or paper responses. This project expanded electronic submissions through an electronic reporting contractor for Industry that has substantially reduced the reporting burden on industry and also allows the companies to receive information back electronically. MRM shares this information with other Federal agencies so the companies do not have to file the same information repeatedly. MMS is very actively working on commercial electronic transaction protocols particularly as related to the minerals industry. MRM intends to pursue opportunities for collaboration with State and Tribal governments on reporting in the future to further reduce the reporting burden on Industry.
- This investment further expanded e-government by implementing an Internet portal that provides improved on-demand data access for States and Tribes including those who have cooperative audit agreements with MRM and those such as State revenue commissions who need to know how much revenue they will have. This eliminated bulky voluminous paper reports, improved timeliness of data, and substantially reduced MRM system support costs for the cooperative audit community.
- The next version of the PeopleSoft (COTS) financial system will be implemented during FY 2004 and will web-enable the software along with other functional improvements. This will greatly simplify the process of supporting the PeopleSoft client internally on numerous workstations reducing support costs. It will also provide additional opportunities for other process improvements.

I.B.7 Agencies and organizations affected by this initiative:

This is not a multi-agency initiative. However, it does share data as noted above with Federal agencies and organizations.

I.B.8 Investment cost reduction or efficiency improvement:

The very essence of the MRM reengineering initiative was to evaluate existing work processes and develop new ones that are more efficient, cost effective and responsive to customer needs. The myriad functions of the MRM, through reengineering, have been distilled into two core business processes. In so doing, organizational structures were realigned, information requirements simplified, and work processes streamlined. IT is applied to support these new business processes and achieve MMS mission performance objectives. COTS products were acquired to minimize the amount of custom application code required supporting MRM operational needs. For example, a COTS financial package was sought to replace existing royalty accounting systems. Acquisition documents clearly stated a preference for COTS based solutions and proposals were evaluated accordingly. These result in reduced costs by supporting improved work processes that are more effective and efficient. These are expected to produce the cost savings and additional collections described in I.E.3.A. Because of the Court-mandated shutdown of systems related to Cobell and subsequent disruption, MRM has been unable to verify as of this date that expected savings and additional collections are being achieved.

I.9.a List all other assets that interface with this asset.

This asset interfaces with the RIK system which feeds financial transactions to the financial system. RIK is in the process of development and implementation and is specifically designed to integrate with the financial system.

I.9.b Have these assets been reengineered as part of this investment (Yes/No)

Yes

Requested Investment Summary of Spending for Project Stages (\$Millions)

BY 2005 Planning Resources:	.00
BY 2005 Acquisition Resources:	.00
BY 2005 Maintenance Resources:	12.30
BY 2005 Total, All Stages Resources:	12.30
Life Cycle Total, All Stages Resources:	102.0

DOI BUDGET YEAR 2005 IT INVESTMENT OVERVIEW

Investment Identification

Agency: Department of the Interior
Bureau: Minerals Management Service
Location in Budget: Minerals Revenue Management, Compliance and Asset Management
Account Title:
Account Identification Code:
Program Activity: Minerals Revenue Management
Name of Investment: [Royalty in Kind Implementation \(Formerly RIK Information for MMS Exhibit 53\)](#)
Unique Investment Identifier: 01006010101060300407189
(IT Only)(see section 53)

Investment Justification

I.A Investment Description: This project encompasses the acquisition and installation of a suite of tailored commercial off-the-shelf software (COTS) applications that are needed by the MMS to manage its fully implemented Royalty in Kind (RIK) Program. The applications are replacing manual processes and will provide MMS the automated systems support and internal controls to manage the transportation, processing and sale of oil and natural gas it receives from lessees as payment of royalties due. The applications are being integrated into the existing Minerals Revenue Management (MRM) Financial System and technical infrastructure recently installed by the MMS as a part of a multi-year Reengineering Initiative. Section I.B. provides a detailed description of the instant project, its history and the integration of the project deliverables into the overall operations and systems infrastructure of the Minerals Revenue Management (MRM).

This project was approved by the Department of the Interior and Office of Management and Budget for the FY 2002 budget cycle and is subject to periodic Exhibit 300 status reporting. The development phase of the project will be completed in September 2003 with the implementation of the final component.

All applications will be in steady-state in October 2003 and thereafter, and operated as an integrated part of MRM's overall technology enterprise. As part of the capital planning and investment control (CPIC) process, the MMS Information Technology Investment Review Board (ITIRB) has rated and ranked the Royalty in Kind Implementation project using established criteria and has approved it for inclusion in the bureau budget request. Additionally, quarterly project status information has been reviewed by the ITIRB.

The project will deliver the needed technology solutions to support the MRM's RIK business activity, which is a core component of the asset management business strategies of the MRM.

Several major programmatic assumptions affect this investment:

- Relative business model stability for MRM, i.e. that there would not be major changes in the two principal ways that mineral royalties are collected (royalty in value and royalty in kind). The Federal Government would continue to manage the collection of royalties.
- There would not be major organization changes, i.e. MRM would continue to be the principal manager of mineral revenue collections for the Federal Government.
- There would continue to be adequate funding for MRM.

From the technology perspective, the MRM assumed the needed solutions would be built on the new more flexible IT technology infrastructure and applications, which included COTS-based approaches and Application Service Provider (ASP) strategies, that were introduced as a part of the MRM Reengineering Initiative. Key to the enabling technology strategy for RIK was the assumption that the solutions needed to integrate fully with the newly reengineered infrastructure. This assumption was driven by business, security and cost

considerations. From the business perspective, MRM needed to fully integrate the RIK asset management strategy with the royalty in value strategy at the operational level to fully leverage its knowledge and experience in oil and natural gas commodity production, transportation and sale. This integration is critical to the decision to either receive royalty payments in cash or take the payments in production and sell them competitively in the marketplace. Significant financial gain (or loss) to the U. S. Treasury and achievement of MRM's strategic business goals are at stake in the decision. Beyond decision-making, the RIK business activity needed to interface with MRM's reengineered financial systems to assure proper internal controls and accounting for revenues realized from the sale of oil and gas commodities and reflection of such revenues in MMS's annual financial statements. From the security and cost perspectives, MRM assumed that it would need to take advantage of the established secure technology environment and the cost-effective COTS/application service provider approaches to achieve an integrated MRM technology enterprise.

The MRM's multi-year Reengineering Initiative defined new end-to-end business processes that are more efficient, cost effective and responsive to customer needs. The myriad functions of the MRM, through reengineering, have been distilled into two core business processes, the Financial Management Process and the Compliance and Asset Management Process (CAM). In so doing, organizational structures have been realigned, information requirements simplified, and work processes streamlined. The RIK operations component of the MRM is now building on the successes of the Reengineering Initiative and advancing with new processes and approaches that are aligned with the two core business processes and adopt industry-proven approaches to marketing oil and gas production. IT will be applied to support the RIK business activity and achieve MMS mission performance objectives.

COTS products acquired are currently in use by the oil and gas industry to manage the sale of oil and gas commodities. These products are aligned with the industry approaches that the MMS is adopting in implementing its RIK Program for the future. Furthermore, the products are being integrated with the newly installed core business architecture developed by MRM to support its overall reengineered business enterprise. For the reengineering support systems, MRM chose to use best-in-class technology platforms including a COTS (PeopleSoft) running Department standard Oracle database management system for the financial system rather than building a new custom system. Furthermore, MRM chose to outsource the hardware and its operation to an ASP running state-of-the art Unix hardware/software and attendant security with proven redundancy to streamline operations and take advantage of commercial expertise. Additionally, electronic reporting from industry was outsourced to a company specializing in electronic commerce. This new core business architecture was within the MMS-wide existing network infrastructure. MRM is continuing with the current RIK project to utilize and leverage this established hardware, application and infrastructure together with the RIK COTS applications being introduced to the business enterprise.

The need for the introduction of automated systems support applications to effectively manage MMS's RIK program activity has been identified by the U.S. General Accounting Office and the Department of the Interior's Office of Inspector General.

I.B.1 Agency mission and strategic goals and objectives supported:

The initiative for MRM Royalty in Kind fully supports the DOI agency and strategic mission goal specified as:

Resource Use: "Provide access for responsible use and optimal value (Energy)"

This investment directly supports the agency mission, its strategic goals and objectives, and elements of both the President's National Energy Policy and the President's Management Agenda. MRM's primary strategic goal is "to provide timely, accurate, and cost effective mineral royalty collection and disbursement services. Key performance objectives and measures of MRM directly support the achievement of DOI department-level goals, and focus on several high priorities including timely and accurate collection and disbursement of revenues, reduction of business cycle times, and the timely filling of the Nation's Strategic Petroleum Reserve utilizing RIK oil from Federal leases in the Gulf of Mexico. MRM strategic goals and measures for FY2003 and out years are presented at I.C.

Implementation of the RIK capability through this investment will enable MRM to accelerate cash flows derived from RIK sales, significantly reduce the business and compliance cycle time, and effectively manage the timely fill of the Nation's Strategic Petroleum Reserve.

The MRM was created in 1982 and charged with the mission of ensuring that all revenues from Federal and Indian mineral leases are effectively, efficiently, and accurately collected, accounted for, and disbursed to recipients. These revenues are substantial, averaging over \$5 billion a year for the period 1997-2001. They are distributed and disbursed to 38 States, 41 Indian Tribes, some 20,000 Indian mineral royalty owners, and to U. S. Treasury accounts. The MRM Program is a high visibility proactive minerals revenue program within the Department of the Interior and has a broad base of constituents including State Governments, Indian Tribes and allottees, and companies within the extractive minerals industry.

Under the terms of Federal oil and gas leases the Federal Government reserves the right to have royalties due paid either in cash as a percentage of revenue realized by the lessee (royalty in value: RIV) or as a percentage of the actual hydrocarbon production (royalty in kind: RIK). With RIK the Government (MMS) typically takes ownership of the commodity at the facility measuring point nearest the point of production and then sells the product on the open market in a manner consistent with industry practices. The objective is to sell the commodity at a value equal to or greater than the RIV that would have otherwise been received. In addition to increased revenues, benefits from the RIK approach can also be realized in the form of earlier receipt of revenues (time value of money), earlier certainty that fair market value has been received, and potentially

lower cost of administration.

The merits and benefits of implementing an RIK program have been established through a series of ongoing pilot sales initiatives for both gas and oil that the MMS has been conducting since 1998. Based upon these efforts, the MMS is transitioning to an operating RIK program. Transitioning the RIK Pilots to an operational RIK program involves the further refinement of the processes, business skills and support infrastructure typical of oil and gas producers that market their own oil and gas production. Through the RIK pilots, MMS made a significant investment in its workforce business skills and infrastructure. However the depth and breadth of these skills and infrastructure is being enhanced over time, requiring investments in process design, information technology, workforce training and development, and transition specific to RIK operations.

The implementation of the RIK Program is separate from, and yet distinctly related to the ongoing MRM Reengineering Initiative. The Reengineering Initiative is focused primarily on the RIV component of the MRM asset management responsibility – the collection, distribution, and verification of royalty revenues. RIK reflects the other asset management methodology – the generation, collection, distribution, and verification of revenue. Rather than receiving cash payment of royalty from lessees under the RIV approach, the RIK asset management methodology involves taking royalty mineral ownership and competitively selling the asset for fair market value. Both methodologies have the need to access certain common data sets and record transactions in a common financial system. These commonalities, as vital as they may be, do not encompass the full breadth of functionality needed to manage the actual Federal asset ownership, logistics and sales of oil and gas production.

Oil and gas companies that market production typically organize and structure their operations into front office, mid office and back office components, as identified in the following Typical Process Roles overview.

Typical Process Roles



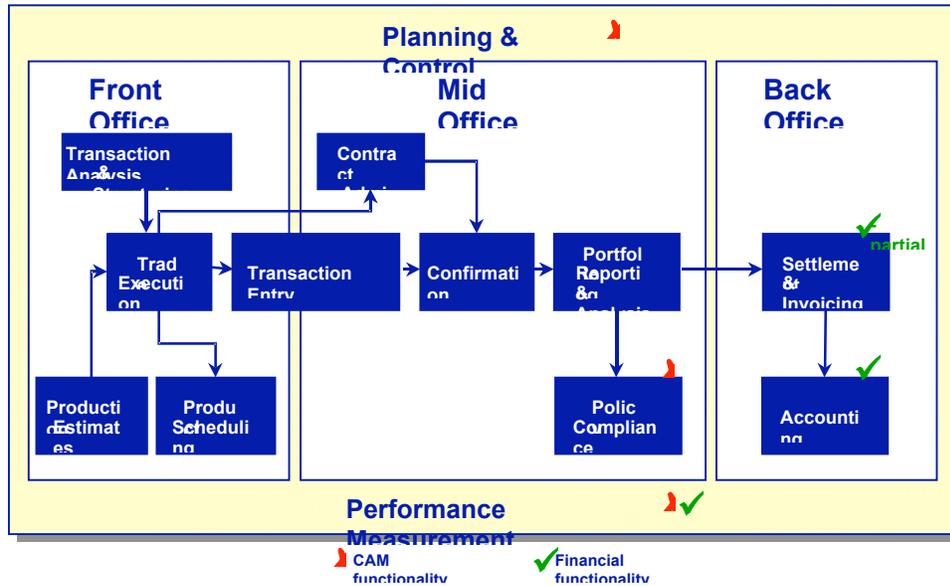
In transitioning the current RIK Pilot activities and Small Refiner Program to the future RIK Program, MMS is adopting, to the maximum extent practicable, the business processes, organizational structures, and technology solutions utilized by the oil and gas industry. From the industry perspective, specific supply and marketing activities are generally organized and categorized into front office (agreements and logistics), mid office (contract administration, internal control, and risk management) and back office (settlement, accounting and auditing). This industry-proven approach is being used as the benchmark for developing the MRM RIK Program.

The MMS established an Operational Model to further evolve current RIK activities to the future operating RIK Program. The Operational Model served as the vehicle for developing RIK business processes and technology support systems in a live environment. The Model includes the full range of operational activities and performance evaluation, and has adopted, to the extent practicable, common oil and gas industry business practices and process capabilities. In operating the Model, MMS has taken advantage of the significant intellectual capital already developed by its workforce in conducting the pilot projects.

The MMS modernized its systems infrastructure to support reengineered business processes. MMS engaged Accenture, LLP to develop two new royalty management systems – a financial system and a compliance and asset management (CAM) system. A relational database, a data warehouse, and a variety of technology tools have been developed to support both systems.

The technology solutions needed to support the RIK activity will integrate with the new Financial and CAM systems. The RIK support systems will share data with the new CAM system and utilize some of the functionality of the new financial system as presented in the following Functional Architecture Overview.

Functional Architecture Overview



A major component of the MMS mission is to ensure that all revenues, whether derived in value or in kind, from Federal and Indian leases are efficiently, effectively and accurately collected, accounted for, verified and disbursed in a timely manner. The IT investments contemplated directly contribute to mission accomplishment, which by statute is an inherently Federal Government function.

With the RIK Program as a key feature of the asset management business strategy of the MMS to accomplish its mission, it is critical that the enabling IT environment and tools be place. The MMS is confident that the RIK technology investments will significantly improve the overall efficiency and effectiveness of the royalty management process and produce positive benefits in the form of increased revenues, accelerated cash flows, dramatically reduced business cycle times, increased certainty that fair market value has been received, and streamlined information collection.

Additional technology investments are needed to support a fully operational RIK activity. The new business applications needed to support the RIK activity includes a gas management system (funding included in the FY 2002 appropriation), an oil/liquids management system (funding included in the FY 2003 request), and a performance and risk management system (funding included in the FY 2003 request). COTS solutions are currently in use by the oil and gas industry to support their production marketing activities. MMS will pursue these solutions consistent with its strategy to adopt industry-proven business approaches. The performance and risk management system, would be the last implemented to assure compatibility with both the marketing model and commodity management systems.

The technology investments being made by the MMS in supporting its RIK capability are critical to successfully accomplishing its Strategic Goals and business objectives. The investments now being made will yield tangible benefits for many years to come. As indicated at Section I.E., the investment, including development and ongoing operations and maintenance costs, yields a positive net present value over its expected life cycle. For FY 2004, MMS's investment is focused on operations and maintenance costs to be incurred in utilizing the RIK support systems to manage oil and gas sales and logistics programs for well over \$2 billion per annum in Federal asset value. In addition to yielding tangible financial benefits, the investments will also assure that the Department of the Interior (DOI) is providing the needed internal controls and accountability to meet its financial stewardship responsibilities.

I.B.2 President's Management Agenda strategic goals supported: MRM Program is a high visibility proactive minerals revenue program within the DOI and has a broad base of constituents including State Governments, Indian Tribes and allottees, and companies within the extractive minerals industry. Implementation of MRM's RIK capability directly supports elements of both the President's National Energy Policy and the President's Management Agenda.

MRM's RIK Program is specifically linked to and supports the President's National Energy Policy. It is tasked, in collaboration with the Department of Energy, to accomplish a major multi-year initiative to fill the remaining capacity of the Nation's Strategic Petroleum Reserve utilizing Gulf of Mexico Federal RIK crude oil.

MRM's management reform initiatives are an integral part of its business operations and directly support the

President's Management Agenda (PMA). The Royalty Reengineering initiative with its redesigned work processes and continued use of technology to achieve program efficiencies and attain goals has challenged MMS to develop new skill mixes in the MRM staff. These retrained, redirected staffs began to carry out operations under the reengineered MRM programs in FY 2002. Similarly, MRM is evolving its RIK capability including the introduction of enabling technology discussed in this Capital Asset Plan and the continuing development of its Human Resources to meet the challenges of managing an oil and gas logistics and sale program.

In the arena of Financial Management Improvement, the MRM continues to support the PMA through the implementation of its reengineered business processes and support systems. With the follow-on implementation of its RIK capability, MRM is utilizing RIK as a business approach to improve financial accountability and internal controls, accelerate cash flows to the Treasury and decrease business cycle times both for the Government and the industry.

Budget and Performance Integration. The systems capability introduced with this investment will provide the needed performance measurement information to monitor effectiveness of asset management decisions and RIK business operations compared to strategic performance goals. This capability will be coupled with MMS's recently implemented Activity-based Cost Accounting System to provide the critical link of business performance to budget resources and expenditures.

Electronic Government is essential to MRM operations. With the implementation of its new financial and compliance systems, constituents, including payors, States, Tribes and allottees, and the public will all have improved access to the MRM activities through the Internet. The RIK technology development will be reliant on the technical infrastructure and Internet access developed during the Reengineering Initiative and will enjoy the same benefits. Also, for those leases where the MRM takes its royalties in kind, industry no longer is required to submit regulatory royalty reports. The MRM relies on industry pipeline statements and other information available on electronic bulletin boards to efficiently transact business in the same manner that oil and gas producers, transporters, and storage and processing facility operators.

The development of MRM's RIK capability with State government representatives and industry representatives. MRM currently is partnering with the States of Wyoming, Texas, and Louisiana in conducting RIK pilot programs. Furthermore MRM is exploring RIK applications with the Shoshone-Arapaho Tribes. Involvement of States and Tribes in the RIK development effort is critical to its success since these parties possess a wealth of knowledge and experience and have a vested financial interest in the success of the Initiative. Furthermore, the MRM is working closely with numerous representatives of the oil and gas industry in the development of its RIK capability. This effort is critical given the industry's vested interest in an efficient approach to the transportation, processing and sale of RIK oil and gas production in the domestic marketplace.

I.B.7 Agencies and organizations affected by this initiative:

This is not a multi-agency initiative. The RIK project is internal to the Minerals Management Service.

I.B.8 Investment cost reduction or efficiency improvement:

This investment will reduce MMS's transaction costs and improve efficiencies by:

- Enabling implementation of industry best practices to replace a set of manually-intensive processes now designed for and supported by desktop applications and manual interventions. In addition to increases in process efficiencies, well-designed COTS solutions will reduce or eliminate commonly encountered issues with desktop applications and manual interventions, including errors, internal controls, accountability and traceability of transactions.
- Integrating RIK systems support into MRM's overall systems infrastructure and established operations and support strategies and thereby providing an efficient and cost effective technology platform for the MRM enterprise.

Enabling MMS to continue its expansion of use of the RIK asset management option to manage the Nation's minerals. Increased utilization of RIK vs. RIV yields substantial reductions in business cycle times and significant acceleration of cash flows for the Government and program beneficiaries. Furthermore, MRM can realize significant increases in royalty revenue through the strategic use of the RIK option.

I.9.a List all other assets that interface with this asset.

The Minerals Revenue Management recently completed a Reengineering Initiative in which all of the Program's core business processes were reengineered and new information technology solutions were introduced to support those processes. The RIK technology solutions will interface with the recently implemented reengineering Financial System and Data Warehouse solutions.

I.9.b Have these assets been reengineered as part of this investment (Yes/No)

Yes

Requested Investment Summary of Spending for Project Stages (\$Millions)

BY 2005 Planning Resources:	.00
BY 2005 Acquisition Resources:	.00
BY 2005 Maintenance Resources:	2.84
BY 2005 Total, All Stages Resources:	2.84
Life Cycle Total, All Stages Resources:	36.65

DOI BUDGET YEAR 2005 IT INVESTMENT OVERVIEW

Investment Identification

Agency: Department of the Interior
Bureau: Office of Surface Mining Reclamation and Enforcement

Location in Budget: Summary of Information Technology Investments & Executive Direction and Administration

Account Title: Regulation and Technology

Account Identification Code: 010-08-14-1801-0

Program Activity: Executive Direction & Administration

Name of Investment: [General Support System \(GSS\)](#)

Unique Investment Identifier: 01008020003202000404139
(IT Only)(see section 53)

Investment Justification

I.A Investment Description: This Exhibit 300 describes the OSM nationwide network and covers all five of the bureau's General Support Systems (GSS). This project has been approved via the OSM CPIC process for the current cycle. The network consists of these five GSS' enclaves as follows:

- Headquarters GSS—Located in Washington, DC, includes the Headquarters Local Area Network (LAN). This part of the network supports one of the OSM Major Applications, the Abandoned Mine Land Inventory System (AMLIS), for which a separate Exhibit 300 has been submitted. The Headquarters enclave supports the Wide Area Network (WAN) for which a separate Exhibit 300-1 has been submitted.
- Division of Financial Management (DFM) GSS—Located in Denver, Colorado, includes the DFM LAN. This part of the network supports the OSM financial systems, including three of the OSM Major Applications for which separate Exhibit 300s have been submitted: The Advanced Budget and Accounting Information System (ABACIS), the Fee Billing and Collection System (FEEBACS), and the Applicant Violator System (AVS).
- Appalachian Regional Coordinating Center (ARCC) GSS—This Enclave includes a LAN, and a Technical Innovation and Professional Services (TIPS) license server at the Regional Office in Pittsburgh, Pennsylvania. Also in this enclave are Field Office LANs in Harrisburg, Pennsylvania; Charleston, West Virginia; Big Stone Gap, Virginia; Lexington, Kentucky; Knoxville, Tennessee; and Columbus, Ohio. This part of the network also includes Area Office LANs in Beckley and Morgantown, West Virginia, Johnstown and Wilkes-Barre, Pennsylvania; and London, Madisonville, Pikeville, and Ashland, Kentucky.
- Mid-Continent Regional Coordinating Center (MCRCC) GSS—This Enclave includes a LAN at the Regional Office in Alton, Illinois, with Field Office LANs in Birmingham, Alabama; Indianapolis, Indiana; and Tulsa, Oklahoma.
- Western Regional Coordinating Center (WRCC) GSS—This Enclave includes a LAN at the Regional Office in Denver, Colorado, with Field Office LANs in Albuquerque, New Mexico, and Casper, Wyoming; and an Area Office in Olympia, Washington. This part of the network also provides lead office support for the TIPS program for which a separate Exhibit 300-1 has been submitted.

This Exhibit 300 requests funding for OSM nationwide network infrastructure support costs, through FY-2009, that are reported on our Exhibit 53. This includes the cost of all major categories of LAN and personal

computer (PC) hardware, software, security, and maintenance, including lifecycle technology replacement. All segments of the OSM network are in the operations and maintenance (O&M), steady state, phase of the system life cycle.

Working together, OSM network GSS enclaves enable all bureau offices to interact with each other electronically via electronic mail and shared access to bureau system applications. Internet connectivity enables interaction with OSM stakeholders at State Regulatory Authorities, other Federal agencies, and the public for access to OSM automated information systems of interest. OSM GSS enclaves' interconnectivity to the WAN enables access to other Interior agency hosted application services, and Internet connectivity expands access to both commercially and publicly available information resources. OSM LAN hardware, software, and wire-plant services provide electronic connectivity to employees and on-site contractors locally at each OSM office as well as interconnecting to the WAN. The OSM network GSS infrastructure cost of current operations and maintenance compares favorably, against other service provision alternatives that have been examined, and offers long-term cost-effectiveness as depicted in Section 1.E., Alternatives Analysis. In today's electronic-age, and with tomorrow's increasing dependencies upon shared access to multi-media electronic information, OSM mission-failure could result from a prolonged loss of our network GSS infrastructure.

This Exhibit 300 requests funding for the nationwide legacy GSS that supports all mission critical and other smaller systems at OSM. ABACIS, AMLIS, AVS, and FEEBACS are the OSM major applications supported by this GSS communications network to enable access by customers and stakeholders to these systems. The OSM GSS is positioned within firewalls at the network perimeter in compliance with Interior network security policy.

I.B.1 Agency mission and strategic goals and objectives supported:

The mission of the US Department of the Interior is to protect and provide access to information about our nation's natural resources, national heritage, and cultural heritage. Complimenting the DOI role, the mission of the Office of Surface Mining is to carry out the requirements of SMCRA in cooperation with States and Tribes. The primary objectives are to ensure that coal mines are operated in a manner that protects citizens and the environment during mining and assures the land is restored to beneficial use following mining, and to mitigate the effects of past mining by aggressively pursuing reclamation of abandoned coal mines. This investment supports our goals and objectives by allowing secure, effective communications within the Bureau, the department and affords information exchange with outside entities, while reducing long-term costs.

The OSM GSS LAN enclaves support the mission critical systems of OSM essential to achieving our strategic goals and objectives. The OSM GSS supports the following Departmental goals and objectives: (1) Resource protection is accomplished through the successful implementation of the Surface Mining Reclamation and Control Act of 1977 by assisting States that have approved regulatory programs to regulate the surface impacts of coal mining operations throughout the coal mining States. In States with no approved regulatory program, OSM is the regulator of coal mining activities within these States. These regulatory activities promote resource protection by ensuring that active coal mining activities are conducted in an environmentally sound manner that not only maximizes the removal of coal, but also ensures that other resources are protected for future generations. (2) Resource use is accomplished by ensuring that active coal mining operations are planned and conducted in a way that ensures that the mining operation recovers as much coal as possible with minimal disturbance to the surrounding natural and human resources. (3) Serving communities is accomplished through the interaction of OSM and the States and local governments in the planning of active mining operations to ensure that the communities' desires are considered when permitting coal mining operations or reclaiming abandoned mined lands through the abandoned mined land program. (4) Management goals and objectives are accomplished through the OSM planning and budget process that ensures that only projects that promote and achieve the goals and objectives of OSM and the Department are actively implemented.

The OSM GSS enables our Federal and State scientists and engineers to use advanced computing tools to evaluate mine plan designs and to develop effective reclamation plans. This results in effective and efficient compliance with the requirements of the Surface Mining Control and Reclamation Act. The OSM GSS LAN enclaves, the OSM WAN, and Internet connectivity allow effective exchange of data with our customers on a worldwide basis.

I.B.2 President's Management Agenda strategic goals supported:

Improved Financial Performance: As a communications vehicle, the OSM GSS allows the mission critical financial systems (ABACIS and FEEBACS) to achieve a high level of performance. Without an effective GSS, OSM would fall short in its financial objectives and accomplishments. ABACIS meets JFMIP Core requirements, complies with the Standard General Ledger, and is in material compliance with Federal Accounting standards. This system provides internal management reports on a daily and monthly basis. The system produced interim quarterly financial statements beginning in FY2003. ABACIS is the bureau accounting system used to allow OSM to obtain an unqualified opinion on financial statements. The redesigned FEEBACS system will also support the Department of Interior's plans to migrate all Bureaus to a new financial accounting system. This system will be designed to handle change. It will be readily adaptable to interface with whatever new accounting system and data standards the Department selects. More efficient and effective working with effective computing tools results in improved financial performance of the agency. Researching procurements and new scientific and engineering developments on the Internet also improves performance. Networked budget tools such as ABACIS has improved budget tracking capabilities. Other

networked tools such as AVS allow for collection of mining fees and tracking of mining permits. The TIPS service shares licenses for scientific and engineering software applications to 700 users nationwide at the cost of only a few tens of licenses.

Expanded Electronic Government: The successes enjoyed by the mission critical systems are rooted in the GSS. Timely communication with other systems and applications outside of OSM is critical to achieving data integrity. In addition, OSM's E-filing capabilities require reliable communications channels provided by the GSS in order to continue to enjoy its documented successes. The GSS supports ABACIS electronic government initiatives that include cross-functionality with non-OSM system such as the Automated Standard Application for Payment System (ASAP), the Electronic Certification System (ECS), the Federal Personnel Payroll System (FPPS), the Bank of America Charge Card interface, the Treasury internet Payment and Collection System, and Hyperion, which is the Department of the Interior financial reporting system. In addition, the GSS supports FEEBACS, which utilizes current and proposed e-filing capabilities in assisting the Coal industry fulfill its reporting requirements. The plan to consolidate three different collection-tracking systems will reduce system operations costs and will facilitate any cross-agency reporting initiatives. An effective network provides the backbone for effective use of electronic technology. OSM has already increased data exchange of complex mining issues with the mining industry and citizen groups. Many mine permits have already been submitted in electronic file form. TIPS advances in technology, especially remote sensing, has resulted in agency awards and recognition for improved government efficiency.

Budget based on Performance: The GSS also supports the ABACIS process as it relates to cost accounting for management purposes. At OSM full budgetary costs are charged to mission accounts and activities. Costs of outputs and programs are integrated with performance in budget requests and execution.

Competitive Sourcing: As a communications tool, the GSS supports the Competitive Sourcing objectives of the President's Management Agenda. To assess future mission critical system use, such as the planned OSM and MMS conversion to the new Departmental accounting system (FBMS), a complete study of employee positions in OSM is in progress to assist with complying with the President's initiative of Competitive Sourcing. OSM employee positions at our Headquarters and Denver enclave locations are currently being analyzed for competitive alternative sources of their functions. OSM intends to develop the new FEEBACS system using contemporary technology and software. This will make outsourcing considerably more feasible, as was illustrated in the E-filing example, and additional OSM employee positions will be evaluated under competitive sourcing guidelines. Also, the development work for the new FEEBACS system will be contracted because OSM does not have the staffing or current technology to develop the system in-house and because the total cost to develop the system is expected to be less by contracting the development.

Strategic Management of Human Capital: The GSS also supports the President's Strategic Management of Human Capital initiative in that it enables OSM management to communicate to all employees in a timely and consistent fashion. And the OSM GSS permits all employees to participate in mission completion, and to be more front-line in service-delivery to stakeholders and becoming more citizen-focused as a result. Results from the Competitive Sourcing analysis mentioned above will be migrated into our workforce plan in support of OSM's Strategic Management of Human Capital. FEEBACS has incorporated significant amounts of staff knowledge into developing the specifications of the new system. Having a redesigned and consolidated system makes training easier and facilitates staff focus on the OSM core mission. Also, the OSM GSS provides the computing power for people to do their work faster and more efficiently. Office software is used in reporting and developing public information. Computer modeling analyzes and resolves complex mining issues. Fast access to the Internet allows employees to research mining related issues and investigate available alternatives.

I.B.7 Agencies and organizations affected by this initiative:

The OSM GSS WAN and LAN enclaves are operated and maintained by OSM Staff in support of OSM mission goals and objectives. The OSM GSS are not multi-agency initiatives.

I.B.8 Investment cost reduction or efficiency improvement:

The ongoing operation and maintenance of the OSM GSS LAN enclaves will continue to provide access to the previously identified customers and SMCRA stakeholders. Users will continue to be able to update, retrieve and generate report information using SMCRA mission-supporting systems, and can rapidly communicate through common-use systems, such as Electronic mail and word processing, spreadsheet, and presentation level software. The continued ability to access OSM GSS based systems will enable stakeholders and decision-makers to have available the latest and most accurate data and information at their disposal. The OSM GSS automates several processes for OSM mission support at the financial management level. Travel Manager and IDEAS provide for centralized procurement and travel processing through the OSM GSS infrastructure. The AVS system automates mining fee collection, and the TIPS system effectively shares licensed software through the OSM GSS.

I.9.a List all other assets

The assets that interface with this project are ABACIS, FEEBACS, AVS, AMLIS, E-Budget, GIFTS and the MORS system. These assets are proposed to be re-engineered but not as a part of this OSM GSS project.

that interface with this asset. MORS system. These assets are proposed to be re-engineered but not as a part of this OSM GSS project.

I.9.b Have these assets been reengineered as part of this investment (Yes/No) No

Requested Investment Summary of Spending for Project Stages (\$Millions)

BY 2005 Planning Resources:	.00
BY 2005 Acquisition Resources:	.00
BY 2005 Maintenance Resources:	6.90
BY 2005 Total, All Stages Resources:	6.90
Life Cycle Total, All Stages Resources:	50.37

DOI BUDGET YEAR 2005 IT INVESTMENT OVERVIEW

Investment Identification

Agency: Department of the Interior
Bureau: Office of Surface Mining Reclamation and Enforcement
Location in Budget: Summary of IT Investments
Account Title: Regulation and Technology
Account Identification Code: 010-08-14-1801-0
Program Activity: Applicant Violator System
Name of Investment: [Applicant Violator System \(AVS\)](#)
Unique Investment Identifier: (IT Only)(see section 53) 01008010201080900308149

Investment Justification

I.A Investment Description: Financial Summary

The financial summary above reflects a combination of spending for a system currently in operation, the outsourcing of hosting for that system, and the integration of a contract for redesign of the legacy system to a web-enabled system by the hosting entity. The investment phase costs are reflected in tables at I.H. The system will become steady state in FY2005. The total costs associated with the AVS investment planning and redesign phase are \$.714. For FY2001, \$.100 was spent on planning the redesign, other summary costs represent the status quo costs of an existing system. Costs for FY2006 and beyond are the projected maintenance cost for the system once it becomes steady state.

For FY2004, OMB approved the AVS Capital Asset Plan and Business Case for a redesign of the system. At the time of the initial budget request, it was assumed that the system would continue to be hosted by the Office of Surface Mining. Due to changes in technology and the availability of viable outsourcing opportunities, it was determined in early FY2003 that the AVS would be hosted by an outside contractor and that the redesign (approved by OMB) would be incorporated into the hosting contract for FY2004. The contract for hosting will include the cost for the redesign. Funding for FY2005 will serve two purposes; continue the hosting and complete the redesign. The redesign will be completed in FY2005 and out year expenses are for acquisition of the service maintenance contract for a system at steady state. Once steady state is achieved, the result will be a savings in hosting costs of 200% over current in-house rates and the elimination of FTEs associated with the hosting and maintenance of the system.

Description

The Applicant Violator System (AVS) implements section 510(c) of the Surface Mining Control and Reclamation Act of 1977 (SMCRA). SMCRA specifies that no mining permit be issued to applicants that have outstanding responsibility for unabated mining violations. The AVS delivers ownership, control, organizational and violation data on a national basis to the 24 State Mining Regulatory Authorities, the Tribes and the Office of Surface Mining (OSM) who are responsible for determining permit eligibility. The AVS program is a mission critical program in OSM.

This investment directly responds to the Presidential mandate of Federal-wide adoption of electronic government (E-gov). The mandate emphasized that Citizens must be given greater access to their government with information, products and services available on-line and that communicating with government, obtaining services and complying with government requirements will be simplified. The changes to the AVS (from a

software dependent system to a web based service):

Provide stakeholders a more user friendly, web-based environment;

Increase internal efficiency by allowing system changes after legal rulings, the development of major, enhancements and flexibility for future enhancements;

Reduce costs for States by providing direct interface with state systems and eliminating dual data entry;

Reduce costs for industry through time savings by allowing certification of existing data instead of resubmissions;

Directly support the goals of several Federal mandates including: the Government Paperwork Elimination Act; the Government Information Security Reform Act; the Clinger-Cohen Act; the Government Performance and Results Act; the Privacy Act; the Federal Records Act; the Computer Security Act; the Freedom of Information Act; the Disabilities Act; and Section 508 of the Rehabilitation Act.

Expands the use of AVS as a source of statistics for OSM's annual report, (e.g., new permits, total acreage permitted, bond releases and forfeitures, etc.) and in preparing numerous other required reports;

System Benefits

The flexibility and agility of the system allows the layering of enhancements in a timely manner. AVS is ready and able to grow in the partnering of this agency with industry in a market-based reality of doing business not as a burdensome bureaucratic hurdle.

Average computer users are able to maneuver within the system in a familiar format. By creating a system that is consciously accommodating to the citizen-user, AVS transformed itself from a difficult to use database into a readily accessible information center.

Use of systems written in common languages will eliminate the need for specialized skill in programming allowing future programming and maintenance options to be in-house or outsourced depending on a cost analysis basis.

Built in flexibility of the data will allow use of the fields to create new and useful reports to meet the needs of management in making decisions and implementing performance based measurements including activity based costing.

Continued web access will reduce the need for the submission of paper requests, responses, and forms, and the filing and retention of those papers; it will allow for up-datable security measures at the appropriate standards; the e-gov strategy will be carefully considered at each step; and the bureaus involved will take this opportunity to integrate the development of performance criteria and define real measures of program performance into the initialization of the investment.

Status: CPIC Process

This investment was approved by OSM's Executive Council in 2002 and received funding from OMB through the planning and analysis phase. It was reviewed in FY 2003 under OSM's revised CPIC procedures and is in the control phase.

I.B.1 Agency mission and strategic goals and objectives supported:

This investment supports three of the Department of the Interior's mission goals (Resource Protection, Resource Use and Serving Communities) and OSM mission goals of Environmental Restoration and Environmental Protection.

Departmental Goal: Resource Protection-Improve Health of Watersheds and Landscapes

Supporting OSM Goals: Protection and Restoration

How AVS Supports Goals: Identifies new or transferred permits to create abandoned mine lands fee accounts

enabling the collection of reclamation fees so that abandoned mine lands can be reclaimed.

Departmental Goal: Resource Use- Manage Resources to Enhance Public Benefit, Promote Responsible Use, and Ensure Optimal Value. - Deliver water and Power in an Environmentally Responsible and Cost Efficient Manner.

Supporting OSM Goals: Protection and Restoration

How AVS Supports Goals: Provides identification of ownership/control and violation data to Regulatory Authorities to assist in determining permit eligibility. The Regulatory Authorities are able to make informed decisions and prevent unscrupulous or repeat violators from erroneously receiving permits allowing them to mine. Careful permitting decreases the risk of environmental harm. Availability of easily accessible information also reduces costs of investigation and maintenance to individual states and speeds the permit process for responsible mining operations.

Departmental Goals: Serving Communities - Protect Lives, resources and property.

Supporting OSM Goals: Protection and Restoration

How AVS Supports Goals: Promotes compliance with the Surface Mining Control and Reclamation Act whose stated first purpose is to establish a nationwide program to protect society and the environment from the adverse effects of surface coal mining operations. Provide investigative assistance to State and Federal Regulatory Authorities, Solicitors, and legal departments.

The AVS Customer Service, Systems Operation and Maintenance and System Development business line (program activities) provide resources, support and enhance the availability of information and skills that States and Tribes need to operate their regulatory and reclamation programs in order to effectively implement the SMCRA. This program activity is an integral part of supporting OSM's Environmental Restoration and Environmental Protection business lines to achieve their goals and outcomes.

To solve problems related to the environmental effects of coal mining, OSM provides assistance and works with stakeholders on issues arising from new regulations. The AVS office conducts investigations to determine those responsible for violations and aids in effectively holding violators accountable. The AVS office provides information and training to OSM staff, States, Tribes, industry and the public on use of this database. New technologies, changes in regulations, and staff turnover necessitate the need for continued assistance and training.

The activities carried out through this business line are critical to the successful outcome of OSM's Restoration and Protection mission goals. Accomplishment of OSM's Restoration and Protection mission goals supports the Department's new strategic plan goal of Resource Protection that is intended to improve the health of watersheds and landscapes and Resource Use that ensures responsible management practices in the extraction of resources.

The AVS is an informational database OSM maintained to support many types of research and program efforts but primarily in support of permit eligibility determinations made by 24 approved program states and tribes under section 510(c) of SMCRA. As part of the permit review process, State and Federal regulatory authorities use the information contained in the AVS to evaluate an applicant's mining and violation history in order to determine the applicant's eligibility to engage in surface coal mining operations. OSM responds to approximately 3,500 requests per year for these evaluation reports. The AVS is also used to determine the eligibility of potential recipients of AML reclamation contracts and grants under the Small Operator Assistance Program.

AVS Office staff provides services to other customers including the coal industry, citizens groups, individual users and other Federal agencies. Some of the services provided include: providing software and technical assistance for customers wishing to access the AVS from a personal computer; updating information in the AVS for coal companies that mine in more than one State; providing basic and advanced system training; and providing investigative assistance to others on complex ownership and control issues and alternative enforcement cases.

I.B.2 President's Management Agenda strategic goals supported: The investment supports four out of five of the President's Management Agenda Goals:

PMA Goal 1: Expanded Electronic Government:

Government to Citizen- The enhanced web-enabled site is designed for modular expansion. Incrementally, it

will grow into a part of a one-stop resource that integrates surface coal mining regulations, information, and educational materials that are available to the public twenty-four hours a day through its linkage with other OSM sites and the Business Compliance One Stop.

Government to Government- This system improves the State Regulatory Authority's ability to meet their responsibilities under SMCRA and other State and Federal laws. The new system partners with States to provide a common platform allowing single entry of data thereby eliminating redundant data entry. It allows managers to readily access and instantaneously generate reports, and users to have nationwide interfacing through seamless technology upgrades using modular IT enhancements. Government to Business- Business interaction is no longer restricted to business hours nor will they be reliant on telephone requests or multiple calls to find the correct agency for processing. This market-based approach emulates business-to-business applications and provides business users with a familiar look and feel in the compliance area.

Internal Efficiency and Effectiveness- Development of the enhanced national database uses the existing AVS database and existing AVS personnel. It eliminates program redundancy, utilizes existing knowledge, and provides real-time data to managers for better performance-based decision-making. The resulting universal platform allows for national system integration, upgrades with limited costly system downtime and ease of interface without the necessity of repeated redesign with each new generation of Internet technology.

PMA Goal 2: Strategic Management of Human Capital:

Contemporary technology allows an effective competition for the work and OSM accomplishes the work it needs done without an "in-house" staff for maintenance.

The AVS took part in an analysis of the Human Resources Workforce Plan (IT) in 2002. This study was to determine the feasibility of outsourcing IT expertise in the development and maintenance of the AVS. This reduced the cost associated with the operation and maintenance of the AVS.

Those users responsible for maintaining data in the old AVS found the system difficult to maneuver and few became proficient with entry. Once someone became proficient, they changed positions and our limited resources were used for training new personnel. The web-based system includes on-line help eliminating much of our training costs.

PMA Goal 3: Competitive Sourcing:

OSM is developing the new system using contemporary technology and software. Among other things, this makes outsourcing feasible. The development work for the new system is contracted out because OSM did not have the staffing or current technology to develop the system in-house. The system is being developed to replace a version developed in 1994 using INGRES programming language. INGRES was widely regarded as a high-performance relational database system, however the AVS was not efficiently designed. The old database was difficult to maintain, administer and enhance. It required administrators and programmers who were increasingly difficult to recruit and retain. Outsourcing was difficult and expensive.

The AVS took part in an analysis of the Human Resources Workforce Plan (IT) in 2002. This study determined the feasibility of outsourcing IT expertise in the development and maintenance of the AVS. Implementation will reduce the cost associated with the operation and maintenance of the AVS.

PMA Goal 4: Improved Performance:

The AVS promotes E-gov principles and practices. Our continuing goal is to adapt the information and its availability to meet the variety of needs of the growing number of AVS users. We are actively developing modifications to the AVS aimed to make information more available and simpler to access electronically. In addition, the service provided to customers by the Lexington AVS staff has always resembled the one-stop shopping approach. Very often, the AVS staff is the single point of contact for users who would otherwise have to deal with multiple federal and state agencies in resolving compliance issues.

Consistent with the E-gov philosophy, our first goal is to establish a web-based application that allows electronic access to OSM stakeholders and others. The basic system architecture is layered where the data, business processing rules and user presentations are kept separate, but sufficiently inter-related to enable maintenance and enhancements in an E-gov environment.

I.B.7 Agencies and organizations

Although this system is not directly cross agency, the concept of its design and deployment incorporates an electronic portal on mining that will allow cross agency utilization. Individuals seeking information available on the AVS website will be directed to the site by the Business Gateway (the Small Business Administration's

affected by this initiative: Quicksilver Initiative formerly identified as the One-Stop Business Compliance Information site.)

I.B.8 Investment cost reduction or efficiency improvement: This investment will reduce costs by:

- Saving maintenance costs by 200% over current rate each year upon reaching steady state.
- Eliminating dual entry for States with their own information systems thereby creating a savings to our State Regulatory Authorities;
- Improving resource use by reducing man-hours spent performing quality checks on evaluation requests by State Regulatory Agencies and AML Offices once interoperability with other OSM systems is achieved.
- Allowing the industry to submit new applications and updates electronically; and
- Saving training costs through the use of an online tutorial thereby reducing the need for on-site instruction.

I.9.a List all other assets that interface with this asset. No other assets will be reengineered as part of the investment. Although interface is not required, interoperability with the following systems scheduled for redesign is desirable Fee Billing and Collection System (FEEBACS) Audit Fee Billing and Collection System (AFBACS) Civil Penalty and Control System (CPACS) Some State Regulatory Agencies with surface mining systems

I.9.b Have these assets been reengineered as part of this investment (Yes/No)

No

Requested Investment Summary of Spending for Project Stages (\$Millions)

BY 2005 Planning Resources:	.00
BY 2005 Acquisition Resources:	.31
BY 2005 Maintenance Resources:	.00
BY 2005 Total, All Stages Resources:	.31
Life Cycle Total, All Stages Resources:	1.80

DOI BUDGET YEAR 2005 IT INVESTMENT OVERVIEW

Investment Identification

Agency: Department of the Interior
Bureau: Office of Surface Mining Reclamation and Enforcement

Location in Budget: Summary of Information Technology Investments & Financial Management – Fee Compliance Program (2F)

Account Title: Abandoned Mine Lands

Account Identification Code: 010-08-14-5015-0

Program Activity: Financial Management

Name of Investment: [Fee Billing Collection System \(FEEBACS\)](#)

Unique Investment Identifier: 01008010201081000402127
(IT Only)(see section 53)

Investment Justification

I.A Investment Description: The project will replace three separate systems at the Office of Surface Mining (OSM). All three of the existing systems support various aspects of OSM's fee compliance program and/or the civil penalty enforcement program. The fee compliance program is a mission critical program in OSM. The program collects over \$284 million a year in reclamation fees that are deposited into the Abandoned Mine Land Fund. The fee compliance program is highly successful, with a 99% collection rate and a 94% on-time reporting rate from coal companies. However, the present systems and processes can be significantly improved. The systems are based on outdated programming languages that are not widely supported commercially and are becoming increasingly difficult to maintain. Two of the current systems will have to be replaced after 2006 when the existing hardware is no longer supported by the manufacturer. And although OSM recently implemented an E-filing company reporting process using web-based technology, it is still linked to a back-end process that was not designed for E-Government.

This project also supports the administration's plan to propose combining the Black Lung/coal excise tax program with the coal reclamation fee compliance program. \$114,000 for related software modifications is included in the FY 2005 request.

This project was reviewed and approved under OSM's and DOI's CPIC procedures. The project was funded through the planning and analysis phase. Funding is requested to begin development in 2005.

I.B.1 Agency mission and strategic goals and objectives supported: This project supports the Department of the Interior's goals of Resource Protection, Resource Use and Serving Communities, and OSM's two mission goals of Environmental Restoration and Environmental Protection. It directly supports these goals by assuring that reclamation fees are collected to restore abandoned mine lands to productive use and to eliminate hazards to public health and safety. It also assures that civil penalties are enforced to promote compliance with mining laws that are designed to protect the land, water and public safety.

The project will replace three separate systems at the Office of Surface Mining (OSM). All three of the existing systems support various aspects of OSM's fee compliance program and/or the civil penalty enforcement program. The fee compliance program is a mission critical program in OSM. The program collects over \$284 million a year in reclamation fees that are deposited into the Abandoned Mine Land Fund. Money is appropriated from the fund to reclaim abandoned mine lands, which puts the land and water resources back to productive use and eliminates hazards to the public health and safety. States and Tribes receive approximately \$172 million per year under the reclamation program. The fee compliance program is highly successful, with a 99% collection rate and a 94% on-time reporting rate from coal companies. This project will assure that OSM

can continue to collect reclamation fees to fund reclamation grants to States and Tribes. It will also assure that OSM's financial operations are cost-effective.

The following table summarizes how this project supports the Department's and OSM's Mission and Goals:

Resource Protection: Improve Health of Watersheds and Landscapes: Collects money used to improve watersheds and landscapes.

Manage or influence resource use to enhance public benefit, promote responsible use, and ensure optimal value.: Enforces civil penalties designed to encourage responsible mining and return land back to productive use.

Serving Communities: Protect lives, resources and property: Collects money used to eliminate safety and health hazards in communities where coal mining occurred. Also, enforces civil penalties designed to protect public health, safety and resources.

I.B.2
President's
Management
Agenda
strategic goals
supported:

This project supports four out of five of the President's Management Agenda Goals:

Expanded Electronic Government:

This project can deliver many of the improvements outlined in OMB's February 27, 2002, E-Government Strategy, including the following:

Simplifying delivery of services to citizens. OSM has already substantially simplified service to citizens and businesses with the E-filing system that coal companies use to file quarterly Coal Reclamation Fee Reports. The system automatically calculates fees due for one or more coal mining permits. It simplifies the moisture deduction for companies, allowing them to take the technically more complex, and more advantageous, moisture deduction. And it pre-fills report information, based on the company's last report, to minimize the amount of data that has to be entered. The redesign project will allow more services to be delivered through the E-filing system, by re-engineering many of the back-end processes such as refunds and billing.

Simplifying agencies' business processes and reducing costs through integrating and eliminating redundant systems. The three existing systems all perform similar accounting, billing, payment processing, debt collection, and reporting functions. The project will replace the three systems with one system. This should reduce maintenance costs since the three systems and the E-filing system reside on three different hardware platforms and require three different programming skill sets.

Also, the project will be integrated with OSM's permit management system (also known as the AVS System). Currently, the permit management system produces weekly listings of new permits that must be researched to determine which ones will be coal producing. New coal producing permits become new accounts in OSM's quarterly coal reclamation fee reporting and accounting system. As part of a coordinated re-design effort, the permit management system will be re-designed to provide an automated transfer of new coal-producing permits to the new system. The redesigned FEEDACS system will also allow OSM to automate other processes: electronic payment processing, data entry of audit reports, and financial and management reporting.

The redesign project can also facilitate cross-agency reporting under SBA's Business One-Stop Compliance initiative. We are working with the Interstate Mining Compact Commission – a group sponsored by the Governor's of twenty states, the Small Business Administration, the Internal Revenue Service, the Mine Safety and Health Administration and the State of Pennsylvania to consolidate and coordinate Federal and State information collection from the coal mining industry. This project may evolve to serve multiple business partners.

Making it possible for citizens and businesses to easily find information and get services. OSM's E-filing system provides useful contact and reporting information to companies. The new system will provide a mechanism for providing expanded information and services to citizens and businesses, including automated payment, refund processing and reporting services.

Achieving other elements of the President's Management Agenda. As shown below, the proposed system supports the President's management goals for Human Capital Management, Competitive Sourcing and Improved Financial Performance.

Strategic Management of Human Capital.

OSM's three existing systems were developed in programming languages that are now outdated (COBOL, 4GL/ABF and C). Moreover, the current systems did not make good use of relational database design concepts. OSM has had difficulty finding programmers for these systems. This has led OSM to hire in-house when it could find programmers versed in these languages. Similarly, OSM has found it difficult and expensive to out-source work on the existing systems. In contrast, and by way of example, OSM recently developed an Internet based

reporting system to allow companies to submit their quarterly Coal Reclamation Fee Reports on-line. OSM contracted out the development of the system and it was developed with widely used contemporary web-based technology. Since the new E-Filing system was developed, OSM has contracted with several companies for enhancements to the system. Because it was developed with contemporary technology, there was effective competition for the work, and OSM could readily obtain the work it needed without having to maintain an in-house staff. Outsourcing this work has allowed OSM to concentrate on its core mission, while obtaining the best contemporary skills that the marketplace has to offer.

"The Administration will adopt information technology systems to capture some of the knowledge and skills of retiring employees" (The President's Management Agenda, FY 2002). OSM's three current systems have a low degree of inherent knowledge built into them. The systems are overly complex and difficult to use, and the knowledge has to be built into the user so that they can use the systems. It takes a minimum of six months for a new accounting technician to learn how to use the existing systems in any functional way, and it takes over three years to become proficient. Although OSM contracts out the accounting technician functions, it is still vulnerable to the same problems posed by retirement and turnover, due to the complexity of the current systems. OSM has incorporated significant amounts of staff knowledge into the specifications for the new system. It will also be easier for new staff to learn one system instead of the three existing systems.

Competitive Sourcing:

OSM intends to develop the new system using contemporary technology and software. This will make outsourcing considerably more feasible, as was illustrated in the E-filing example above. The development work for the new system will be contracted out because OSM does not have the staffing or current technology to develop the system in-house.

OSM is also conducting a complete review of information technology positions to comply with the President's initiative for competitive sourcing. Results from this competitive sourcing analysis will be incorporated into OSM's workforce plan and strategic management of human capital.

Improved Financial Performance:

While OSM has achieved a high rate of financial performance with a 99% collection rate, it cannot sustain this rate of performance without investing in the future. The current systems are becoming increasingly more difficult to maintain. And OSM is becoming increasingly more reliant on an aging programmer workforce. Eventually, the systems will fail and the consequences will be measurable in terms of lost collections and interest earnings, and the increased costs to fix such a failure. OSM can continue to achieve a high rate of performance and clean audit opinions by replacing the existing systems with one that can be maintained into the future.

The new system will also allow OSM to streamline its accounts receivable financial reporting processes. Currently, the data from the three existing systems must be downloaded and manipulated using spreadsheets. This process is time-consuming and error prone. And new reports are difficult and time-consuming to produce. Also, data from two of the existing systems must be manually input to the general ledger. The new system will provide both better management reporting using contemporary report-writing software, and an automated interface with the general ledger. This will help OSM achieve the President's initiatives of accelerating year-end reporting and producing quarterly financial statements. The new system will also produce real time output data for OSM's activity based costing program.

The redesigned system will also support the Department of Interior's plans to migrate all Bureaus to a new financial accounting system. The re-designed FEEBACS system will be designed to handle change. It will be readily adaptable to interface with whatever new accounting system and data standards the Department selects.

I.B.7 Agencies and organizations affected by this initiative:

OSM is currently working with the Interstate Mining Compact Commission – a group sponsored by the Governor's of twenty states, the Small Business Administration, the Mine Safety and Health Administration (MSHA), the Internal Revenue Service and the State of Pennsylvania on a demonstration project to consolidate and coordinate Federal and State information collection from the coal mining industry. The project is called Single Source Coal Reporting. It is being sponsored by the Small Business Administration to demonstrate SBA's Business Compliance One-Stop concept – a Quicksilver initiative. OSM modified its Electronic Filing website to allow companies to report excise taxes to the IRS, and safety and production data to MSHA and Pennsylvania, while filing quarterly Coal Reclamation Fee Reports with OSM. A pilot test was successfully completed in January 2003. Test companies reported that Single Source Coal Reporting significantly simplified the reporting process. OSM is working with these agencies to develop the business case and will submit a separate proposal for Single Source Coal Reporting. We expect that this initiative will evolve to serve multiple business partners.

Besides simplifying coal reporting by industry, this initiative also supports consolidating similar agency processes that are currently performed by the IRS and OSM. The Administration intends to propose combining the IRS's coal excise tax compliance function with OSM's coal reclamation fee compliance function, due to the similarities of both functions and their focus on companies. This initiative integrates coal excise tax compliance into the FEEBACS redesign.

OSM also currently uses the Pay.Gov tool developed by the Treasury Department's Financial Management

Service to collect AML Fees through its Electronic Filing website.

I.B.8
Investment cost
reduction or
efficiency
improvement:

This project will reduce costs by:

1) averting a system failure to business processes that generate over \$284 million a year in collections, and by avoiding the costs required to fix such a failure. We estimate that a major system failure would cost a minimum of \$710,000 in lost fee collections.

2) migrating two of the existing systems off of their current hardware. The two systems reside on the same computer system as the administrative accounting system and its related subsidiary systems. OSM plans to migrate its administrative accounting system to a new Department-wide Financial and Business Management System. Once this occurs, (estimated for FY 2005), OSM would have to continue to maintain and operate the host computer system to support the two existing collection systems – AFBACS and CPACS. The redesign of these two existing systems will eliminate the need to do this, and save OSM an estimated \$139,000 in recurring annual maintenance costs (current dollars). The redesign will also eliminate \$96,411 a year in programmer maintenance costs. Due to the difficulty OSM faces in finding programmers to maintain the current systems, the complexity of those systems, and the mission critical nature of the business processes, OSM must retain two programmers to assure continuity of operations. Development of a new system will allow OSM to readily contract out software maintenance and reduce staffing by one programmer.

3) eliminating the need to replace existing hardware that is going off-maintenance in 2006 and re-writing the AFBACS and CPACS systems. This will save an additional \$1.02 million. And,

4) reducing the reporting and compliance burden on industry by combining the reclamation fee compliance and Black Lung (coal excise tax) compliance functions.

This project will improve efficiencies by:

1) re-engineering and streamlining business processes. OSM currently incurs \$540,000 a year in non-computer operating costs that could be reduced with the new system. Although we cannot currently predict the total efficiency savings from this project, a 15% efficiency gain would be a conservative estimate. A 15% efficiency gain would save \$81,000 per year. Over ten years, this adds up to \$1,057,000 in operating savings (adjusted for inflation);

2) replacing three outdated systems with one system;

3) eliminating redundant data collection, especially for coal excise tax reporting, and

4) potentially reducing the cost of data collection by partner agencies.

In summary, this project will deliver \$5,445,000 in savings/cost avoidance over ten years, as outlined in the following table:

Benefits: Maintenance Savings – Combining Systems: \$2,658,000 Operating Savings – Streamlined Business Processes: \$1,057,000 Replacement Cost Avoidance – AFBACS & CPACS: \$1,020,000 Additional Fee Collections: \$710,000 Total Benefits/Savings: \$5,445,000

I.9.a List all other assets that interface with this asset.

The other assets (systems) that the Redesigned FEEBACS system will interface with have been re-engineered or are in the process of being re-engineered. These are: The Applicant Violator System (AVS), and The Advanced Budget/Accounting Control Information System (ABACIS) or the Departmental Financial and Business Management System.

I.9.b Have these assets been reengineered as part of this investment (Yes/No)

Yes

Requested Investment Summary of Spending for Project Stages (\$Millions)

BY 2005 Planning Resources:	0.6
BY 2005	2.28

Acquisition Resources:	
BY 2005 Maintenance Resources:	.36
BY 2005 Total, All Stages Resources:	2.70
Life Cycle Total, All Stages Resources:	8.16

DOI BUDGET YEAR 2005 IT INVESTMENT OVERVIEW

Investment Identification

Agency: Department of the Interior
Bureau: Office of Surface Mining Reclamation and Enforcement
Location in Budget: Summary of IT Investments
Account Title: Abandoned Mine Reclamation
Account Identification Code: 010-08-14-5015-0
Program Activity: Division of Reclamation Support
Name of Investment: [Abandoned Mine Land Inventory System \(AMLIS\)](#)
Unique Investment Identifier: (IT Only)(see section 53) 01008010201081300108024

Investment Justification

I.A Investment Description: This investment supports the Abandoned Mine Land Inventory System (AMLIS), a computerized inventory of abandoned mine land (AML) problems eligible for funding by the Abandoned Mine Land Reclamation Fund. The current size of the U.S. Office of Surface Mining (OSM) AML Inventory is:

Unfunded Problems- \$8.6 billion

(\$0.2 billion Priority 1 coal related- extreme health and safety problems)

(\$6.4 billion Priority 2 coal related- health and safety problems)

(\$2.0 billion other)

Funded & Completed Problems- \$2.6 billion

Total- \$11.2 billion

It is estimated that 3.6 million people are within a mile of unreclaimed AML problems.

AMLIS is a steady state WEB based system that is Certified and Accredited. It can be accessed at: <http://ismhdqa02.osmre.gov/scripts/OsmWeb.dll>.

The Surface Mining Control and Reclamation Act of 1977 (SMCRA), as amended by the Abandoned Mine Reclamation Act of 1990, requires the Secretary of the Department of Interior to maintain an inventory of eligible abandoned mine lands and waters which meet the public health, safety, and general welfare criteria of SMCRA Section 403(1) and (2). AMLIS implements this requirement. The Abandoned Mine Land (AML) Program provides for the restoration of eligible lands that were mined and abandoned or left inadequately restored before passage of the Surface Mining Control and Reclamation Act (SMCRA) of 1977. Title IV of SMCRA, as amended, establishes the Abandoned Mine Land Reclamation Fund which is used primarily for reclamation and restoration of land and water resources adversely affected by past coal mining. States and Tribes are allocated 50 percent of the annual appropriations, while the remainder is used by the Office of Surface Mining (OSM) to fund emergency projects and high-priority projects. Grants to States and Indian tribes total approximately \$190 million annually. The Abandoned Mine Land Inventory System (AMLIS) is the

critical underpinning of the AML Program.

AMLIS is used as a planning tool and as a source of information on the amount of work completed under a State/Tribal program, and the extent and cost of AML problems remaining to be abated. AMLIS is also used by OSM to determine which States and Tribes have sufficient Priority 1 and 2 coal problems to justify a grant distribution from the Federal historic coal share (See SMCRA 402 (g) (5)). AMLIS is used by OSM to generate a variety of reports for the Annual Report, GPRA, and Departmental requests.

This project was reviewed and approved under OSM's and DOI's CPIC procedures. AMLIS has gone from a UNIX , to a Windows, to a WEB based system. This investment directly supports the Presidential mandate of Federal-wide adoption of electronic government (E-gov). The mandate emphasized that Citizens must be given greater access to the government with information, products and services available on-line and that communicating with government, obtaining services and complying with government requirements will be simplified.

AMLIS is supported by the OSM'sHeadquarter's General Support System (GSS). It resides as part of the OSM Headquarters GSS Enclave. AMLIS, along with the rest of the OSM Headquarters GSS Enclave was Certified and Accredited on September 30, 2003.

The WEB version of AMLIS has many capabilities:

- Enter enter/modify data from remote locations via the Internet.
- Enter and store information by "Problem Areas". A Problem Area has at least one AML problem.
- Easily transfer AML problems from unfunded, to funded, to completed categories.
- Add, modify, and tract alternative funding sources.
- Accept information created using hand-held GPS units and manage errors through checking and updating prior to including the information in the database. (To be developed.)
- Query the database from remote locations via the Internet.
- Display query results via the Internet as reports in multiple formats or on a map.
- Download query results in multiple formats including dbase and shape files.
- Create Priority Documentation Forms as Word or WordPerfect documents and manage the repository of these documents.
- Create and maintain a list of every change made.

I.B.1 Agency mission and strategic goals and objectives supported:

Agency Mission

This investment supports the Department of the Interior's goals of Resource Protection and Serving Communities, and OSM' mission goals of Environmental Restoration, which addresses threats to the public health, safety, and general welfare caused by past mining practices.

AMLIS helps OSM support two DOI Mission Goals: Resource Protection and Serving Communities: AMLIS is required by SMCRA. Section 403(c) requires the Secretary to maintain an inventory of eligible lands and waters. AMLIS also provides the basis for the Secretary's annual report to Congress on reclamation completed during a fiscal year.

AMLIS provides the information necessary for OSM to grant State or Indian Tribe permission to reclaim an AML problem. Prior to permission, the State or Indian Tribe must have entered a minimum number of eligible unfunded problems in the inventory via the AMLIS system.

Through AMLIS, the Secretary can verify that a State or Indian tribe has addressed all eligible coal-mining related problems allowing the State or Indian tribe to use its AML grant monies to reclaim non-coal related

problems.

AMLIS is used to provide key OSM GPRA measures.

AMLIS frequently provides pertinent information needed to respond to Congressional budget questions.

I.B.2 President's Management Agenda strategic goals supported: AMLIS supports two of the strategic goals from the President's Management Agenda.
(1) PMA Goal 1: Human Capital.

By using the people associated with the development of the WEB version to maintain the WEB version a body of knowledge about the system is maintained. (Under Preferred Alternative; Section I.E. Alternative Analysis)

(2) PMA Goal 5: Electronic Government

Government to Citizen-- AMLIS access via the WEB provides easy and efficient public access to OSM's AML Inventory. Previously, the Windows-NT version, accessed via the Internet, required time consuming software download, and subsequent installation using detail instructions. Recent development of the AMLIS WEB site eliminates the need to download the.

Government-to-Government-- The WEB version facilitates recording information into the AML Inventory by the States and Indian tribes. A major improvement has been conversion of the Priority Documentation Forms either to Word or WordPerfect documents rather than simple text files. Since much of the information is already in electronic format, now this information can "cut and pasted" into the forms. The WEB version provides other federal agencies and State and local government easier access to the AML

Government to Business-- The WEB version is easier for companies desiring AML reclamation- related business to collect information about unfunded AML problems.

I.B.7 Agencies and organizations affected by this initiative: This is not a multi-agency initiative.

I.B.8 Investment cost reduction or efficiency improvement: Switching for a Windows-based system requiring someone wishing to access it to download and set up a piece of thin client software to a WEB based system with no such requirement has made the system much more accessible and reduced the time required by users to access the information. It has also eliminated the need for OSM employees to provide phone support to people needing to download and set up the thin client software. Tables created using AMLIS can be saved as spreadsheets eliminating or greatly reducing the need to type data into spreadsheet from hardcopy paper reports. Priority Documentation Forms, used by OSM to help determine if a problem is eligible for funding, are available as Word or WordPerfect documents in the WEB version giving the States and Indian tribes who prepare them the ability to import information from spreadsheets and use all the other capabilities of modern word processing software when preparing the Priority Documentation Forms. When entering information about a new AML Problem Area in the WEB version one only has to enter its coordinates and AMLIS then automatically fills most of the other required spatial information.

OSM will continue to look for ways to provide better, more effective service. It is anticipated that as the States, Indian tribes and other continue to use AMLIS, these stakeholders will have suggestions to improve the efficiency and use of AMLIS. OSM will continue to review the security aspects of the data in the system

I.9.a List all other assets that interface with this asset.

I.9.b Have these assets been reengineered as part of this investment No

(Yes/No)

Requested Investment Summary of Spending for Project Stages (\$Millions)

BY 2005 Planning Resources:	.00
BY 2005 Acquisition Resources:	.00
BY 2005 Maintenance Resources:	.10
BY 2005 Total, All Stages Resources:	.10
Life Cycle Total, All Stages Resources:	.79

DOI BUDGET YEAR 2005 IT INVESTMENT OVERVIEW

Investment Identification

Agency: Department of the Interior
Bureau: Office of Surface Mining Reclamation and Enforcement
Location in Budget: Summary of Information Technology Investments & Executive Direction and Administration
Account Title: Regulation and Technology
Account Identification Code: 010-08-14-1801-0
Program Activity: MMS: Administration
Name of Investment: [Advanced Budget/Accounting Control and Information System \(ABACIS\)](#)
Unique Investment Identifier: (IT Only)(see section 53) 01008010101081500402125

Investment Justification

I.A Investment Description: The Advanced Budget/Accounting Control and Information System (ABACIS) was designed by the Department of the Interior (DOI), Office of the Secretary (O/S) in 1982. The system was installed by the Minerals Management Service (MMS) on October 1, 1985. The Office of Surface Mining (OSM) installed ABACIS on October 1, 1986. ABACIS stores and processes budgetary and financial data. Data and programming code reside on HP minicomputer located in Denver, Colorado for OSM and in Herndon, Virginia for MMS. ABACIS provides these bureaus with an automated accounting system and a mechanism for meeting internal and external reporting requirements. ABACIS also allows OSM and MMS to meet Chief Financial Officer (CFO) Act and Federal Financial Managers' Fiscal Integrity Act (FFMFIA) requirements and helps them manage their appropriated funds. ABACIS has been certified by the Joint Financial Managers Improvement Program (JFMIP) as being "core compliant". The ABACIS system is supported by the General Support System (GSS). At OSM, the ABACIS system resides as part of the Division of Financial Management GSS Enclave. OSM developed two modules that provide more detailed data reporting capabilities and interfaces that data with ABACIS. The Grant Information Financial Tracking System (GIFTS) is a module of ABACIS that allows on-line access to award, cost, and disbursement information for its grant customers. Draw Down eXpress (DDX) is a sub-module of GIFTS that allows the grant customers to request funds from remote locations processing. OSM also developed the Comprehensive On-Line Document Reconciliation System (CONDORS). This module provides an automated interface between charge card vendors, ABACIS and the Charge Card Company. It also is an integrated tool to assist in the management of funds, assets, and the acquisition process. MMS also developed an ABACIS module called the Interior Franchise Fund (IFF), which allows for the collection of advances using the bulk transfer process owned and operated by the Department of Treasury. The IFF module interfaces with the Business Information System (BIS) operated by the bureau's procurement office and automatically downloads agreement and award document information to ABACIS.

ABACIS was reviewed and approved both through each Bureau's and the Department's CPIC process for the current steady state cycle.

This business case seeks budgetary resources to continue operation and maintenance of ABACIS and its modules as an integrated part of ABACIS through budget year 2008. The budget resources necessary to maintain the individual modules are not segregated. Software and hardware are located on the same platform and this makes separate module operation and maintenance cost tracking unnecessary. For these bureaus, ABACIS is a mission critical core accounting system. It supports bureau financial reporting and ultimately, departmental financial reporting. The Department of the Interior is currently developing functional requirements for a new accounting system that would be used by all Interior bureaus. However, the Department has not determined funding sources or an implementation schedule for this accounting system. OSM and MMS have made an assumption that bureau conversion to the new accounting system will be before the end of budget year 2008, and, as such, project the life cycle of ABACIS through budget year 2008. MMS and OSM each

share roughly half of the operation and maintenance cost.

I.B.1 Agency mission and strategic goals and objectives supported:

As a core Financial system for OSM and MMS, ABACIS is the financial artery through which bureau and departmental goals are accomplished. The bureaus cannot accomplish activities associated with achieving their strategic and mission goals if they cannot pay for the cost of their activities or accurately report on the financial aspects of their achievements. ABACIS maintains accurate and audited financial data in support of bureau and departmental goals.

The ABACIS system supports the Department of Interior's mission. The Department of the Interior mission is to protect and manage the Nation's natural resources. ABACIS supports this mission by being the core financial system for the Office of Surface Mining. The Office of Surface Mining's responsibility in cooperation with the states and Indian tribes, is to protect citizens and the environment during coal mining and reclamation, and to reclaim mines abandoned before 1977. ABACIS is also the core financial system for the Minerals Management Service. The Minerals Management Service has various programs that ensure the effective management of mineral resources located on the nations Outer Continental Shelf (OCS). This includes the environmentally safe exploration, development, and productions of oil, natural gas, and the collections and distribution of revenue for mineral developed on Federal and Indian lands.

ABACIS supports the Secretary's vision. The Secretary's vision for effective Interior program management focuses on conservation, cooperation, consultations and communications.

- ABACIS supports conservations of our Nation's land and its resources by being the core financial system that supports the programs that protects citizens and the environment during mining, assures that the land is restored to beneficial use following mining, and to mitigate the effects of past mining by aggressively pursuing reclamation of abandoned coal mines. ABACIS also is the core financial system that supports the programs that manages the Nation's natural gas, oil and other mineral resources on the OCS.

- ABACIS supports cooperation in terms of providing necessary financial information to States local citizens, Tribal leaders and industry.

- ABACIS supports consultations and communication with others to provide the most current financial information available for use by local citizens, States, Indian tribes and industry.

The Department of the Interior (DOI) mission goals and objectives are: (1) Resource Protection by improving the health of watersheds and landscapes; (2) Resource Use by Managing resource use to enhance public benefit, promote responsible use, and ensure optimal value (3) Serving Communities by protecting lives and property. In addition, a departmental strategic management goal is to ensure financial and managerial accountability.

As a bureau in DOI, the Office of Surface Mining (OSM) also has mission goals: (1) provide a cleaner and safer environment by reclaiming and restoring land and water degraded by past mining, and (2) protect people and the environment during current mining operations and ensure that the land is restored to beneficial use after mining has ceased.

At the same level, the Minerals Management Service (MMS) also has its own mission goals: (1) Ensure safe outer continental shelf (OCS) mineral development; (2) Ensure environmentally sound OCS mineral development; (3) ensure that the public receives fair market value for OCS mineral development; (4) Provide revenue recipients with access to their money within 24 hours of the due date; (5) assure compliance with applicable laws, lease terms, and regulations for all leases in the shortest time possible, but no more than 3 years from the due date.

ABAICS is the core financial system that serves as the foundation of all of the programs of OSM and MMS that support the agencies mission goals. ABACIS contains the necessary information to measure the costs and effectiveness of the programs.

I.B.2 President's Management Agenda strategic goals supported:

ABACIS supports five of the five presidential initiatives:

Improved Financial Performance: ABACIS meets JFMIP Core requirements, complies with the Standard General Ledger, and is in material compliance with Federal Accounting standards. This system provides internal management reports on a daily and monthly basis. The system produced interim quarterly financial statements beginning in FY2003. ABACIS is the system used to allow the Bureaus to obtain an unqualified

opinion on financial statements.

Budget based on Performance: ABACIS supports the cost accounting processes for management purposes. At OSM full budgetary costs are charged to mission accounts and activities. Costs of outputs and programs are integrated with performance in budget requests and execution

E-Gov: Utilizing the GIFTS module of ABACIS, state and tribal grant recipients can receive real-time data on their grant activity.

ABACIS is fully functional with the Treasury's Electronic Certification System (ECS). ECS permits data entry, electronic certification, and transmission of schedules from a personal computer with on-line communication to a host mainframe computer at Treasury.

ABACIS interfaces with several systems to receive electronic financial information; for example, Federal Personnel Payroll System (FPPS) for payroll information, Bank of America for charge card costs, Treasury's Interagency Payment & Collection System and the Department's financial reporting system, Hyperion.

ABACIS interfaces with the Interior Department Electronic Acquisition System (IDEAS) to support electronic procurement.

Competitive Sourcing and Strategic Management of Human Capital: The ABACIS life cycle end date is 09/30/08. By that time, OSM and MMS both expect to have converted to the new departmental accounting system. In preparation for this conversion, OSM is completing a study of positions which will assist the bureau to support the President's initiative on competitive sourcing. OSM will migrate the results of this study into their workforce plan which will, in turn support its initiatives under Strategic Management of Human Capital. In the interim, the majority of the current workforce will remain on-board. This is due to the unavailability of the competencies needed in the private sector

I.B.7 Agencies and organizations affected by this initiative: This business case covers two DOI Bureaus: OSM and MMS. Each bureau operates its own implementation of ABACIS.

I.B.8 Investment cost reduction or efficiency improvement: This project is requesting funds for maintenance and any enhancements that may be required by new regulations. This investment will control costs by avoiding a more expensive alternative and maintain current efficiencies until the new DOI accounting system is implemented.

I.9.a List all other assets that interface with this asset. The following assets interface with ABACIS: Charge Card Transactions (Bank of America) FEEBACS (OSM only) – Fee collection system MAPS (OSM only) – Management information system E-Budget (OSM Only) IDEAS – Procurement tracking system FPPS – Personnel/labor cost system Treasury ECS – Electronic disbursement system Treasury's IPAC (interagency payment & collection system) (MMS only) BIS (Business Information System) (MMS only) FEEBACS, MAPS, and E-budget are all reported separately on the Exhibit 53. They are not combined with ABACIS information. All of the interfaces have been reengineered as the law, needs, and regulations have dictated. They will continue to be reengineered if regulations demand. IDEAS and FPPS are reported separately on Exhibit 53 by the National Business Center of DOI. Treasury ECS and Treasury IPAC are reported separately by the Department of Treasury. The BIS is reported separately by MMS.

I.9.b Have these assets been reengineered as part of this investment (Yes/No)

Yes No

Requested Investment Summary of Spending for Project Stages (\$Millions)

BY 2005 Planning Resources:	.00
BY 2005 Acquisition	.00

Resources:

BY 2005
Maintenance Resources: 1.10

BY 2005 Total,
All Stages Resources: 1.10

Life Cycle Total,
All Stages Resources: 8.64



DOI BUDGET YEAR 2005 IT INVESTMENT OVERVIEW

Investment Identification

Agency: Department of the Interior
Bureau: Office of Surface Mining Reclamation and Enforcement
Location in Budget: Abandoned Mine Reclamation Fund
Account Title: Summary of IT Investments & Financial Management
Account Identification Code: 010-08-14-5015-0
Program Activity: Environmental Compliance & Fee Management
Name of Investment: [Single Source Coal Reporting \(SSCR\)](#)
Unique Investment Identifier: 01008010201081600313168
(IT Only)(see section 53)

Investment Justification

I.A Investment Description: This proposal is to establish an electronic Single Source Coal Reporting form aimed at reducing the burden for industry and expanding the use of electronic services for government compliance. The Single Source Coal Reporting e-Form, test pilot was partially funded by the Small Business Administration's Business Compliance One-Stop Presidential Quicksilver Initiative. The success of the pilot is mentioned at the White House e-government website: (<http://www.whitehouse.gov/omb/egov/gtob/compliance.htm>).

OSM, working with the Interstate Mining Compact Commission (a group sponsored by the Governors of twenty states), the Small Business Administration, the Mine Safety and Health Administration (MSHA), the Internal Revenue Service and the State of Pennsylvania was sponsored by the Business Compliance One-Stop Quicksilver initiative. The simple concept is that the industry submits the required data one-time and the federal and state agencies share that data. The pilot test was successfully completed in January 2003. OSM modified its E-filing website to allow companies to report excise taxes to the IRS, and safety and production data to MSHA and Pennsylvania, while filing quarterly Coal Reclamation Fee Reports with OSM. The industry test companies reported that Single Source Coal Reporting significantly simplified the reporting process. The FY 2005 requested funds will be expended to fully develop and host the Single Source Coal Reporting initiative into a seamless, national system.

This project directly responds to the Presidential mandate of Federal-wide adoption of electronic government (E-gov). The mandate emphasized that Citizens must be given greater access to their government with information, products and services available on-line and that communicating with government, obtaining services and complying with government requirements will be simplified by establishing one-stop shopping points of access.

Minimally, the web-based application will help: · Automate data exchange capabilities; · Provide stakeholders a more user friendly, web-based environment; · Direct customers to existing e-permit systems; · Allow full automation of amendment, billing, refund and payment processes; and full integration of internet-based transactions with back-end accounting and debt collection functions. · Reduce costs in programming and maintenance due to new technology; and · Directly support the goals of several Federal mandates including: the Small Business Paperwork Relief Act, the Government Paperwork Elimination Act; the Government Information Security Reform Act; the Clinger-Cohen Act; the Government Performance and Results Act; the Privacy Act; the Federal Records Act; the Computer Security Act; the Freedom of Information Act; the Disabilities Act; and Section 508 of the Rehabilitation Act.

Benefits · Use of systems written in common languages will eliminate the need for specialized skill in programming allowing future programming and maintenance options to be in-house or outsourced depending on a cost analysis basis. · Built in flexibility of the data will allow use of the fields to create new and useful

reports to meet the needs of management in making decisions and implementing performance-based measurements. · SSCR will reduce the need for the submission of paper requests, responses, and forms, and the filing and retention of those papers; it will allow for up-datable security measures at the appropriate standards; the e-gov strategy will be carefully considered at each step; and the bureaus involved will take this opportunity to integrate the development of performance criteria and define real measures of program performance into the initialization of the project.

I.B.1 Agency mission and strategic goals and objectives supported:

Resource Protection: Improve Health of Watersheds and Landscapes How Support?: Collects money used to improve watersheds and landscapes.

Serving Communities: Protect lives, resources and property How Support?: Collects money used to eliminate safety and health hazards in communities where coal mining occurred. Also, enforces civil penalties designed to protect public health, safety and resources.

Secretary's Management Strategy: Add Value and Ensure Effective Use of Resources SSCR Project: Coordination of the needs of the agencies and recognition of a single definition set for reporting purposes will create a more valid and useful set of data. Information obtained on the combined form will provide a more accurate picture of the tonnage. Inter-agency acceptance of the standard in reporting will lead to a more useful accounting of tonnage and the ability of agencies to cross reference other collected information based on the commonality of the tonnage report. Because the data is collected based on common definitions, individual agency reports utilizing the collected data will have value beyond the writing agency. All participating agencies will enjoy the benefits of shared reporting and be able to reliably use the information other agencies extrapolate knowing that the standard definitions make the information relevant to their needs and regulatory definitions.

Strategy: Use Technology to Work Smarter and Provide Single Points of Access to DOI's Services SSCR Project: Provide a cross-agency point of access for the payment of fees.

Strategy: Hold DOI Managers and Employees Accountable for Results SSR Project: This project will contain simple, measurable, achievable, realistic and time dependent goals. Goals will be integrated into the scores of managers.

I.B.2 President's Management Agenda strategic goals supported:

Goal 1: Expanded Electronic Government Provide industry users the option of electronic filing and paying of fees.

Goal 2: Strategic Management of Human Capital By utilizing the personnel associated with the legacy systems (that would be incorporated into this project) a body of knowledge about the systems and the information contained in the systems is retained.

Goal 3: Improve Financial Performance Cross-Agency reporting: By reducing industry reporting and compliance to a single form it will positively effect the ability of all participants to collect fees and taxes. - Industry will have a simple method of determining what fees/taxes are owed and how to pay them. - Agencies will have a consistent set of reporting entities for tracking, cross verification and contact in the case of delinquent payments. - Planned system activities include the proactive reminder system for payments. Single point of data entry for remaining paper filers will reduce cost to all participants.

Goal 4: Competitive Sourcing The ending of reliance on dated programming skills opens the door to quality competition in sourcing alternatives.

I.B.7 Agencies and organizations affected by this initiative:

The Single Source Coal Reporting project's initial partners include the Department of the Interior's Office of Surface Mining, the Department of Labor's Mine Safety and Health Administration, the Internal Revenue Service (Black Lung Excise Tax), the State of Pennsylvania, the Interstate Mining Compact Commission, and other coal mining states.

I.B.8 Investment cost reduction or efficiency improvement:

This initiative will reduce costs and improve efficiencies by:

1. Reducing the reporting burden on industry by eliminating redundant data reporting to multiple State and Federal agencies. This will generate \$460,000 a year in recurring cost savings to the coal mining industry, from

the reduced reporting burden.

2. Reducing forms processing costs at State and Federal agencies, generating \$170,000 a year in recurring cost savings to State and Federal agencies. And,

3. Eliminating the need for State agencies to develop duplicate electronic reporting systems, saving \$780,000 in one-time development cost.

Over the ten year expected useful life of the SSCR system, this project will deliver \$4.6 million in time savings to industry, \$1.7 million in cost savings to State and Federal agencies, and \$0.78 million in systems development cost avoidance to States, for a total of \$7.08 million in savings/cost avoidance.

I.9.a List all other assets that interface with this asset.

Single Source Coal Reporting used an existing OSM system to launch the pilot and as proof of concept. Ultimate development will require an assessment process to determine the most cost efficient and effective means of providing this service. The redesigned FEEBACS, OSM's fee accounting system is currently under redesign and while not a part of this project, it will play a role in allowing real time submission and its interoperability with the application is essential.

I.9.b Have these assets been reengineered as part of this investment (Yes/No)

No

Requested Investment Summary of Spending for Project Stages (\$Millions)

BY 2005 Planning Resources:	.00
BY 2005 Acquisition Resources:	.51
BY 2005 Maintenance Resources:	.00
BY 2005 Total, All Stages Resources:	.51
Life Cycle Total, All Stages Resources:	2.53

DOI BUDGET YEAR 2005 IT INVESTMENT OVERVIEW

Investment Identification

Agency: Department of the Interior
Bureau: Bureau of Reclamation
Location in Budget: BOR Working Capital Fund
Account Title: BOR Working Capital Fund
Account Identification Code: 010-10-14-4524-0
Program Activity: Denver Office
Name of Investment: [Denver Office General Support System \(DOGSS\)](#)
Unique Investment Identifier: 01010020003202500117056
(IT Only)(see section [53](#))

Investment Justification

I.A Investment Description: Introduction to the Bureau of Reclamation Established in 1902, the Bureau of Reclamation is best known for the dams, power plants, and canals it constructed in the 17 western states. These water projects led to homesteading and promoted the economic development of the West. Reclamation has constructed more than 600 dams and reservoirs including Hoover Dam on the Colorado River and Grand Coulee on the Columbia River.

Today, we are the largest wholesaler of water in the country. We bring water to more than 31 million people, and provide one out of five Western farmers (140,000) with irrigation water for 10 million acres of farmland that produce 60% of the nation's vegetables and 25% of its fruits and nuts.

Reclamation is also the second largest producer of hydroelectric power in the western United States. Our 58 power plants annually provide more than 40 billion kilowatt hours generating nearly a billion dollars in power revenues and produce enough electricity to serve 6 million homes.

Today, Reclamation is a contemporary water management agency with a Strategic Plan outlining numerous programs, initiatives and activities that will help the Western States, Native American Tribes and others meet new water needs and balance the multitude of competing uses of water in the West. Our mission is to assist in meeting the increasing water demands of the West while protecting the environment and the public's investment in these structures. We place great emphasis on fulfilling our water delivery obligations, water conservation, water recycling and reuse, and developing partnerships with our customers, states, and Indian Tribes, and in finding ways to bring together the variety of interests to address the competing needs for our limited water resources.

Investment Summary The DOGSS is an interconnected set of Information Technology (IT) resources within the Denver Office. The GSS includes servers, workstations, and LAN equipment. The DOGSS functions to store, access, maintain, and back up all user generated data and supports a wide range of functional activities, including Planning, Environmental programs, and administrative functions. The system servers and LAN equipment reside in environmentally controlled, secured computer rooms.

The DOGSS is in a steady state phase. Maintenance and ordinary replacement of the various components are treated as operational costs.

Introduction to the Problem or Opportunity The DOGSS supports normal business operations, responding to

changing requirements and improved technology. The system will receive IT security certification and accreditation in FY2004 and at least every three years thereafter. Significant problems or opportunities are not expected.

What this Initiative / Project Investment will Accomplish The investment will continue to support business operations of the Denver Office. The primary goal of this investment is to maintain the current infrastructure in an efficient manner and to take advantage of technology advances as appropriate.

Measurement, Review and Approval Process Tracking and reporting for this investment are handled within Reclamation Capital Planning and Investment Control process. The system is in a steady-state phase and no major acquisitions or contracts are expected.

I.B.1 Agency mission and strategic goals and objectives supported:

Resource Use: Manage Resources to Enhance Public Benefit, Promote Responsible Use, and Ensure Optimal Value Support Provided: Provide stable and reliable general support system technology infrastructure support systems services that meets or exceeds established performance goals and metrics

Resource Use: Deliver Water and Power in an Environmentally Responsible and Cost Efficient Manner Support Provided: Provide stable and reliable general support system technology infrastructure support systems services that meets or exceeds established performance goals and metrics

I.B.2 President's Management Agenda strategic goals supported:

PMA Goal: Strategic Management of Human Capital Support Provided: This system investment indirectly supports all aspects of the PMA by providing effective day-to-day basic technology infrastructure and automation support.

PMA Goal: Competitive Sourcing Support Provided: This system investment indirectly supports all aspects of the PMA by providing effective day-to-day basic technology infrastructure and automation support.

PMA Goal: Improved Financial Performance. Support Provided: This system investment indirectly supports all aspects of the PMA by providing effective day-to-day basic technology infrastructure and automation support.

PMA Goal: Expanded Electronic Government

PMA Goal: Government to Citizen (G2C), Government to Business (G2B), Government to Government (G2G) Support Provided: This system investment indirectly supports all aspects of the PMA by providing effective day-to-day basic technology infrastructure and automation support.

PMA Goal: Internal Efficiency and Effectiveness (IEE) Support Provided: This investment directly supports this PMA goal by providing effective and reliable day-to-day automation support of basic operational work activities to be accomplished quickly through efficient leverage of human resources. Also mission and business information can be communicated analyzed and managed more efficiently than would otherwise be possible.

PMA Goal: Budget and Performance Integration Support Provided: This system investment directly supports budget and performance integration by providing effective day-to-day basic technology infrastructure and automation support that allows individuals to perform Reclamation' business mission and work functions in an efficient and effective manner.

I.B.7 Agencies and organizations affected by this initiative:

No, This investment is not a multi-agency initiative.

I.B.8 Investment cost reduction or efficiency improvement:

By providing effective and reliable day-to-day automation support, this investment allows basic operational work activities to be accomplished quickly, through efficient leverage of, an increasingly scarcer, human resource. Also mission and business information can be communicated analyzed and managed more efficiently than would otherwise be possible without it.

I.9.a List all other assets

Recnet- This GSS utilizes and interfaces with RecNet (Reclamation's wide-area network). RecNet is, however, treated as a separate investment, and as such, wide-area network performance improvement opportunities

that interface with this asset.

identified for this GSS are forwarded to the responsible Recnet manager for consideration in conjunction with all other Reclamation wide-area network needs. In fact, RecNet was recently re-engineered to address perimeter security issues and web server consolidation for all general support systems. Thus, overall business objectives relating to efficient and effective financial, architectural, project activity, etc. have been managed to accomplish better leverage of both the current and future wide area network investment, while also addressing specific needs for this general support system. Business Functional Applications- The responsible business area and the related functional needs determine re-engineering of business functional applications. As those needs impact the regional GSS they will be consolidated and analyzed by the responsible GSS manager to determine and propose (if appropriate) a separate GSS development /major enhancement business case.

I.9.b Have these assets been reengineered as part of this investment (Yes/No)

No

Requested Investment Summary of Spending for Project Stages (\$Millions)

BY 2005 Planning Resources:	.00
BY 2005 Acquisition Resources:	.00
BY 2005 Maintenance Resources:	6.70
BY 2005 Total, All Stages Resources:	6.70
Life Cycle Total, All Stages Resources:	48.72

DOI BUDGET YEAR 2005 IT INVESTMENT OVERVIEW

Investment Identification

Agency: Department of the Interior
Bureau: Bureau of Reclamation
Location in Budget: BOR Working Capital Fund
Account Title: BOR Working Capital Fund
Account Identification Code: 010-10-14-4524-0
Program Activity: Pacific Northwest Region
Name of Investment: [Pacific Northwest General Support System \(PNGSS\)](#)
Unique Investment Identifier: (IT Only)(see section 53) 01010020003202600117056

Investment Justification

I.A Investment Description: Introduction to the Bureau of Reclamation Established in 1902, the Bureau of Reclamation is best known for the dams, power plants, and canals it constructed in the 17 western states. These water projects led to homesteading and promoted the economic development of the West. Reclamation has constructed more than 600 dams and reservoirs including Hoover Dam on the Colorado River and Grand Coulee on the Columbia River.

Today, we are the largest wholesaler of water in the country. We bring water to more than 31 million people, and provide one out of five Western farmers (140,000) with irrigation water for 10 million acres of farmland that produce 60% of the nation's vegetables and 25% of its fruits and nuts.

Reclamation is also the second largest producer of hydroelectric power in the western United States. Our 58 power plants annually provide more than 40 billion kilowatt hours generating nearly a billion dollars in power revenues and produce enough electricity to serve 6 million homes.

Today, Reclamation is a contemporary water management agency with a Strategic Plan outlining numerous programs, initiatives and activities that will help the Western States, Native American Tribes and others meet new water needs and balance the multitude of competing uses of water in the West. Our mission is to assist in meeting the increasing water demands of the West while protecting the environment and the public's investment in these structures. We place great emphasis on fulfilling our water delivery obligations, water conservation, water recycling and reuse, and developing partnerships with our customers, states, and Indian Tribes, and in finding ways to bring together the variety of interests to address the competing needs for our limited water resources.

INVESTMENT SUMMARY

The PNGSS is an interconnected set of Information Technology (IT) resources within the Pacific Northwest Region. The PNGSS includes servers, workstations, software, staff, and LAN equipment. The PNGSS functions to store, access, maintain, and back up all user generated data and supports a wide range of functional activities, including Planning, Environmental programs, and administrative functions. The system servers and LAN equipment reside in environmentally controlled, secured computer rooms.

The PNGSS is in a steady state phase. Maintenance and ordinary replacement of the various components are treated as operational costs.

INTRODUCTION TO THE PROBLEM OR OPPORTUNITY

The PNGSS supports normal business operations, responding to changing requirements and improved technology. The system will receive IT security certification and accreditation in FY2004 and at least every three years thereafter. Significant problems or opportunities are not expected.

WHAT THIS INITIATIVE / INVESTMENT WILL ACCOMPLISH

The investment will continue to support business operations of the Pacific Northwest Region. The primary goal of this investment is to maintain the current infrastructure in an efficient manner and to take advantage of technology advances as appropriate.

MEASUREMENT, REVIEW AND APPROVAL PROCESS

Tracking and reporting for this investment are handled within Reclamation Capital Planning and Investment Control process. The system is in a steady-state phase and no major acquisitions or contracts are expected.

I.B.1 Agency mission and strategic goals and objectives supported:

DOI Strategic Goal / Objective (Per FY 2003-2008 Draft Strategic Plan) Resource Use - Manage Resources to Enhance Public Benefit, Promote Responsible Use, and Ensure Optimal Value

Support Provided by this Investment: Provide stable and reliable general support system technology infrastructure support systems services that meets or exceeds established performance goals and metrics.

DOI Strategic Goal / Objective (Per FY 2003-2008 Draft Strategic Plan) Resource Use - Deliver Water and Power in an Environmentally Responsible and Cost Efficient Manner

Support Provided by this Investment: Provide stable and reliable general support system technology infrastructure support systems services that meets or exceeds established performance goals and metrics.

I.B.2 President's Management Agenda strategic goals supported:

PMA Strategic Goal: Strategic Management of Human Capital

Support Provided by this Investment: This system investment indirectly supports all aspects of the PMA by providing effective day-to-day basic technology infrastructure and automation support.

PMA Strategic Goal: Competitive Sourcing

Support Provided by this Investment: This system investment indirectly supports all aspects of the PMA by providing effective day-to-day basic technology infrastructure and automation support.

PMA Strategic Goal: Improved Financial Performance.

Support Provided by this Investment: This system investment indirectly supports all aspects of the PMA by providing effective day-to-day basic technology infrastructure and automation support.

PMA Strategic Goal: Expanded Electronic Government. Specifically 1) Government to Citizen, 2) Government to Business, and 3) Government to Government

Support Provided by this Investment: This system investment indirectly supports all aspects of the PMA by providing effective day-to-day basic technology infrastructure and automation support.

PMA Strategic Goal: Expanded Electronic Government. Specifically Internal Efficiency and Effectiveness.

Support Provided by this Investment: This investment directly supports this PMA goal by providing effective and reliable day-to-day automation support of basic operational work activities to be accomplished quickly through efficient leverage of human resources. Also mission and business information can be communicated, analyzed and managed more efficiently than would otherwise be possible.

PMA Strategic Goal: Budget and Performance Integration

Support Provided by this Investment: This system investment directly supports budget and performance integration by providing effective day-to-day basic technology infrastructure and automation support that allows individuals to perform Reclamation' business mission and work functions in an efficient and effective manner.

I.B.7 Agencies and organizations affected by this initiative: No, This investment is not a multi-agency initiative.

I.B.8 Investment cost reduction or efficiency improvement: By providing effective and reliable day-to-day automation support, this investment allows basic operational work activities to be accomplished quickly, through efficient leverage of, an increasingly scarcer, human resource. Also mission and business information can be communicated analyzed and managed more efficiently than would otherwise be possible without it.

I.9.a List all other assets that interface with this asset. ASSET NAME: RecNet RE-ENGINEERED: No DESCRIPTION: This GSS utilizes and interfaces with RecNet (Reclamation's wide-area network). RecNet is, however, treated as a separate investment, as such, wide-area network performance improvement opportunities identified for this GSS are forwarded to the responsible Recnet manager for consideration in conjunction with all other Reclamation wide-area network needs. In fact, RecNet was recently re-engineered to address perimeter security issues for all general support systems and thus overall business objectives relating to efficient and effective financial, architectural, project activity, etc. have been managed to accomplish better leverage of both the current and future wide area network investment, while also addressing specific needs for this general support system. ASSET NAME: Business Functional Applications RE-ENGINEERED: No DESCRIPTION: The responsible business area and the related functional needs determine re-engineering of business functional applications. As those needs impact the regional GSS they will be consolidated and analyzed by the responsible GSS manager to determine and propose (if appropriate) a separate GSS development /major enhancement business case.

I.9.b Have these assets been reengineered as part of this investment (Yes/No) No

Requested Investment Summary of Spending for Project Stages (\$Millions)

BY 2005 Planning Resources:	
BY 2005 Acquisition Resources:	
BY 2005 Maintenance Resources:	3.31
BY 2005 Total, All Stages Resources:	3.31
Life Cycle Total, All Stages Resources:	24.42

DOI BUDGET YEAR 2005 IT INVESTMENT OVERVIEW

Investment Identification

Agency: Department of the Interior
Bureau: Bureau of Reclamation
Location in Budget: BOR Working Capital Fund
Account Title: BOR Working Capital Fund
Account Identification Code: 010-10-14-4524-0
Program Activity: Mid Pacific Regional Office
Name of Investment: [Mid Pacific General Support System](#)
Unique Investment Identifier: 01010020003202700117056
(IT Only)(see section 53)

Investment Justification

I.A Investment Description: Introduction to the Bureau of Reclamation Established in 1902, the Bureau of Reclamation is best known for the dams, power plants, and canals it constructed in the 17 western states. These water projects led to homesteading and promoted the economic development of the West. Reclamation has constructed more than 600 dams and reservoirs including Hoover Dam on the Colorado River and Grand Coulee on the Columbia River. Today, we are the largest wholesaler of water in the country. We bring water to more than 31 million people, and provide one out of five Western farmers (140,000) with irrigation water for 10 million acres of farmland that produce 60% of the nation's vegetables and 25% of its fruits and nuts. Reclamation is also the second largest producer of hydroelectric power in the western United States. Our 58 power plants annually provide more than 40 billion kilowatt hours generating nearly a billion dollars in power revenues and produce enough electricity to serve 6 million homes.

Today, Reclamation is a contemporary water management agency with a Strategic Plan outlining numerous programs, initiatives and activities that will help the Western States, Native American Tribes and others meet new water needs and balance the multitude of competing uses of water in the West. Our mission is to assist in meeting the increasing water demands of the West while protecting the environment and the public's investment in these structures. We place great emphasis on fulfilling our water delivery obligations, water conservation, water recycling and reuse, and developing partnerships with our customers, states, and Indian Tribes, and in finding ways to bring together the variety of interests to address the competing needs for our limited water resources.

Investment Summary The MPGSS is an interconnected set of Information Technology (IT) resources within the Mid Pacific Region. The GSS includes servers, workstations, and LAN equipment. The MPGSS functions to store, access, maintain, and back up all user generated data and supports a wide range of functional activities: Planning, Environmental programs, and administrative functions. The system servers and LAN equipment reside in environmentally controlled, secured computer rooms. The MPGSS is in a mixed life cycle phase. Maintenance and ordinary replacement of the various components are treated as operational costs. Routine technology refreshment is planned for BY05.

Introduction to the Problem or Opportunity The MPGSS supports normal business operations, responding to changing requirements and improved technology. The system will receive IT security certification and accreditation in FY2004 and at least every three years thereafter. Significant problems or opportunities are not expected.

What this Initiative / Project Investment will Accomplish The investment will continue to support business operations of the Mid Pacific Region. The primary goal of this investment is to maintain the current infrastructure

in an efficient manner and to take advantage of technology advances as appropriate.

Measurement, Review and Approval Process Tracking and reporting for this investment are handled within Reclamation Capital Planning and Investment Control process. The system is in a mixed life cycle with routine technology refreshment acquisitions planned for BY05.

I.B.1 Agency mission and strategic goals and objectives supported:

MPGSS supports the following DOI mission goals and objectives:

DOI Strategic Goal: Manage Resources to Enhance Public Benefit, Promote Responsible Use, and Ensure Optimal Value. MPGSS provides stable and reliable general support system technology infrastructure support system services that meets or exceeds established performance goals and metrics.

DOI Strategic Goal: Deliver Water and Power in an Environmentally Responsible and Cost Efficient Manner. MPGSS provides stable and reliable general support system technology infrastructure support systems service that meets or exceeds established performance goals and metrics.

I.B.2 President's Management Agenda strategic goals supported:

MPGSS supports the President's Management Agenda in the following ways:

Strategic Management of Human Capital- Competitive Sourcing- Improved Financial Performance - Expanded Electronic Government- This system investment indirectly supports all these aspects of the PMA by providing effective day-to-day basic technology infrastructure and automation support.

Internal Efficiency and Effectiveness (IEE)- This investment directly supports this PMA goal by providing effective and reliable day-to-day automation support of basic operational work activities to be accomplished quickly through efficient leverage of human resources. Also mission and business information can be communicated analyzed and managed more efficiently than would otherwise be possible.

Budget and Performance Integration This system investment directly supports budget and performance integration by providing effective day-to-day basic technology infrastructure and automation support that allows individuals to perform Reclamation' business mission and work functions in an efficient and effective manner.

I.B.7 Agencies and organizations affected by this initiative:

This investment is not a multi-agency initiative.

I.B.8 Investment cost reduction or efficiency improvement:

providing effective and reliable day-to-day automation support, this investment allows basic operational work activities to be accomplished quickly, through efficient leverage of, an increasingly scarcer, human resource. Also mission and business information can be communicated analyzed and managed more efficiently than would otherwise be possible without it.

I.9.a List all other assets that interface with this asset.

This GSS utilizes and interfaces with RecNet (Reclamation's wide-area network) However, RECNet has not been re-engineered as it is treated as a separate investment. As such, wide-area network process / performance improvement opportunities and/or requirements identified for this GSS are forwarded to the responsible Recnet manager for consideration in conjunction with all other Reclamation wide-area network needs. In fact, RecNet was recently re-engineered to address perimeter security issues and web server consolidation for all general support systems. Thus, overall business objectives relating to efficient and effective financial, architectural, project activity, etc. have been managed to accomplish better leverage of both the current and future wide area network investment, while also addressing specific needs for this general support system. Business Functional Applications that interface to MPGSS have not been re-engineered as the responsible business area and the related functional needs determine re-engineering of business functional applications. As those needs impact the regional GSS they will be consolidated and analyzed by the responsible GSS manager to determine and propose (if appropriate) a separate GSS development /major enhancement business case.

I.9.b Have these assets been reengineered as part of this investment (Yes/No)

No

Requested Investment Summary of Spending for Project Stages (\$Millions)

BY 2005 Planning Resources:	1.17
BY 2005 Acquisition Resources:	.00
BY 2005 Maintenance Resources:	4.68
BY 2005 Total, All Stages Resources:	5.85
Life Cycle Total, All Stages Resources:	43.84

DOI BUDGET YEAR 2005 IT INVESTMENT OVERVIEW

Investment Identification

Agency: Department of the Interior
Bureau: Bureau of Reclamation
Location in Budget: BOR Working Capital Fund
Account Title: BOR Working Capital Fund
Account Identification Code: 010-10-14-4524-0
Program Activity: Great Plains Region
Name of Investment: [Great Plains General Support System \(GPGSS\)](#)
Unique Investment Identifier: 01010020003202800117056
(IT Only)(see section [53](#))

Investment Justification

I.A Investment Description: Introduction to the Bureau of Reclamation Established in 1902, the Bureau of Reclamation is best known for the dams, power plants, and canals it constructed in the 17 western states. These water projects led to homesteading and promoted the economic development of the West. Reclamation has constructed more than 600 dams and reservoirs including Hoover Dam on the Colorado River and Grand Coulee on the Columbia River. Today, we are the largest wholesaler of water in the country. We bring water to more than 31 million people, and provide one out of five Western farmers (140,000) with irrigation water for 10 million acres of farmland that produce 60% of the nation's vegetables and 25% of its fruits and nuts. Reclamation is also the second largest producer of hydroelectric power in the western United States. Our 58 power plants annually provide more than 40 billion kilowatt hours generating nearly a billion dollars in power revenues and produce enough electricity to serve 6 million homes.

Today, Reclamation is a contemporary water management agency with a Strategic Plan outlining numerous programs, initiatives and activities that will help the Western States, Native American Tribes and others meet new water needs and balance the multitude of competing uses of water in the West. Our mission is to assist in meeting the increasing water demands of the West while protecting the environment and the public's investment in these structures. We place great emphasis on fulfilling our water delivery obligations, water conservation, water recycling and reuse, and developing partnerships with our customers, states, and Indian Tribes, and in finding ways to bring together the variety of interests to address the competing needs for our limited water resources.

Investment Summary The GPGSS is an interconnected set of Information Technology (IT) resources within the Great Plains Region. The GSS includes servers, workstations, software, staff, and LAN equipment. The GPGSS functions to store, access, maintain, and back up all user generated data and supports a wide range of functional activities, including Planning, Environmental programs and administrative functions. The system servers and LAN equipment reside in environmentally controlled, secured computer rooms. The GPGSS is in a steady state phase. Maintenance and ordinary replacement of the various components are treated as operational costs.

Introduction to the Problem or Opportunity The GPGSS will support normal business operations, responding to changing requirements and improved technology. The system will receive IT security certification and accreditation in FY2004 and at least every three years thereafter. Significant problems or opportunities are not expected.

What this Initiative / Project Investment will Accomplish The investment will continue to support business operations of the Great Plains Region. The primary goal of this investment is to maintain the current

infrastructure in an efficient manner and to take advantage of technology advances as appropriate.

Measurement, Review and Approval Process Tracking and reporting for this investment are handled within Reclamation Capital Planning and Investment Control process. The system is in a steady-state phase and no major acquisitions or contracts are expected

I.B.1 Agency mission and strategic goals and objectives supported:

GPGSS supports the following DOI mission goals and objectives:

DOI Strategic Goal: Manage Resources to Enhance Public Benefit, Promote Responsible Use, and Ensure Optimal Value. GPGSS provides stable and reliable general support system technology infrastructure support system services that meets or exceeds established performance goals and metrics.

DOI Strategic Goal: Deliver Water and Power in an Environmentally Responsible and Cost Efficient Manner. GPGSS provides stable and reliable general support system technology infrastructure support systems service that meets or exceeds established performance goals and metrics.

I.B.2 President's Management Agenda strategic goals supported:

GPGSS supports the President's Management Agenda in the following ways:

Strategic Management of Human Capital- This system investment indirectly supports all aspects of the PMA by providing effective day-to-day basic technology infrastructure and automation support. Competitive Sourcing- This system investment indirectly supports all aspects of the PMA by providing effective day-to-day basic technology infrastructure and automation support. Improved Financial Performance - This system investment indirectly supports all aspects of the PMA by providing effective day-to-day basic technology infrastructure and automation support. Expanded Electronic Government- This system investment indirectly supports all aspects of the PMA by providing effective day-to-day basic technology infrastructure and automation support. Internal Efficiency and Effectiveness (IEE)- This investment directly supports this PMA goal by providing effective and reliable day-to-day automation support of basic operational work activities to be accomplished quickly through efficient leverage of human resources. Also mission and business information can be communicated analyzed and managed more efficiently than would otherwise be possible. Budget and Performance Integration This system investment directly supports budget and performance integration by providing effective day-to-day basic technology infrastructure and automation support that allows individuals to perform Reclamation' business mission and work functions in an efficient and effective manner.

I.B.7 Agencies and organizations affected by this initiative:

This is not a multi-agency initiative.

I.B.8 Investment cost reduction or efficiency improvement:

By providing effective and reliable day-to-day automation support, this investment allows basic operational work activities to be accomplished quickly, through efficient leverage of, an increasingly scarcer, human resource. Also mission and business information can be communicated analyzed and managed more efficiently than would otherwise be possible without it.

I.9.a List all other assets that interface with this asset.

RECNet has not been re-engineered as this GSS utilizes and interfaces with RecNet (Reclamation's wide-area network), however, RECNet is treated as a separate investment. As such, wide-area network process / performance improvement opportunities and/or requirements identified for this GSS are forwarded to the responsible Recnet manager for consideration in conjunction with all other Reclamation wide-area network needs. In fact, RecNet was recently re-engineered to address perimeter security issues and web server consolidation for all general support systems. Thus, overall business objectives relating to efficient and effective financial, architectural, project activity, etc. have been managed to accomplish better leverage of both the current and future wide area network investment, while also addressing specific needs for this general support system. Business Functional Applications have not been re-engineered as the responsible business area and the related functional needs determine re-engineering of business functional applications. As those needs impact the regional GSS they will be consolidated and analyzed by the responsible GSS manager to determine and propose (if appropriate) a separate GSS development /major enhancement business case.

I.9.b Have these assets been reengineered as part of this investment (Yes/No)

No

Requested Investment Summary of Spending for Project Stages (\$Millions)

BY 2005 Planning Resources:	.00
BY 2005 Acquisition Resources:	.00
BY 2005 Maintenance Resources:	3.99
BY 2005 Total, All Stages Resources:	3.99
Life Cycle Total, All Stages Resources:	32.48

DOI BUDGET YEAR 2005 IT INVESTMENT OVERVIEW

Investment Identification

Agency: Department of the Interior
Bureau: Bureau of Reclamation
Location in Budget: BOR Working Capital Fund
Account Title: BOR Working Capital Fund
Account Identification Code: 010-10-14-4524-0
Program Activity: Lower Colorado Regional Office
Name of Investment: [Lower Colorado General Support System \(LCGSS\)](#)
Unique Investment Identifier: 01010020003202900117056
(IT Only)(see section 53)

Investment Justification

I.A Investment Description: Established in 1902, the Bureau of Reclamation is best known for the dams, power plants, and canals it constructed in the 17 western states. These water projects led to homesteading and promoted the economic development of the West. Reclamation has constructed more than 600 dams and reservoirs including Hoover Dam on the Colorado River and Grand Coulee on the Columbia River. Today, we are the largest wholesaler of water in the country. We bring water to more than 31 million people, and provide one out of five Western farmers (140,000) with irrigation water for 10 million acres of farmland that produce 60% of the nation's vegetables and 25% of its fruits and nuts. Reclamation is also the second largest producer of hydroelectric power in the western United States. Our 58 power plants annually provide more than 40 billion kilowatt hours generating nearly a billion dollars in power revenues and produce enough electricity to serve 6 million homes.

Today, Reclamation is a contemporary water management agency with a Strategic Plan outlining numerous programs, initiatives and activities that will help the Western States, Native American Tribes and others meet new water needs and balance the multitude of competing uses of water in the West. Our mission is to assist in meeting the increasing water demands of the West while protecting the environment and the public's investment in these structures. We place great emphasis on fulfilling our water delivery obligations, water conservation, water recycling and reuse, and developing partnerships with our customers, states, and Indian Tribes, and in finding ways to bring together the variety of interests to address the competing needs for our limited water resources.

Investment Summary The LCGSS is an interconnected set of Information Technology (IT) resources within the Lower Colorado Region. The GSS includes servers, workstations, software, staff, and LAN equipment. The LCGSS functions to store, access, maintain, and back up all user generated data and supports a wide range of functional activities including: planning, environmental programs and administrative functions. The system servers and LAN equipment reside in environmentally controlled, secured computer rooms.

The LCGSS is in a Mixed Life Cycle phase. Maintenance and ordinary replacement of the various components are treated as operational costs. Routine technology refreshment is planned for BY05.

Introduction to the Problem or Opportunity The LCGSS will support normal business operations, responding to changing requirements and improved technology. The system will receive IT security certification and accreditation in FY2004 and at least every three years thereafter. Significant problems or opportunities are not expected.

What this Initiative / Project Investment will Accomplish The investment will continue to support business operations of the Lower Colorado Region. The primary goal of this investment is to maintain the current

infrastructure in an efficient manner and to take advantage of technology advances as appropriate.

Measurement, Review and Approval Process Tracking and reporting for this investment are handled within Reclamation Capital Planning and Investment Control process. The system is in a mixed life cycle with routine technology refreshment acquisitions planned for BY05.

I.B.1 Agency mission and strategic goals and objectives supported:

LCGSS supports the following DOI mission goals and objectives:

DOI Strategic Goal: Manage Resources to Enhance Public Benefit, Promote Responsible Use, and Ensure Optimal Value. LCGSS provides stable and reliable general support system technology infrastructure support system services that meets or exceeds established performance goals and metrics.

DOI Strategic Goal: Deliver Water and Power in an Environmentally Responsible and Cost Efficient Manner. LCGSS provides stable and reliable general support system technology infrastructure support systems service that meets or exceeds established performance goals and metrics.

I.B.2 President's Management Agenda strategic goals supported:

PMA Goal: Strategic Management of Human Capital Support Provided by Investment: This system investment indirectly supports all aspects of the PMA by providing effective day-to-day basic technology infrastructure and automation support.

PMA Goal: Competitive Sourcing Support Provided by this Investment: This system investment indirectly supports all aspects of the PMA by providing effective day-to-day basic technology infrastructure and automation support.

PMA Goal: Improved Financial Performance Investment Support: This system investment indirectly supports all aspects of the PMA by providing effective day-to-day basic technology infrastructure and automation support.
PMA Goal: Government to Citizen, Government to Business, Government to Government Investment Support: This system investment indirectly supports all aspects of the PMA by providing effective day-to-day basic technology infrastructure and automation support.

PMA Goal: Internal Efficiency and Effectiveness Support Provided by this Investment: This system investment indirectly supports all aspects of the PMA by providing effective day-to-day automation support of basic operational work activities to be accomplished quickly through efficient leverage of human resources. Also mission and business information can be communicated analyzed and managed more efficiently than would otherwise be possible.

PMA Goal: Budget and Performance Integration Investment Support: This system investment directly supports budget and performance integration by providing effective day-to-day basic technology infrastructure and automation support that allows individuals to perform Reclamation's business mission and work functions in an efficient and effective manner.

I.B.7 Agencies and organizations affected by this initiative:

No, This investment is not a multi-agency initiative.

I.B.8 Investment cost reduction or efficiency improvement:

By providing effective and reliable day-to-day automation support, this investment allows basic operational work activities to be accomplished quickly, through efficient leverage of, an increasingly scarcer, human resource. Also mission and business information can be communicated analyzed and managed more efficiently than would otherwise be possible without it.

I.9.a List all other assets that interface with this asset.

Recnet Reengineered? No This GSS utilizes and interfaces with RecNet (Reclamation's wide-area network). RecNet is, however, treated as a separate investment, as such, wide-area network process improvement opportunities identified for this GSS are forwarded to the responsible Recnet manager for consideration in conjunction with all other Reclamation wide-area network needs. In fact, RecNet was recently re-engineered to address perimeter security issues and web server consolidation for all general support systems. Thus, overall business objectives relating to efficient and effective financial, architectural, project activity, etc. have been managed to accomplish better leverage of both the current and future wide area network investment, while also addressing specific needs for this general support system. Business Functional Applications Reengineered? No The responsible business area and the related functional needs determine re-engineering of business functional

applications. As those needs impact the regional GSS they will be consolidated and analyzed by the responsible GSS manager to determine and propose (if appropriate) a separate GSS development /major enhancement business case.

I.9.b Have these assets been reengineered as part of this investment (Yes/No) No

Requested Investment Summary of Spending for Project Stages (\$Millions)

BY 2005 Planning Resources:	.01
BY 2005 Acquisition Resources:	1.33
BY 2005 Maintenance Resources:	4.01
BY 2005 Total, All Stages Resources:	5.35
Life Cycle Total, All Stages Resources:	39.33

DOI BUDGET YEAR 2005 IT INVESTMENT OVERVIEW

Investment Identification

Agency: Department of the Interior
Bureau: Bureau of Reclamation
Location in Budget: BOR Working Capital Fund
Account Title: BOR Working Capital Fund
Account Identification Code: 010-10-14-4524-0
Program Activity: Upper Colorado Regional Office
Name of Investment: [Upper Colorado General Support System \(UCGSS\)](#)
Unique Investment Identifier: 01010020003203000117056
(IT Only)(see section 53)

Investment Justification

I.A Investment Description: Introduction to the Bureau of Reclamation Established in 1902, the Bureau of Reclamation is best known for the dams, power plants, and canals it constructed in the 17 western states. These water projects led to homesteading and promoted the economic development of the West. Reclamation has constructed more than 600 dams including Hoover Dam on the Colorado River and Grand Coulee on the Columbia River.

Today, we are the largest wholesaler of water in the country. We bring water to more than 31 million people, and provide one out of five Western farmers (140,000) with irrigation water for 10 million acres of farmland that produce 60% of the nation's vegetables and 25% of its fruits and nuts. Reclamation is also the second largest producer of hydroelectric power in the western United States. Our 58 power plants annually provide more than 40 billion kilowatt hours generating nearly a billion dollars in power revenues and produce enough electricity to serve 6 million homes.

Today, Reclamation is a contemporary water management agency with a Strategic Plan outlining numerous programs, initiatives and activities that will help the Western States, Native American Tribes and others meet new water needs and balance the multitude of competing uses of water in the West. Our mission is to assist in meeting the increasing water demands of the West while protecting environment and the public's investment in these structures. We place great emphasis on fulfilling water delivery obligations, water conservation, water recycling and reuse, and developing partnerships with our customers, states, and Indian Tribes, and in finding ways to bring together the variety of interests to address the competing needs for our limited water resources.

Investment Summary

The UCGSS is an interconnected set of Information Technology (IT) resources within the Upper Colorado Region. The GSS includes servers, workstations, software, staff, and LAN equipment. The UCGSS functions to store, access, maintain, and back up all user generated data and supports a wide range of functional activities including: Planning, Environmental programs and administrative functions. The system servers and LAN equipment reside in environmentally controlled, secured computer rooms.

The UCGSS is in a steady state phase. Maintenance and ordinary replacement of the various components are treated as operational costs.

Introduction to the Problem or Opportunity

The UCGSS will continue to support normal business operations, responding to changing requirements and improved technology. The system will receive IT security certification and accreditation in FY2004 and at least every three years thereafter. Significant problems or opportunities are not expected.

What this Initiative/Project Investment will Accomplish

The investment will continue to support business operations of the Upper Colorado Region. The primary goal of this investment is to maintain the current infrastructure in an efficient manner and to take advantage of technology advances as appropriate.

Measurement, Review and Approval Process

Tracking and reporting for this investment are handled within Reclamation Capital Planning and Investment Control process. The system is in a steady-state phase and no major acquisitions or contracts are expected.

I.B.1 Agency mission and strategic goals and objectives supported:

DOI Strategic Goal: Manage Resources to Enhance Public Benefit, Promote Responsible Use, and Ensure Optimal Value. Support Provided by Investment: Provide stable and reliable general support system technology infrastructure support systems services that meets or exceeds established performance goals and metrics.

DOI Strategic Goal: Deliver Water and Power in an Environmentally Responsible and Cost Efficient Manner. Support Provided by Investment: Provide stable and reliable general support system technology infrastructure support systems services that meets or exceeds established performance goals and metrics.

I.B.2 President's Management Agenda strategic goals supported:

PMA Goal: Strategic Management of Human Capital Support Provided: This system investment indirectly supports all aspects of the PMA by providing effective day-to-day basic technology infrastructure and automation support.

PMA Goal: Competitive Sourcing Support Provided: This system investment indirectly supports all aspects of the PMA by providing effective day-to-day basic technology infrastructure and automation support.

PMA Goal: Improved Financial Performance. Support Provided: This system investment indirectly supports all aspects of the PMA by providing effective day-to-day basic technology infrastructure and automation support.

PMA Goal: Expanded Electronic Government; Government to Citizen (G2C), Government to Business (B2B), Government to Government (G2G) Support Provided: This system investment indirectly supports all aspects of the PMA by providing effective day-to-day basic technology infrastructure and automation support.

PMA Goal: Internal Efficiency and Effectiveness (IEE) Support Provided: This investment directly supports this PMA goal by providing effective and reliable day-to-day automation support of basic operational work activities to be accomplished quickly through efficient leverage of human resources. Also mission and business information can be communicated analyzed and managed more efficiently than would otherwise be possible.

PMA Goal: Budget and Performance Integration Support Provided: This system investment directly supports budget and performance integration by providing effective day-to-day basic technology infrastructure and automation support that allows individuals to perform Reclamations' business mission and work functions in an efficient and effective manner.

I.B.7 Agencies and organizations affected by this initiative:

No. This investment is not a multi-agency initiative.

I.B.8 Investment cost reduction or efficiency improvement:

By providing effective and reliable day-to-day automation support, this investment allows basic operational work activities to be accomplished quickly, through efficient leverage of, an increasingly scarcer, human resource. Also mission and business information can be co-managed more efficiently than would otherwise be possible without it.

I.9.a List all other assets that interface with this asset. Asset Name: Recnet Reengineered: No Description: This GSS utilizes and interfaces with RecNet (Reclamation's wide-area network). RecNet is, however treated as a separate investment, such as, wide-area network process improvement opportunities identified for this GSS are forwarded to the responsible Recnet manager for consideration in conjunction with all other Reclamation wide-area network needs. In fact, RecNet was recently re-engineered to address perimeter security issues and web server consolidation for all general support systems. Thus, overall business objectives relating to efficient and effective financial, architectural, project activity, etc. have been managed to accomplish better leverage of both the current and future wide area network investment, while also addressing specific needs for this general support system. Asset Name: Business Functional Applications Reengineered: No Description: The responsible business area and the related functional needs determine re-engineering of business functional applications. As those needs impact the regional GSS they will be consolidated and analyzed by the responsible GSS manager to determine and propose (if appropriate) a separate GSS development/major enhancement business case.

I.9.b Have these assets been reengineered as part of this investment (Yes/No) No

Requested Investment Summary of Spending for Project Stages (\$Millions)

BY 2005 Planning Resources:	.00
BY 2005 Acquisition Resources:	.00
BY 2005 Maintenance Resources:	5.54
BY 2005 Total, All Stages Resources:	5.54
Life Cycle Total, All Stages Resources:	43.94

DOI BUDGET YEAR 2005 IT INVESTMENT OVERVIEW

Investment Identification

Agency: Department of the Interior
Bureau: Bureau of Reclamation
Location in Budget: Bureau Working Capital Fund
Account Title: Bureau Working Capital Fund
Account Identification Code: 010-10-14-4524-0
Program Activity: Financial Management
Name of Investment: [Program and Budget System \(PABS\)](#)
Unique Investment Identifier: 01010010101100900304101
(IT Only)(see section [53](#))

Investment Justification

I.A Investment Description: INTRODUCTION TO THE BUREAU OF RECLAMATION

Established in 1902, the Bureau of Reclamation is best known for the dams, power plants, and canals it constructed in the 17 western states. These water projects led to homesteading and promoted the economic development of the West. Reclamation has constructed more than 600 dams and reservoirs including Hoover Dam on the Colorado River and Grand Coulee on the Columbia River. Today, we are the largest wholesaler of water in the country. We bring water to more than 31 million people, and provide one out of five Western farmers (140,000) with irrigation water for 10 million acres of farmland that produce 60% of the nation's vegetables and 25% of its fruits and nuts.

Reclamation is also the second largest producer of hydroelectric power in the western United States. Our 58 power plants annually provide more than 40 billion kilowatt hours generating nearly a billion dollars in power revenues and produce enough electricity to serve 6 million homes. Today, Reclamation is a contemporary water management agency with a Strategic Plan outlining numerous programs, initiatives and activities that will help the Western States, Native American Tribes and others meet new water needs and balance the multitude of competing uses of water in the West. Our mission is to assist in meeting the increasing water demands of the West while protecting the environment and the public's investment in these structures. We place great emphasis on fulfilling our water delivery obligations, water conservation, water recycling and reuse, and developing partnerships with our customers, states, and Indian Tribes, and in finding ways to bring together the variety of interests to address the competing needs for our limited water resources.

INVESTMENT SUMMARY

Status: PABS is operational and in full maintenance status (steady-state), with no planned enhancements through 2007. Operation and maintenance costs remain steady at approximately one million dollars per year, FY05-FY07.

WHAT THIS INITIATIVE / INVESTMENT WILL ACCOMPLISH

PABS is the Bureau of Reclamation's automated program and budget system developed for the purpose of performing Reclamation-wide budget analysis, formulation, and execution tracking in support of the President's budget as approved by Congress. PABS provides the ability to consolidate, analyze, and modify budgetary data within Regions and Area Offices as well as at the Bureau-wide level. PABS provides the Commissioner's Office with an automated tool for Funds Control management. PABS provides an interface to the accounting system, FFS, and allows for budget line item tracking/execution as it relates to BOR mission/goals. PABS will

play a significant role in the BOR implementation of the Department of Interior's Activity Based Costing and Performance Management project.

MEASUREMENT, REVIEW AND APPROVAL PROCESS

PABS performance is annually evaluated by BOR. Funding is reviewed and approved annually by BOR's CFO Council. PABS is included in regularly scheduled Management Control Reviews (MCRs), Departmental Functional Reviews (DFRs). Contractor support for technical programming is provided through GSA's IT Support contract, Millennia Lite.

I.B.1 Agency mission and strategic goals and objectives supported: PABS supports the mission and strategic goals of the Bureau of Reclamation by providing an automated budget formulation and execution tool, a central corporate database of budget information, which interfaces (through separate extract files) with the accounting system (FFS), and appropriated funds control management. In doing so, it supports BOR strategic goal #3 to Advance Organizational Effectiveness. It further supports DOI's Strategic Goal #5, Management- Improved Financial Management and Performance-Budget Integration

As indicated earlier in this business case, the Bureau of Reclamation is the largest wholesaler of water in the country. We bring water to more than 31 million people, and provide one out of five Western farmers (140,000) with irrigation water for 10 million acres of farmland that produce 60% of the nation's vegetables and 25% of its fruits and nuts. Also, with over 50 power plants, Reclamation is the second largest producer of hydroelectric power in the western United States. These power plants annually provide more than 40 billion kilowatt hours and generate nearly a billion dollars in power revenues, producing enough electricity to serve 6 million homes. Funds generated must be meticulously managed and documented within the corresponding water related regulations, mandates and business / contractual relationships

I.B.2 President's Management Agenda strategic goals supported: PMA Goal: Improved Financial Performance Support Provided by Investment: PABS supports the President's Management Agenda for Sound financial Performance by assuring appropriated funds control management, PMA Strategic Goal: Budget and Performance Integration Support Provided by Investment: PABS supports the President's Management Agenda - for Improved Financial Performance, by assuring appropriated funds control management, - for Budget and Performance Integration, by providing a data link between budget formulation plans/line items and their corresponding costs as incurred during budget execution.

I.B.7 Agencies and organizations affected by this initiative: PABS is not a multi-agency initiative

I.B.8 Investment cost reduction or efficiency improvement: PABS reduces costs of storing budget data in multiple systems, eliminates massive data reconciliation efforts, improves the timely availability of budget data for management decisions, and provides a secure tool for appropriated funds control. It provides for integration of budget and accounting data, improving analysis of budget performance.

I.9.a List all other assets that interface with this asset. Asset Name: Federal Financial System (FFS) Description: Due to the satisfactory system design and interfacing performance with PABS, there are no plans to reengineer this interfacing system at this time. DOI intends to replace FFS with their new Financial and Business Management System. Asset Name: BOR Labor Cost System Description: Due to the satisfactory system design and interfacing performance with PABS, there are no plans to reengineer this interfacing system at this time.

I.9.b Have these assets been reengineered as part of this investment (Yes/No) No

Requested Investment Summary of Spending for Project Stages (\$Millions)

BY 2005 Planning Resources:	.00
BY 2005 Acquisition Resources:	.00
BY 2005 Maintenance Resources:	1.00
BY 2005 Total, All Stages Resources:	1.00
Life Cycle Total, All Stages Resources:	12.10

DOI BUDGET YEAR 2005 IT INVESTMENT OVERVIEW

Investment Identification

Agency: Department of the Interior
Bureau: Bureau of Reclamation
Location in Budget: BOR Working Capital Fund
Account Title: BOR Working Capital Fund
Account Identification Code: 010-10-14-4524-0
Program Activity: Chief Information Officer Office
Name of Investment: [Corporate Data Warehouse \(CDW\)](#)
Unique Investment Identifier: 01010010101101000403132
(IT Only)(see section 53)

Investment Justification

I.A Investment Description: Established in 1902, the Bureau of Reclamation is best known for the dams, power plants, and canals it constructed in the 17 western states. These water projects led to homesteading and promoted the economic development of the West. Reclamation has constructed more than 600 dams and reservoirs including Hoover Dam on the Colorado River and Grand Coulee on the Columbia River.

Today, we are the largest wholesaler of water in the country. We bring water to more than 31 million people, and provide one out of five Western farmers (140,000) with irrigation water for 10 million acres of farmland that produce 60% of the nation's vegetables and 25% of its fruits and nuts.

Reclamation is also the second largest producer of hydroelectric power in the western United States. Our 58 power plants annually provide more than 40 billion kilowatt hours generating nearly a billion dollars in power revenues and produce enough electricity to serve 6 million homes.

Today, Reclamation is a contemporary water management agency with a Strategic Plan outlining numerous programs, initiatives and activities that will help the Western States, Native American Tribes and others meet new water needs and balance the multitude of competing uses of water in the West. Our mission is to assist in meeting the increasing water demands of the West while protecting the environment and the public's investment in these structures. We place great emphasis on fulfilling our water delivery obligations, water conservation, water recycling and reuse, and developing partnerships with our customers, states, and Indian Tribes, and in finding ways to bring together the variety of interests to address the competing needs for our limited water resources.

INVESTMENT SUMMARY

The Corporate Data Warehouse (CDW) project had its genesis in a Reclamation-wide study of perceived management financial reporting inadequacies. The Financial Information Reporting Team (FIRT) conducted the study and reported its results in June 1993. At the direction of the Reclamation Chief Financial Officer and his CFO Steering Committee, the team developed the initial warehouse, titled Financial Information Reporting System (FIRS) in October 1993 and deployed it Reclamation-wide in July 1994. This system was subsequently converted from Ingres RDBMS to Oracle RDBMS in 1996, and updated to comply with a Corporate Data Architecture strategy. It was formally renamed Corporate Data Warehouse in 1999. The data warehouse initially provided a single, authoritative source of financial reports for managers. Upon its update in 1996, it also became the source of financial, budgetary, and human resource data for other management information system applications throughout Reclamation. In 2002 relevant sponsors and beneficiaries identified enhancements and modernization requirements including expanding the depth and breadth of the

reposited data and increasing the level of internal automation. Overall, the CDW continues to be the source of managerial finance reports and the data source for other enterprise applications. Based on the initiatives requested by the sponsors and beneficiaries, the CDW is expected to incorporate additional data at increasing levels of granularity as reporting requirements necessitate, and to integrate other data types as Reclamation continues to implement its Corporate Data Architecture strategy. The overall impact of CDW has been and continues to be the provision of a single, consistent, authoritative source of enterprise data.

INTRODUCTION TO THE PROBLEM OR OPPORTUNITY

In 1993 FIRT identified 11 technical, organizational, and structural problems with respect to financial information and managerial report capability. Not all of these issues were or even could be amenable to a technical or data management solution; however, they were all identified as significant problems bearing on the adequacy and inadequacy of Reclamation financial and program management:

1. Failure to provide program and line managers with timely, reliable, access to consistent, authoritative financial information.
2. Lack of a standard financial management source.
3. Lack of standard, usable, commonly accepted financial information reports.
4. Inadequate tools and inconsistent methods for converting available data into useful information.
5. Lack of a commonly accepted Data Model for Reclamation-wide information systems
6. Lack of a commonly accepted Reclamation-wide program and budget formulation and execution process involving managers at all levels.
7. A dichotomy between the authority form program and budget formulation and execution and the responsibility for program implementation.
8. Wide variations in detail and complexity of work management processes and related program and budget formulation and execution processes.
9. Inadequate guidelines for defining mission-related measures of program accomplishment.
10. Lack of commonly accepted financial management vocabulary or knowledge-base understood by and required of Reclamation managers; absence of coherent, systematic management training and development in financial management.
11. Lack of a designated functional sponsor or accountable official for Reclamation's financial management information systems.

The revision of 1996 identified additional problems that required resolution:

1. Multiplicity of data acquisition processes and downloads to various information systems and applications.
2. Employment of inadequate and antiquated database technology.
3. Inadequate data interface with the new Federal Pay and Personnel System (FPPS) being deployed by the Administrative Service Center (now National Business Center).
4. Lack of interfaces and integration with various information systems and applications (e.g., Maximo-based maintenance management system).
5. Incompatibility with the new Programmatic Budget Structure
6. Lack of enterprise meta-data and data management standards.

In FY2002 Human Resource, Financial Management, and Office of Policy program officials along with the Data Architect reviewed aspects of the CDW performance. They identified several other enhancements that

they believed would accrue substantial additional benefits:

1. In order to provide more timely and accurate financial reporting with respect to Job Corps activities, the relevant sponsors requested the addition of Job Corps financial data to the CDW.
2. In order to replace redundant, inflexible, and expensive mainframe financial reporting processes with site and time independent instruments, the relevant sponsors requested the addition of General Journal data to the CDW
3. Increased data volume, accruing from the addition of new data elements as well as the addition of data over time, has substantially decreased the effectiveness of interocular traumatic data verification techniques; the relevant sponsors requested that these processes be replaced with automated data verification methods.
4. Through FY2002, GPRA data and reporting employed distributed data repositories based on antiquated software and methods; the relevant sponsors requested that this data be consolidated into the CDW.
5. In order to comply with the intent of E-Government Act of 2002, the relevant sponsors requested that the CDW incorporate Web Services capabilities thus allowing and fostering seamless data interchanges with other federal agencies, state and local governments, business partners, and native American entities.
6. In order to reduce maintenance costs and to improve data management, the relevant sponsors requested that data download processes be standardized using the FPPS method as the template, and that an industry standard Extraction, Transformation, and Loading tool be evaluated and if possible acquired and installed.

These enhancements are scheduled to be developed (or acquired) between FY 2003 and FY 2006

WHAT THIS INITIATIVE / PROJECT WILL ACCOMPLISH

As noted previously, development and adoption of a CDW did not and does not address all of the issues raised in the studies and analyses, specifically those of an organizational or structural nature. It did, however, resolve the uniquely technical issues, and provided a foundation for addressing those problems that were less tractable to a purely technical solution. The initial CDW, or FIRS, implementation specifically resolved the problem of management access to timely, reliable financial information by creating and provisioning a consolidated financial and human resource data repository; this eliminated the need for creating and maintaining reports from the transaction systems. In addition, the 1994 implementation employed an industry standard reporting tool (i.e., Cognos Corporation's Impromptu tool) that enabled the creation and easy maintenance of standard look and feel enterprise-wide management reports. Finally, this implementation provided for a single, standard financial management source for managers across Reclamation.

The 1996 revision built on this foundation: (a) the data warehouse was migrated from Ingres to Oracle, thus assuring reliance on an industry standard RDBMS; (b) downloads (and associated costs) from the Administrative Service Center (now National Business Center) were reduced from 32 to 9; (c) warehouse data structures were made compliant with the Programmatic Budget Structure, assuring the integrity of the data and consistency between the authoritative systems and the reports generated from the data warehouse; and, (d) installation and implementation of Oracle Gateway software not only provided a tightly integrated data interface with FPPS, it also eliminated maintenance requirements for the existing cumbersome and costly COBOL interface.

The enhancements scheduled for FY 2003 through FY 2006 will (a) broaden and deepen the data types allowing for higher granularity reporting and data mining; (b) reduced maintenance costs as more processes are automated; and, (c) integration with e-government initiatives and standards.

MEASUREMENT, REVIEW AND APPROVAL PROCESS

The initial FIRS project and 1996 upgrade, and the change of name from FIRS to CDW were all presented to the Chief Financial Officer (CFO) and the CFO's Council for review and approval. In addition, the maintenance budget is reviewed and authorized annually by the CFO on the recommendation of the CFO's Council. Operational maintenance, change requests, problem reports, and enhancements are initiated, reviewed and approved by relevant Stakeholders (e.g., Reclamation Financial Manager, Reclamation Human Resource Manager, Reclamation Budget Officer, etc). Major modernization efforts, such as acquisition and installation of Extraction, Transformation, and Loading (ETL) technology are submitted to the CFO for review and approval.

I.B.1 Agency mission and

DOI Strategic Goal: Resource Use; Deliver water and power in an environmentally responsible and cost efficient manner Support Provided By Investment: CDW provides data to support software that manages

strategic goals and objectives supported: Reclamation facilities (REMMS). Also, CDW contains financial, employee, labor cost, and budget data that enable Reclamation managers to control and predict expenditures on all projects.

DOI Strategic Goal: Management; Manage the Department to be highly skilled, accountable, modernized, functionally integrated, citizen-centered and results oriented. Support Provided by Investment: CDW enables higher internal efficiency in financial management by centrally locating information, providing a consistent access mechanism to retrieve the information, and providing timely, accurate data.

I.B.2
President's
Management
Agenda
strategic goals
supported:

PMA Strategic Goal: Competitive Sourcing Support Provided by Investment: CDW provides data for comparing performance metrics for competitive sourcing.

PMA Strategic Goal: Improved Financial Performance Support Provided by Investment: CDW stores BOR financial data from 1993 to the present. Corporate reports, as well as ad-hoc reporting, enable BOR project managers and the financial community to track costs, to a low level of detail, up to the last 24 hours of entry into the Federal Financial System and report to their customers, constituents, and auditor's accurate financial information. CDW also enables managers to make informed decisions regarding past and future expenditures on BOR projects. Further, CDW distributes source data to other BOR business applications to ensure accurate financial reporting. For example, employee and financial data is distributed every 24 hours to the Time and Attendance System (TAAS) which enables the system to accurately report labor cost charges associated with the payroll submission.

PMA Strategic Goal: Expanded Electronic Government Support Provided by Investment: CDW enables information to be shared more quickly and conveniently between the federal, state, local and tribal governments. While CDW is not internet accessible, BOR employees are able to respond to their customers and constituents quickly and accurately on inquiries of costs associated with projects in which BOR partners with other government entities.

CDW also enables higher internal efficiency in financial management by centrally locating information, providing a consistent access mechanism to retrieve the information, and providing timely, accurate data.

The use of a web version of the Impromptu reporting tool will enable a convenient entry into the data warehouse while on travel or working at home, and reduce costs associated with the distribution of the full client/server version of the Impromptu software to BOR employees. This will improve the internal operating efficiencies of BOR.

PMA Strategic Goal: Budget and Performance Support Provided by Investment: A proposal is being written to incorporate BOR performance goals and measurements in CDW by the start of FY2004.

PMA Strategic Goal: Integration Support Provided by Investment: CDW integrates BOR budget and financial information. Corporate reports exist that enable BOR managers to measure performance on programs to approved budgets and actual expenditures.

I.B.7 Agencies
and
organizations
affected by this
initiative:

This project does not cross agency boundaries.

I.B.8
Investment
cost reduction
or efficiency
improvement:

Customer: Financial Managers Customer Needs: Financial, budget, labor cost, and employee data stored in a single, centralized repository for enterprise reporting. Effectiveness/Efficiencies Impacts: Easier, more timely access to data (daily updates). The retention of historical detail billable rate data generated by the Technical Service Center, Denver, to aid in financial audits. Corporate enterprise reports already exist for easy retrieval of information.

Customer: Organizational Managers Customer Needs: A central repository to track task activities and costs, budgets, labor costs, and employee information. Effectiveness/Efficiencies Impacts: One source, not many, for financial information. Easier, timelier access to data. No longer is it required to access FFS directly or to go to many different sources for the information. Existing corporate reports eliminate much of the need for extracting and transforming raw data into useful information. Also, the corporate reports enable a common vocabulary for the information, which aids in the sharing of information with customers.

Customer: Timekeepers and Controls Customer Needs: Authoritative source system data for validating employee and financial information used by the Time and Attendance System (TAAS). Effectiveness/Efficiencies Impacts: Daily update of employee and financial data, which are required elements

in creating payroll transactions. Elimination of the need to investigate and locate the correct data for use in creating payroll transactions. Elimination of 99% of the errors that occur when the payroll files are posted to FFS and FPPS. Source system data is replicated to all TEEM (Time Employee Entry Module) remote databases which require all sites to have the same data at the same time.

Customer: Employees Customer Needs: A central repository to track task activities and costs to predict possible cost overruns. Effectiveness/Efficiencies Impacts: One source, not many, for financial information. Easier, timelier access to data. No longer is it required to access FFS directly or to go to many different sources for the information. Existing corporate reports eliminate much of the need for extracting and transforming raw data into useful information. Also, the corporate reports enable a common vocabulary for the information, which aids in the sharing of information with customers.

Customer: Property Managers Customer Needs: Financial data to accurately calculate depreciation transactions, which are posted to FFS. Effectiveness/Efficiencies Impacts: Elimination of errors that occur when posting depreciation transactions to FFS. Elimination of the need to investigate and locate the correct data for use in calculating depreciation. Easier, timelier access to data. Corporate enterprise reports already exist for easy retrieval of information.

Customer: Job Corps Site Managers Customer Needs: All data that supports the Job Corps Youth Program will be in CDW accessible in a read-only mode to all users at all Job Corps sites to facilitate corporate reporting and management of the Job Corps Youth Program. Effectiveness/Efficiencies Impacts: Acquisition and transformation on a nightly basis of all data at the level of detail specified by the Job Corps Program Office. Historical retention of all detail data that supports Job Corps. Corporate reports for easy retrieval of information. A common vocabulary for the information, which aids in the management of the Youth Program. Elimination of the use of QuickBooks to manage the financial data for Job Corps. Timely, easy access to data. Elimination of duplicate data entry into QuickBooks and FFS to support the required financial management and reporting requirements.

Customer: Technical Service Center Program Analysts Customer Needs: CDW stores the detail billable rate data, which is posted biweekly to FFS. CDW is the only source for this data and has been used numerous times by financial auditors reconciling financial statements. TSC Program Analysts also manage service level agreements in the NewMIS application and create work orders in TAAS that require accurate, timely financial data. CDW distributes financial and employee data to NewMIS and TAAS on a daily basis. CDW provides timely, accurate budget information to support financial management by the TSC. Effectiveness/Efficiencies Impacts: Program Analysts do not manually create vouchers to post billable rate data to FFS. A central repository that retains all detail billable rate transactions to aid in financial audits. Existing corporate reports eliminate much of the need for extracting and transforming raw data into useful information. Also, the corporate reports enable a common vocabulary for the information, which aids in the sharing of information with customers. Daily update of employee and financial data, which are required elements in creating payroll transactions. Elimination of the need to investigate and locate the correct data for use in creating payroll transactions. Elimination of 99% of the errors that occur when the payroll files are posted to FFS and FPPS. Eliminate the need to access PABS (the budget system) directly for budget information.

Customer: FEDSTRIP users Customer Needs: CDW distributes financial data to the FEDSTRIP application to validate data used in creating transactions which are posted daily to FFS. Effectiveness/Efficiencies Impacts: Accurate financial data to create FFS transactions. Eliminate the need to investigate and locate the corrected data to create the FFS transactions. Elimination of errors that would occur if users manually entered financial data used to create FFS transactions.

Customer: GPRA Coordinators Customer Needs: Integrated financial, budget, and performance data in a central repository. Effectiveness/Efficiencies Impacts: A centralized repository to track the development of goals and performance targets at each stage of the development. Reporting of performance information from a variety of organizational perspectives. Ability to interrelate budget, financial and performance data. Timely, easy access to performance management information and reports to users at all organizational levels. Elimination of Microsoft Access on users' desktops to manage information. Impromptu web reporting that supports intranet-based reporting, browser-enabled access to users both while at work and from remote locations.

I.9.a List all other assets that interface with this asset.

Asset Name: Time and Attendance System (TAAS) Description: This system was implemented in 1996 as a client/server application with distributed Oracle databases. The application is dependent on the data warehouse for employee and financial data. In 2003, CDW began replicating employee data using Oracle advanced replication software to distribute the data to the 23 databases that support TAAS and to the database that supports TEEM. This change in how employee data was being managed necessitated reengineering of the interface and the TAAS application to ensure data accuracy at all sites at all times to prevent any failure of data replication process. TAAS also has an interface with MAXIMO (REMMS) for the purpose of exchanging employee and work order data. This interface was re-engineered to properly exchange employee data as a result of how CDW now replicates the data. Asset Name: Time Employee Entry Module (TEEM) Description: This application was implemented in 2003. It is a web-enabled application that is directly

integrated with TAAS and CDW. TEEM relies on CDW for employee and financial data. Asset Name: Movable Property System (MPS) Description: This application receives nightly files of financial data (account structures and organization codes) from CDW for use in validating accuracy of transactions. The MPS system is responsible for the loading of the data into the databases that supports the application. Asset Name: MAXIMO (REMMS) Description: This is a distributed application with 19 databases located in regional and area offices. Each MAXIMO database is connected to a TAAS database. CDW sends nightly files of financial data (account structures and organization codes) to the REMMS Data Warehouse which in turn distributes the data to the 19 databases. The data is used to validate the accuracy of transactions. MAXIMO is dependent on the tables that support TAAS for accurate employee data. In every MAXIMO installation, there is an Oracle database interface between a TAAS table and a MAXIMO table to exchange accurate employee data. MAXIMO, through an Oracle database interface, sends work order (a data record that identifies what type of work is authorized to be completed) data to TAAS every 15 minutes to control the charging of time to financial accounts that are used for managing BOR facilities. MAXIMO and TAAS receive the same financial data (account structures), at the same time and interval as a result of the direct interface to CDW. Asset Name: FEDeral Standard Requisitioning and Issue Procedures System (FEDSTRIP) Description: This application has a direct, Oracle database connection to CDW for financial data (account structures and organization codes) to validate the accuracy of transactions. This interface ensures FFS transactions generated by this application and uploaded into the FFS system, are against open, valid account structures and against valid organization codes. Asset Name: Federal Financial System (FFS) Description: This is the authoritative source for financial data, which is extracted, transformed, and loaded into CDW every 24 hours. Asset Name: Federal Personnel and Payroll System (FPPS) Description: This is the authoritative source for budget data which is extracted, transformed, and loaded into CDW at predefined intervals as specified by user requirements. Asset Name: Program and Budget System (PABS) Description: This is the authoritative source for budget data which is extracted, transformed, and loaded into CDW at predefined intervals as specified by user requirements. Asset Name: BOR Labor Cost System Description: This is the authoritative source for personnel labor cost data which is extracted, transformed, and loaded into CDW at predefined intervals as specified by user requirements. Asset Name: New Management Information System (NEWMIS) Description: This application is owned by the Technical Service Center in Denver and is used for budget formulation, budget tracking, and project management. This application has direct Oracle interfaces to CDW for reporting and is dependent on CDW to receive employee and financial data account structures and organization codes) to ensure transactions are accurate. This application also creates FFS transactions (called billable rate transactions), which are uploaded into FFS every pay period. The transactions sent to FFS are summarized at the organization code, account structures, and budget object code level. The detailed transactions from which the summary transactions are created as transferred and stored to CDW through a direct database interface. CDW is the only source in BOR for the detail data and is often used by auditors to validate FFS transactions. The detail records are stored indefinitely.

I.9.b Have these assets been reengineered as part of this investment (Yes/No)

No

Requested Investment Summary of Spending for Project Stages (\$Millions)

BY 2005 Planning Resources:	.09
BY 2005 Acquisition Resources:	.00
BY 2005 Maintenance Resources:	.45
BY 2005 Total, All Stages Resources:	.54
Life Cycle Total, All Stages Resources:	8.55

DOI BUDGET YEAR 2005 IT INVESTMENT OVERVIEW

Investment Identification

Agency: Department of the Interior
Bureau: Bureau of Reclamation
Location in Budget: BOR Working Capital Fund
Account Title: BOR Working Capital Fund
Account Identification Code: 010-10-144524-0
Program Activity: Records Management
Name of Investment: [Reclamation Electronic Document System \(REDS\)](#)
Unique Investment Identifier: 01010010701101100404142
(IT Only)(see section 53)

Investment Justification

I.A Investment Description: The Reclamation Electronic Document Management System (REDS) is a replacement system for two steady state systems, the Automated Records Management System (ARMS) and Engineering Drawings Reference System (EDRS) that have reached the end of their functional and technical usefulness. The need to replace ARMS and EDRS has been validated by the business and information technology communities within Reclamation. A pilot project demonstrating the validity of the business and technology approaches for REDS has been completed. Approval to move from the "Select" phase to the "Control" phase of the capital planning cycle is pending.

INTRODUCTION TO THE BUREAU OF RECLAMATION

Established in 1902, the Bureau of Reclamation is best known for the dams, power plants, and canals it constructed in the 17 western states. These water projects led to homesteading and promoted the economic development of the West. Reclamation has constructed more than 600 dams and reservoirs including Hoover Dam on the Colorado River and Grand Coulee on the Columbia River. Today, the Bureau of Reclamation is the largest wholesaler of water in the country. Reclamation brings water to more than 31 million people, and provides one out of five Western farmers (140,000) with irrigation water for 10 million acres of farmland that produce 60% of the nation's vegetables and 25% of its fruits and nuts. Reclamation is also the second largest producer of hydroelectric power in the western United States. 58 power plants annually provide more than 40 billion-kilowatt hours generating nearly a billion dollars in power revenues and produce enough electricity to serve 6 million homes.

Today, Reclamation is a contemporary water management business with a Strategic Plan outlining numerous programs, initiatives and activities that will help the Western States, Native American Tribes and others meet new water needs and balance the multitude of competing uses of water in the West. Reclamation's mission is to assist in meeting the increasing water demands of the West while protecting the environment and the public's investment in these structures. Reclamation places great emphasis on fulfilling water delivery obligations, water conservation, water recycling and reuse, and developing partnerships with its customers, states, and Indian Tribes, and in finding ways to bring together the variety of interests to address the competing needs for our limited water resources.

INTRODUCTION TO THE PROBLEM

Reclamation is required, as stated in 44 U.S.C. 3101, to make and preserve records containing adequate and proper documentation of the organization, functions, policies, and essential transactions of the agency and to

furnish the information necessary to protect the legal and financial rights of the Government and the persons directly affected by the agencies activities. The use of information and communication technology has transformed the way Reclamation and other Government agencies create documents and conduct business. Valuable corporate information is being created and stored electronically throughout Reclamation yet no integrated means to manage them exists within Reclamation.

Reclamation's records are created by the day-to-day work of documenting the programs, initiatives and activities related to the maintenance and operation of the hundreds of features and structures designed to meet the increasing water demands of the West while protecting the environment and the public's investment in these structures. Records can be in the form of e-mail, memorandums, reports, letters, video tapes, photographs, and drawings related to land, geology, construction, maintenance, dam safety, water, the environment, and research as well as business and operational records documenting human resources, information technology, and financial activities of the agency. Reclamation has received and created thousands of records over the past 100 years and continues to create and receive records to managed the water facilities on a daily basis.

Today, Reclamation relies on two systems, the Automated Records Management System (ARMS) and Engineering Drawings Reference System (EDRS). ARMS and EDRS manage the retention and disposition of the paper records as well as provide search capability to find the location of paper records and drawings. EDRS was implemented in the early 1970's to replace the manual index cards used to locate the thousands of manufacturers' and Reclamation drawings. The Denver Office, alone, has over 600,000 drawings that are indexed in EDRS. ARMS was implemented in the late 1980's to replace the manual indexing system and to manage the retention and disposition of all the other types of paper records. Both systems have saved thousands of hours by allowing Reclamation staff to locate hardcopy records and drawings quickly. Currently ARMS and EDRS are using software and hardware that are obsolete and no longer part of Reclamation's Enterprise Architecture and do not provide the capability to capture and manage electronic records. If these systems are not replaced soon Reclamation will be forced to purchase used obsolete equipment to ensure data is not lost. The loss would also reduce Reclamation's ability to respond to customers, contractors, or citizen requests for information or documentation in a timely manner.

In June 1998, Reclamation began the Reclamation Electronic Document System (REDS) pilot to:

- Meet the expanding governmental legal and regulatory requirements pertaining to electronic records and e-GOV efforts (e.g., Electronic Freedom of Information Amendments Act, Government Paperwork Elimination Act, Document Security, Electronic Commerce, etc.);

- Improve business processes as explained below; and

- Replace the obsolete Automated Records Management System (ARMS) and Electronic Drawings Records System (EDRS).

Reclamation established functional and technical teams to review records, drawings, and document management practices, evaluate methods to manage both electronic and physical documents/records, and develop standards or best practices. Several product demonstrations were conducted with multiple vendors to determine if Commercial Off-the-Shelf (COTS) software was available to meet Reclamation's needs. These products were evaluated based on Department of Defense (DoD) 5015.2 standards and the functional and technical requirements developed by the Reclamation teams. The functional requirements include the capability to capture both electronic and paper records; to process, review, and approve documents/records electronically within functional groups such as acquisitions management, land management, safety of dams, human resources, administrative services, geotechnical services, infrastructure i.e., mechanical, electrical, and structural services, environmental resources, water resources, and engineering services; to index and classify documents/records according to National Archive and Records Administration (NARA) approved retention schedules; to store and secure electronic records; to easily retrieve records for use in decision making and other activities; to transfer records for permanent retention; and to destroy or delete temporary records in a timely manner as described in the retention. The technical requirements were based on Reclamation's Enterprise Architecture to leverage existing information technology.

Reclamation selected a software suite based on the results of these product demonstrations and funded a pilot project to fully test them in our production environment. The REDS Pilot Project focused on Records Management, Drawings Management, Land Management and a select group of users from Acquisitions Management. The pilot tested the management of drawings, land documents, acquisition documents and records received by Reclamation in a regional office and included paper, scanned images, and electronic records.

At the conclusion of the planning project it was determined that the full deployment of REDS will improve the internal efficiency and effectiveness of Reclamation by streamlining and automating document processes and management. Some of the improvements include:

1. Overall improvement in the management of the agency records utilizing REDS which is capable of managing both paper and electronic records
2. Greater security and protection of documents. REDS can provide unique security to each document in the system for maximum flexibility and security. The electronic files are backed up to long term storage media and stored offsite for increased records protection and preservation.
3. Managed and controlled collaborative electronic workflow environment replaces our existing paper processes resulting in decreased processing times. This also ensures the established policies for document and drawings processes are followed and enforced.
4. Compliance with legal requirements to manage electronic records and the ability to produce records when requested in a timely manner. REDS will provide public access to electronic information as required by the Electronic Freedom of Information Act and the Government Paperwork Elimination Act. Electronic forms managed by REDS will increase our capability to interact with the public and reduce internal processing times.

REVIEW AND APPROVAL PROCESS

Reclamation enterprise-wide IT projects begin with a business need that is presented to Reclamation Management and the CFO Council in the form of a Business Concept Document (BCD). The CFO Council and management review the proposal to determine the validity of the need and either approves or denies funding to further study or expand the project. Upon completion of the study, planning, or investigative phase, a Business Decision Document (BDD) is prepared and presented to the CFO Council with the results and either proposes implement or to discontinue. The CFO Council and management review the BDD and determine if the proposal should be funded and implemented Reclamation-wide. Project status reports are presented to the CFO Council quarterly throughout the project.

The Bureau of Reclamation's Chief Financial Officer's (CFO) Council is responsible for providing advice and support to the CFO in fulfilling the requirements of the CFO Act. The Council will ensure that its recommendations are consistent with and support Reclamation's mission, initiatives and program priorities. The council's focus is on the areas and activities covered in the Reclamation CFO Organizational Plan. The Council identifies issues and makes recommendations to the CFO on business practices related to the improvement of Reclamation's financial integrity. Responsibilities of the Council include overseeing management, decision processes, and cost recovery activities of the Working Capital Fund (WCF); deliberating and making recommendations to the CFO on Reclamation-wide automated business systems initiatives; providing direction for preparation of the CFO Annual Report and reviewing/approving the final draft of the report; and performing special assignments for the CFO or Commissioner.

Upon completion of the REDS planning, the functional teams reviewed the results and proposed Reclamation-wide implementation of the software suite selected. The REDS Planning results were presented to Reclamation's CFO Council in October of 2002. The CFO Council concurred with the proposal to implement REDS. The project will be managed with multiple phases starting with the implementation of Electronic Drawings Management and Records Management software throughout Reclamation. Funding for this phase has already been approved and is awaiting departmental approval. The implementation of Electronic Document Management will be a second phase with several individual sub-phases for each of our functional departments (e.g. Human Resources and Contracting).

I.B.1 Agency mission and strategic goals and objectives supported:

Resource Use Deliver Water and Power in an Environmentally Responsible and Cost Efficient Manner Support Provided by this Investment: REDS supports DOI strategic goals by providing an electronic document and records system that will enable us to better manage, develop, and protect water resources to help meet the needs of current and future generations.

Management: Manage the Department to be highly skilled, accountable, modernized, functionally integrated, citizen-centered and results oriented.

Support Provided by this Investment: REDS supports the mission and strategic goals of the Bureau of Reclamation by providing more effective management and preservation of information related to Reclamation's projects.

I.B.2 President's Management Agenda strategic goals supported:

Expanded Electronic Government - REDS provides the foundation for Reclamation to meet the President's Management Agenda to Expand Electronic Government by providing a capability for responsive and cost-effective information sharing between Reclamation, other government agencies and citizens. REDS provides the ability to store electronic documents in a system that is searchable by the public as well as other

government agencies and contractors. The document management system supports electronic forms and electronic signature to facilitate doing business via the web. REDS will directly support the Government Paperwork Elimination Act, and Electronic Freedom of Information Act by expanding our electronic interaction with citizens, businesses, and government agencies.

Budget and Performance - REDS will automate internal processes resulting in reduced operating costs and implementation of best practices. The electronic workflow software will route the electronic documents and forms to the appropriate people for processing. REDS automates our business practices and expedites our service to citizens, contractors and government agencies as well as support to Reclamation employees.

I.B.7 Agencies and organizations affected by this initiative:

The Bureau of Reclamation began discussing records management business practices and the REDS pilot with NARA and the Government-wide eQuick Silver' team. The eQuick Silver' team referred the REDS Core Team to Chris O'Donnel at the Environmental Protection Agency (EPA). Chris, the team lead for the Enterprise wide ERM effort, believes the Bureau of Reclamation is ahead of other agencies in the development of an Electronic Records Management System.

In February 2003, the REDS Core Team began discussing Electronic Records Management requirements and systems with the Office of Special Trust (OST). Discussions include the REDS pilot and results, technology, and the EPA Assessment Report.

In March 2003, the REDS Core Team began developing a partnership with MMS's E-Gov Program Management Office, FWS, and BIA. These initial meetings were to begin sharing knowledge about system requirements, technology, and business practices.

I.B.8 Investment cost reduction or efficiency improvement:

The implementation of REDS will produce cost savings and improve the internal efficiency and effectiveness of Reclamation by streamlining and automating document processes and management. These savings and improved efficiencies are based on the assumption that the employees will use less search time in finding the information they need to accomplish their work, and the public will use less time in finding their information and completing their transactions. Some of the key benefits are:

- a) The cost to implement REDS with a corporate approach is much less than implementing independent systems in each region. It will provide consistency throughout the agency.
- b) Overall improvement in the management of Reclamation records. The existing system can only manage paper records yet the majority of the records are created and stored electronically.
- c) Greater security and protection of documents and official records as part of the overall Reclamation security plan. Each document in the system can have unique security applied based on the required access by individuals and/or groups. The electronic files managed by REDS will be copied onto backup tapes and stored off-site protecting them from catastrophic disasters or intentional sabotage.
- d) Managed and controlled collaborative electronic workflow will enable Reclamation to automate best business practices and ensure these processes are performed uniformly. It will expedite work processes and provide the ability to track work and measure performance.
- e) Compliance with legal requirements to manage electronic records and the ability to produce records when requested. Several Reclamation employees expressed a significant lack of trust with the existing paper based records management system. They resist turning in their paper records for fear they will not get them back when needed. REDS allows a person to place documents into the system which they retain access to yet the records managers can manage the retention and disposition of the document.
- f) Paperwork reduction via electronic submission and distribution of information to and from the public. Electronic automation of existing internal paper processes will increase productivity with faster processing times and reduced duplication of efforts caused by lost paper.
- g) Enhanced decision-making by utilizing the most current and accurate information contained in the document management system.
- h) Faster access to information and the ability to retrieve the electronic files for use on future projects. The document management system has a robust search engine to provide access to documents within the system. A person can search for documents of a certain type that pertain to a specific project or they can search for documents that contain keywords. Documents in the system can be grouped to emulate an existing paper

based system such as placed in folders labeled by project name.

I.9.a List all other assets that interface with this asset. Local Area Network and Wide Area Network Desktop computers Desktop Applications (e.g., Microsoft Office, Email, AutoCad, Adobe Acrobat) Oracle Report files from existing applications

I.9.b Have these assets been reengineered as part of this investment (Yes/No) No

Requested Investment Summary of Spending for Project Stages (\$Millions)

BY 2005 Planning Resources:	1.55
BY 2005 Acquisition Resources:	1.35
BY 2005 Maintenance Resources:	.27
BY 2005 Total, All Stages Resources:	3.17
Life Cycle Total, All Stages Resources:	19.91

DOI BUDGET YEAR 2005 IT INVESTMENT OVERVIEW

Investment Identification

Agency: Department of the Interior
Bureau: U.S. Geological Survey
Location in Budget: Earthquake Hazards
Account Title: Surveys, Investigations and Research
Account Identification Code: 010-12-14-0804-0
Program Activity: Geologic Hazards, Resources and Processes
Name of Investment: [Advanced National Seismic System \(ANSS\)](#)
Unique Investment Identifier: 01012010501120100104007
(IT Only)(see section 53)

Investment Justification

I.A Investment Description: This investment supports the mission and goals of the interagency National Earthquake Hazards Reduction Program (NEHRP). NEHRP is the Federal government's coordinated approach to addressing earthquake hazards and risks. NEHRP was established by Congress in 1977 (Public Law 95-124) as a long-term, nationwide program to reduce the risks to life and property in the U.S. resulting from earthquakes. NEHRP comprises the Federal Emergency Management Agency (FEMA), the National Institute of Standards and Technology (NIST), the National Science Foundation (NSF), and the United States Geological Survey (USGS).

The 1990 reauthorization of NEHRP (Public Law 101-614) states that "The United States Geological Survey shall conduct research necessary to characterize and identify earthquake hazards, assess earthquake risks, monitor seismic activity, and improve earthquake predictions." To carry out this mandate the USGS operates the U.S. National Seismic Network, a network of widely spaced seismic stations, and the USGS supports the operation of regional seismic networks of more closely spaced seismic stations in areas of high to moderate seismicity. Most of the regional networks are operated under cooperative agreements with universities. Most of the equipment in these networks was designed, manufactured, and installed over twenty years ago and needs to be replaced with modern sensors, recording devices, and telecommunications. In addition, there is little or no seismic equipment in urban areas to record and report the severity and distribution of strong ground shaking during an earthquake and to provide the data for the design and construction of earthquake resistant structures.

The ANSS investment will enable the USGS to modernize and integrate its legacy seismic networks into an integrated and Advanced National Seismic System (ANSS) while also augmenting this system with critically needed strong motion monitoring of seismic energy in at-risk urban areas across the U.S. This effort directly supports the President's Management Agenda for E-Government in the area of Disaster Assistance and Crisis Response and the Disaster Management line of business in the President's Business Reference Model. It also directly supports the Department of the Interior's Strategic Goal of Serving Communities, and the USGS Program Strategic Goal to "Ensure the continued transfer of data, risk assessments and disaster scenarios needed by our customers before, during and after natural disasters, and increase delivery of real-time hazard information to minimize loss of life and property."

The ANSS will be capable of providing real-time information on the distribution and intensity of ground shaking to emergency response officials so that they can more rapidly assess the full impact of a significant earthquake and speed disaster relief to the areas that need it most. ANSS will also provide engineers and building code developers with the information they need to improve building design standards and engineering practices to mitigate the impact of future earthquakes. A complete summary of the ANSS and associated goals can be found at: <http://geology.cr.usgs.gov/pub/circulars/c1188/>.

As part of the FY2001 NEHRP reauthorization (P.L. 106-503), Congress approved the ANSS plan and

authorized full funding for the implementation effort (approximately \$171 million over five years). Congress also called for a management plan to outline the detailed implementation of ANSS. Accordingly, a plan was completed and submitted to the Department of Interior in the spring of 2001 (currently pending Department and OMB approval). To date, a total of approximately 350 strong motion earthquake sensors have been deployed in seven large metropolitan centers across the country, as a part of ANSS, and an additional 98 sensors are being deployed in FY2003. Significant enhancements in earthquake preparedness and response efforts have already been achieved, including implementing a real-time ground shaking reporting system that displays the variation in the intensity of earthquake ground shaking for the San Francisco and in Salt Lake City regions. The Salt Lake City enhancements were on line prior to the Winter Olympics; similarly, the San Francisco upgrades were on-line and operational during the May 13, 2002, Gilroy, California earthquake (magnitude 4.9) and allowed for rapid reporting of earthquake location and ground shaking information which was used to assess emergency response efforts and loss estimation.

The ANSS efforts have been endorsed by FEMA, the lead agency for the National Earthquake Hazard Reduction Program, and are an integral part of the President's Disaster Management, E-Government and Homeland Security efforts. Earthquakes represent the Nation's single greatest natural hazard, and impact of a catastrophic event could be significantly greater (in terms of life loss and economic impact) than the September 11, 2001 terrorist attacks. Although earthquakes cannot be prevented, their impact can be greatly reduced – this project is critical to realizing this goal.

The USGS Investment Review Board and the Department of the Interior IT Management Council and Management Initiatives Team have reviewed and approved this project and USGS and DOI are seeking funding through the budget process for this investment.

I.B.1 Agency mission and strategic goals and objectives supported:

The ANSS supports the Mission area of the Department of Interior's Strategic Plan, Serving Communities. Specifically, the ANSS initiative addresses two Strategic Goals within this Mission area:

- Strategic Goal 1: Protect Lives and Property
- Strategic Goal 2: Advance Knowledge Through Scientific Leadership and Inform Decisions Through Application of Science

Earthquakes threaten lives and property and are detrimental to local and national economic health. The ANSS is designed to Protect Lives and Property by improving the quality and timeliness of information we provide to communities so they can use it to improve their warning systems, planning processes, response efforts, community education, and building modifications. The installation of new and upgraded seismic monitoring equipment to assess and track earthquakes and the resulting hazards is necessary to provide improved and timely information to communities. By providing more timely and informative earthquake reports and alerts to first-line responders, the ANSS will address the DOI Strategic Goal of safeguarding property and financial assets, advance scientific knowledge, and improving the quality of life for communities we serve. Performance toward this goal will be measured by the number of communities served by ANSS and by the resulting hazard mitigation, preparedness, decision-maker satisfaction (needs for information met), and consequent reduction of risk.

The ANSS supports the DOI Strategic Goal of Advancing Knowledge Through Scientific Leadership and Inform Decisions Through Application of Science, by providing the data needed to better characterize seismic hazards and by providing communities, businesses, and individuals with the information they need to better understand and mitigate seismic risk. This will be accomplished by ensuring the soundness of methodology, accuracy, and reliability of the underlying science (through program evaluation, peer review), and by improving stakeholder access to needed science information. Performance will be measured by numbers of sampled customers reporting adequacy of science base to inform decision making for earthquakes. Finally, the ANSS supports the science programs of the USGS and the Department by focusing on data collection and understanding, modeling and predicting how multiple forces affect Earth systems. To improve public input, the ANSS relies on regular interactions with customers, cooperators, and others who have a major role or interest in earthquake science. This input was used from the beginning to establish the needs and priorities for an Advanced National Seismic System (see USGS Circular 1188).

The diagram on the following page shows the structure through which ANSS supports DOI, the USGS and the USGS Earthquake Hazards Program in their mission and strategic goals, under the President's Business Reference Model.

I.B.2 President's Management Agenda strategic goals supported:

This project supports the President's E-Government initiative in the area of Disaster Assistance and Crisis Response by: • improving the efficiency and effectiveness of earthquake monitoring and reporting in the U.S., • developing a technology framework that provides for the integration of earthquake monitoring and reporting systems nationwide, and • supporting Homeland Security efforts by providing rapid and accurate information to emergency responders that enables them to save lives and protect property through sound decision making.

I.B.7 Agencies and organizations affected by this initiative:

NEHRP Federal Agency Partners: • Federal Emergency Management Agency (FEMA; lead agency in FY03, probable change in FY04): • National Science Foundation (NSF) • National Institute of Standards and Technology (NIST)

Other Federal Agency Collaborators • Department of Commerce (NOAA) – for the location and size of earthquakes beneath ocean areas for tsunami (tidal wave) warnings • the Army Corps of Engineers – ANSS Collaborator • U.S. Bureau of Reclamation – ANSS Collaborator • The DOE National Laboratories (Los Alamos National Laboratory and Idaho National Engineering and Environmental Laboratory) – ANSS Collaborator

State and local earthquake response agencies, emergency managers and emergency response officials in earthquake-prone regions: • the National Emergency Managers Association, • California Geological Survey • California Office of Emergency Services • California Department of Transportation • California Division of Water Resources • California Institute of Technology • Kentucky State Geological Survey • Hawaii Department of Civil Defense • Montana Bureau of Mines and Geology • Ohio State Geological Survey • Nevada Bureau of Mines and Geology • Utah Office of Emergency Services • Utah State Geological Survey • Utah Seismic Safety Commission • Washington State Office of Emergency Services • Washington State Department of Natural Resources • Anchorage, Alaska, Office of Emergency Services • Los Angeles Department of Water and Power.

Private Sector Partners: • Pacific Gas and Electric • Southern California Edison • Southern California Gas • Union Pacific • Alyeska Pipeline Service Company

Cooperating educational institutions: • Boise State University • Delaware Geological Survey • Georgia Tech University • Hawaii Volcano Observatory • Lamont-Doherty Earth Observatory, Columbia University • Massachusetts Institute of Technology • New Mexico Tech University • Northern Arizona University, Flagstaff • Ricks College, Rexburg, Idaho • Saint Louis University • University of Alaska, Fairbanks • University of California, Berkeley • University of California, San Diego • University of Memphis • University of Nevada, Reno • University of North Carolina, Chapel Hill • University of Puerto Rico, Mayaguez • University of South Carolina • University of Tennessee, Knoxville • University of Texas, El Paso • University of Utah • University of Washington • Virginia Polytechnic Institute • Weston Observatory, Boston College

I.B.8 Investment cost reduction or efficiency improvement:

Implementation of an Advanced National Seismic System will expand strong motion recording in urban areas of the United States for rapid damage assessments and will provide data on the amplitude, frequency content, and duration of ground shaking for engineering design and construction purposes. This investment will also provide for the needed modernization and integration of existing regional and national seismic networks. This, in turn, will result in improved efficiencies and enhanced effectiveness in the following ways: 1) faster and more accurate reporting of earthquakes to enhance first-responder programs (including delivery of "ShakeMaps") to speed earthquake disaster relief and save lives;

2) reduced single-points-of-failure and hardened acquisition, monitoring, and reporting systems; 3) more efficient operation of earthquake monitoring systems, including more rapid data analysis, consolidated data archiving, and streamlined earthquake reporting systems; 4) expanded availability and direct access to the high quality strong motion data that engineers need to improve building codes, design standards, and land use practices.

I.9.a List all other assets that interface with this asset.

The DOI Enterprise Services Network interfaces with ANSS, because of the system's requirement for reliable and secure high-speed, high-capacity data transmission. ANSS will utilize and therefore interface with the USGS component of DOI's enhanced, wide-area network, which is being developed through a separate investment.

I.9.b Have these assets been reengineered as part of this investment (Yes/No)

No

Requested Investment Summary of Spending for Project Stages (\$Millions)

BY 2005
Planning

.20

Resources:	
BY 2005 Acquisition Resources:	1.50
BY 2005 Maintenance Resources:	2.70
BY 2005 Total, All Stages Resources:	4.40
Life Cycle Total, All Stages Resources:	380.00

DOI BUDGET YEAR 2005 IT INVESTMENT OVERVIEW

Investment Identification

Agency: Department of the Interior
Bureau: U.S. Geological Survey
Location in Budget: Biological Information Management and Delivery
Account Title: Surveys, Investigations and Research
Account Identification Code: 010-12-14-0804-0
Program Activity: Biological Research
Name of Investment: [National Biological Information Infrastructure](#)
Unique Investment Identifier: 01012010501120600202072
(IT Only)(see section 53)

Investment Justification

I.A Investment Description: The National Biological Information Infrastructure (NBII) Capital Planning and Investment Control (CPIC) documents have been reviewed and approved by the appropriate boards and individuals within the US Geological Survey (USGS) and the Department of the Interior (DOI). Such reviews include the USGS Investment Review Board, Chief Financial Officer (CFO), Procurement Executive, and Security Officer, and the DOI IT Management Council and Management Initiatives Team.

Information about the natural world, ecosystems, and the biodiversity found within them, is fundamentally important to all sectors of society. The United States has invested many millions of dollars in the collection of this type of information but, unfortunately, most of it is inaccessible and resides in forms that are not easily used. The NBII provides the framework for making this vast storehouse of information accessible and also provides the tools needed to make it coherent and useful to a wide audience. The NBII is a web-based information system, coordinated by the USGS; it provides data and information on the nation's biological resources. NBII links biological databases, information products, and analytical tools maintained by NBII partners from all sectors including Federal, State, local, and tribal government agencies, international organizations, academic institutions, non-government organizations, and private industry.

Data, information, and tools made available through the NBII are organized around a structure of "nodes" – individual components of the network designed to focus on specialized regional and/or thematic issues. There are three types of nodes: regional, thematic, and infrastructure. Twelve regions have been delineated, six of which now have nodes that have been initiated. Thematic nodes are initiated when a single science-based theme or issue arises as a priority in several regions, calling for national level coordination. Infrastructure nodes provide the computer hardware, software, systems, and technical support that underlie the entire network.

The goal of the NBII is to eventually provide data and information that covers the nation both geographically and scientifically. It is being developed one or two nodes at a time, with each node growing toward full functionality as it matures. Some nodes are closer to full functionality than others, depending on the resources that have been invested in them. Some nodes have yet to be initiated. Therefore, the NBII as a whole has activity in the planning, acquisition, and maintenance phases simultaneously, and expects to continue to do so for the remainder of the current planning period (FY2008).

The NBII gives scientists, natural resource managers, decision makers, and citizens fast and easy access to a bigger, more inclusive biological knowledge resource that is available from any other single provider. Thus, the mission of the NBII to: ...provide the Nation with a mechanism for accessing a vast reservoir of biological and natural resources data, information products, and analytical tools that support and enhance science-based decision making. The NBII is the cornerstone for the gathering and efficient transfer of research and monitoring information from all sectors of the global biological community to those involved with the care, use,

and conservation of natural resources.”

The goals of the NBII include the following: · Develop the framework to support knowledge discovery and creation for the Nation’s biological and ecological resources enterprise. · Create an integrated library of biological knowledge by systematically discovering, organizing, storing, and making available scientific data and information from diverse sources. · Lead the development, selection, and distribution of tools and standards necessary to facilitate interoperability and allow meaningful interactions with scientific data and information. · Empower NBII users by creating awareness of NBII and its capabilities and providing the support for users to enable them to directly apply NBII products and services within their own areas of concern.

I.B.1 Agency mission and strategic goals and objectives supported:

The NBII’s goals and objectives are consistent with and support on of the core mission of the USGS: to develop the ability and resources to transfer the information gained in research and monitoring to resource managers and to others concerned with the care, use, and conservation of the nation’s resources. Likewise, the NBII is well-aligned with the mission of DOI: The U.S. Department of the Interior protects and manages the Nation’s natural resources and cultural heritage; provides scientific and other information about those resources; and honors its special responsibilities to American Indians, Alaska Natives, and affiliated Island Communities.”

DOI’s strategic plan states, “the provision of scientific information to serve communities is not better exemplified than by the National Biological Information Infrastructure. The federal, state, and local government agencies, private sector organizations, and other parties from around the world cooperatively maintain this electronic gateway, which provides a wealth of biological data and information to the public. Working with a variety of partners in this country and from around the world, the Department has taken a leadership role in developing this electronic ‘federation’ of biological data and information sources.” (http://www.doi.gov/gpra/stratplan_2_14_2003.html)

The DOI Strategic Plan has organized the Department’s goals into four mission areas — Resource Protection, Resource Use, Recreation, and Serving Communities — and each program in each DOI bureau falls under one of these four areas. As part of the Biological Informatics Program of the USGS, the NBII falls organizationally under “Serving Communities.” However, the accomplishments of the NBII nodes support outcome goals under all four DOI mission areas.

The regional and thematic nodes have realized approximately 95 major national and international accomplishments during the first two years of operation. About 40 percent of these accomplishments support the primary DOI mission of Serving Communities through leading and facilitating the exchange and use of knowledge (Knowledge Exchange). Approximately 29 percent of accomplishments support the DOI missions of Resource Protection, Resource Use, and Serving Communities through the strategies of expanding the scientific knowledge base and improving the information base, resource management, and technical assistance (Knowledge Base). Twenty percent of node accomplishments support decision-making, a strategy that supports the DOI goals of both Resource Protection and Recreation.

I.B.2 President’s Management Agenda strategic goals supported:

The NBII directly supports the initiatives of the President’s Management Agenda:

Electronic Government: The NBII’s vision, mission, structure, and business practices are fully aligned with the PMA guidelines for e-government initiatives, and directly support two major components of the President’s Management Agenda. These include 1) science-based decision-making, by making available to scientists and researchers a broad range of data and information produced by organizations in every sector through the use of public-public and public-private partnerships; and 2) electronic government, by simplifying and enhancing the delivery of data, information, and tools to citizens by providing an efficient and easy to use portal. DOI’s strategic plan states, “The provision of scientific information to serve communities is not better exemplified than by the National Biological Information Infrastructure. The federal, state, and local government agencies, private sector organizations, and other parties from around the world cooperatively maintain this electronic gateway, which provides a wealth of biological data and information to the public. Working with a variety of partners in this country and from around the world, the Department has taken a leadership role in developing this electronic ‘federation’ of biological data and information sources.” (http://www.doi.gov/gpra/stratplan_2_14_2003.html)

Within e-government, the NBII supports the President’s priorities for: Asset Management: Natural Resource Management Research & Development and Science: Data and Statistics development, public health and science, and Environmental Management: Protection and Preservation, and monitoring.

In addition, the NBII supports DOI priorities for e-government initiatives. These include support for Geospatial One-Stop, by enhancing access to and delivery of geospatially referenced biological data, and support for

Recreation One-Stop, by providing access to museum collections data.

Strategic Management of Human Capital: The NBII Program Office within USGS uses a de-layered, matrixed structure that is totally aligned with the mission, goals, and objectives of the investment and the agency. This high-performing workforce has a diverse skill mix that covers all NBII management and operational requirements, and is the basis for NBII's performance-based, customer oriented culture. (See table in 1D for specific skills and experience.) In addition, the NBII is a federation of partners – more than 200 in all – that provides access to an enormous pool of expertise from which to draw to ensure that the right skills are applied to each activity. The entire partnership network is focused on the goal of using e-business technologies to ensure stakeholder participation designed to provide citizen governance as well as citizen access to NBII products and services.

Competitive Sourcing: All DOI bureaus are being reviewed for compliance with PMA Competitive Sourcing guidelines with the goals of meeting increasing demands for service in the face of flat budgets; ensuring the continued viability of an aging infrastructure in the face of a retiring workforce; and accelerating technological change. The NBII Program functions as a public-private partnership, working with organizations from all sectors. This ensures that skills and other resources required for each activity may be provided by the most appropriate source.

Improved Financial Performance: The NBII is a collaborative project that supports each of these goals by including human and other resources from multiple federal agencies, state, local, and tribal governments, as well as organizations from academia and the non-government and private sectors. To maximize the impact of its efforts, the NBII fully leverages the resources of partners wherever possible, to address such critical issues as invasive species and Chronic Wasting Disease.

In 2002, NBII leveraged contributions from partners at a ratio of 1:3 (one NBII dollar leveraged by the monetary or in-kind equivalent of three contributed dollars from partners.) It is anticipated that partner support will continue at this ratio. Partner contributions include:

- Personnel
- New technologies, models, and applications
- Metadata records prepared for legacy or new data
- Real property, space, equipment, and software

Budget and Performance Integration: The NBII is committed to serve the nation by providing reliable scientific information for many purposes, including efforts to manage biological and other natural resources. By performing this valuable function, the NBII helps the USGS to maximize the Nation's investment in science research and monitoring activities by leveraging Federal research dollars against those expended by other organizations in all sectors. This benefits everyone by avoiding costly duplicative data collection. The USGS Annual Performance Plan validates the necessity for the NBII's dual tasks of (1) providing a single point of access for USGS biological data and information, as well as (2) playing a leadership role in coordinating biological data and information from other organizations in order to provide a clearer picture of the Nation's biodiversity and natural resources. This validation is echoed in the words of the National Research Council, which described the USGS as a "vitaly important provider and coordinator of information related to critical issues in the natural sciences." Acceptance of this task has led the USGS to set for itself long-term and annual goals addressing the need for the organization of environmental and natural resource information, to be measured in terms of long-term data collection and management efforts toward maintaining, improving, and supporting large data infrastructures. In addition, the agency is committed to fostering partnerships with universities, states, and other organizations for the supply and analysis of this information. The NBII is such a partnership-based, collaborative infrastructure, and has fully complied with the strategic direction of the USGS of combining and enhancing diverse programs, capabilities, and talents, and increasing customer involvement to strengthen the Nation's scientific leadership and contribution to the resolution of complex issues. The NBII has achieved the Nation's strategic goals by successfully fostering many partnerships including ones with other federal agencies, state and local governments, universities, private industry, and non-government/non-profit organizations.

I.B.7 Agencies and organizations affected by this initiative:

The NBII is a multi-entity, multi-sector program coordinated by the U.S. Geological Survey. The NBII puts a premium on successful partnerships with other agencies and organizations with which we can share resources and expertise as well as leverage other ongoing activities. The agencies and organizations run the gamut and include partners in federal agencies, state agencies, international agencies, inter-agency groups, non-government/non-profit agencies, academic partners, and private industry. The following is a list of partners that demonstrates the types of partnerships pursued by this program. Many more such partnerships are being negotiated at the present time. Academy of Natural Sciences Agriculture and Agri-Food Canada American Institute of Biological Sciences (AIBS) American Museum of Natural History ANAI: Costa Rica Appalachian Trail Conference (ATC) Army Corps of Engineers (ACOF): Construction Engineering Research Laboratory Bayou Preservation Association (BPA) Big Sky Institute for Science and Natural History Biodiversity and Ecosystems Informatics Work Group (BioEco) BIOSIS Biota of North America Program (BONAP) The Bishop Museum Buffalo Bill Historical Center Bureau of Land Management (BLM) Burns Telecommunications Center (BTC) CALFED Bay-Delta Program CalFlora California Department of Food and Agriculture (CDFA) California Department of Forestry and Fire Prevention California Department of

Transportation (CalTrans) California Exotic Pest Plant Council (CalEPPC) California Environmental Resources Evaluation System (CERES) California Resources Agency (Legacy Program) Cambridge Scientific Abstracts (CSA) Canadian Association of Biosphere Reserves Canada/Mexico/U.S. Trilateral Committee for Wildlife and Ecosystem Conservation and Management Center for Environmental Management of Military Lands (CEMML) Center for International Earth Science Information Network (CIESIN) Center for Invasive Plant Management (CIPM) Center of Applied Biodiversity Science (CABS) Centers for Disease Control Chattanooga-Hamilton County Regional Planning Agency Clearinghouse Mechanism of the Convention on Biological Diversity Colorado Coalition: - Colorado State University - University of Colorado at Boulder - University of Colorado at Colorado Springs - University of Denver Colorado Natural Heritage Program Columbia River Research Laboratory Columbia University Earth Institute Comision Nacional para el Conocimiento y Uso de la Biodiversidad (CONABIO) Conservation Management Institute (CMI) Consortium for Conservation Medicine (CCM): - Harvard Medical School - Johns Hopkins School of Public Health - National Wildlife Health Center (NWHC) - Tufts School of Veterinary Medicine - Wildlife Trust Discover Life in America Draper Museum of Natural History Ducks Unlimited Eastern European Biosphere Reserves Ecological Society of America (ESA) Environment Canada: Environmental Monitoring and Assessment Network (EMAN) Environmental Protection Agency (EPA) Federal Geographic Data Committee (FGDC) Federal Highway Administration (FDA) FishBase Flora of North America (FNA) Flora of Texas Consortium Galveston Bay Estuary Program Gap Analysis Program (GAP) GeoMaxim Global Biodiversity Information Facility (GBIF) Global Forest Information Service (GFIS) Global Invasive Species Programme (GISP) Global Learning Observations of the Betterment of the Environment (GLOBE) Program Greater Yellowstone Coordinating Committee (GYCC) Hawaii Department of Land and Natural Resources Hemlock Woolly Adelgid (HWA) Strike Force Hiawatha Island Software LLC (HI Software) Home Engineering Services, Inc Information International Associates, Inc (IIA) Institute for Bird Populations (IBP) Institute of Museum and Library Services Integrated Taxonomic Information System (ITIS) Interagency Grizzly Bear Committee (IGBC) Inter-American Biodiversity Information Network (IABIN) International Association of Fish and Wildlife Agencies (IAFWA) Invasive Species Specialist Group (ISSG) IPIX Corporation Joint Ventures ad hoc Geospatial Data Working Group Lady Bird Johnson Wildflower Center Little Tennessee Watershed Association (LTWA) Long Term Ecological Research (LTER) Los Alamos National Laboratory Lula Lake Land Trust Mailman School of Public Health at Columbia University Maryland Ornithological Society (MOS) Michael Baker, Jr., Inc Meadowlands Environmental Research Institute (MERI) The Metropolitan East Coast Assessment Miistakis Institute (Yellowstone to Yukon) Montana State University Geographic Information and Analysis Center Missouri Botanical Garden (MOBOT) National Aeronautics and Space Administration (NASA): - Global Change Master Directory (GCMD) - Goddard Space Flight Center - GLOBE National Atlas of the United States National Center for Ecological Analysis and Synthesis (NCEAS) National Chronic Wasting Disease Management Plan Implementation Team National Institutes of Health National Military Fish and Wildlife Association (NMFWA) National Oceanographic and Atmospheric Administration (NOAA): - National Marine Fisheries Service - National Oceanographic Data Center National Park Service (NPS) National River Restoration Science Synthesis National Science Foundation (NSF) National Science and Technology Council National Wildlife Health Center (NWHC) Natural Resource Ecology Laboratory (NREL) Natural Resources Conservation Service National Science Collections (NSC) Alliance: - Taxonomic Resources Expertise Directory (TRED) - Directory of Research Systematics Collections National Spatial Data Infrastructure NatureServe New Jersey Department of Environmental Protection New Jersey Meadowlands Commission New Mexico State University: Laboratory for Environmental Spatial Analysis Nine Countries, One Vision (Environmental Preservation Task Force and Regional Coordinating Council) North American Biodiversity Information Network (NABIN) North Chickamauga Creek Conservancy (NCCC) Northern Arizona University (NAU) Northwest Alliance for Computational Science and Engineering (NACSE) Northwest Habitat Institute (NHI) Oak Ridge National Laboratory (ORNL) Oak Ridge Public Library Ocean Biodiversity Information System Organization of American States Organization of Fish and Wildlife Information Managers (OFWIM) Pacific Northwest Power Planning Council Pennsylvania Spatial Data Access (PASDA) Pennsylvania State University: Environmental Resources Research Institute Plumtree Point Reyes Bird Observatory (PRBO) The Polistes Foundation Profusion Regional Ecosystem Office (Portland, OR) Riverlink Rocky Mountains Cooperative Ecosystem Studies Unit (CESU) San Diego Supercomputer Center (SDSC) Sage Grouse Conservation Framework Team Science Applications International Corporation (SAIC) Smithsonian Institution: - Smithsonian Environmental Research Center - Smithsonian Man and the Biosphere Program (SIMAB) Sonoma (CA) Ecology Center: - Team Arundo del Norte (TadN) Southeastern Cooperative Wildlife Disease Study (SCWDS) Southern Appalachian Man and the Biosphere Program (SAMAB) Southwest Strategy (SWS) Tennessee Aquarium/ Tennessee Aquatic Research Institute (TARI) Tennessee Higher Education Authority Tennessee River Gorge Trust (TRGT) Tennessee Valley Authority (TVA) Tennessee Wildlife Resources Agency (TWRA) Texas A&M University: - Bioinformatics Working Group - Wildlife and Fisheries Science Department Texas Natural Resources Information System (TNRIN): - Texas Water Development Board (TWDB) Texas Parks and Wildlife Department (TXPWD) Texas Department of Transportation (TXDOT) Texas Forest Service The Nature Conservancy (TNC) Town of Walden, Tennessee United Nations Educational Scientific and Cultural Organization (UNESCO): Man and the Biosphere Program United States - Columbia Alliance University of California: - Cooperative Extension - UC Davis: Center for Image Processing and Intensive Computing (CIPIC), Center for Spatial Technology and Remote Sensing (CSTARS), Information Center for the Environment (ICE) - Riverside - White Mountain University of Georgia University of Hawaii: - Center for Conservation Research and Training - Hawaii Natural Heritage Program (HINHP) - Maui High Performance Supercomputing Center University of Kansas University of New Mexico: - Department of Biology, - Earth Data Analysis Center (EDAC), - Museum of Southwestern Biology University of Oklahoma University of the South University of Tennessee: Chattanooga and Knoxville University of Texas at Austin: Center for Space Research University of Wisconsin: Division of Information Technology University of Washington: - College of Forest Resources US Agency for International Development US Department of Agriculture (USDA): - ARS National Agricultural Library - USDA Forest Service - USDA Natural Resources Conservation Service (NRCS) US Department of Defense (DoD) US Department of Energy (DoE) US Fish

and Wildlife Service (USFWS) US Department of Homeland Security US Department of Transportation (DOT) US Geological Survey (USGS): · Appalachian Integrated Science Initiative · Biological Resources Division · Cartographic and Publishing Program · Center for Biological Informatics · Central Region Office for Biology · Center for Coastal and Regional Marine Studies · Colorado Plateau Field Station · EROS Data Center · Florida Caribbean Science Center · Forest and Rangeland Ecosystem Science Center · Fort Collins Science Center · GAP Analysis Program · Mid-continent Ecological Science Center · National Map · National Water Quality Assessment Program · National Wetlands Resource Center · Northern Appalachian Research Laboratory Northern Rocky Mountain Science Center · Pacific Island Ecosystems Research Center · Patuxent Wildlife Research Center · Rocky Mountain Science Center · Rocky Mountain Mapping Center · Southern Appalachian Field Laboratory · Southwest Biological Science Center · Upper Midwest Environmental Science Center · Water Resources Division · Western Regional Office US State Department Valles Caldera National Preserve Trust Virginia Department of Game and Inland Fisheries Western Association of Fish and Wildlife Agencies · Sage Grouse and Columbian Sharp-tailed Grouse Technical Committee White House Office of Science and Technology Policy Wildlife Information Network Wildlife Trust Wisconsin Department of Natural Resources Wisconsin Division of Public Health Wisconsin Veterinary Diagnostic Laboratory World Bank World Conservation Union (IUCN) · Invasive Species Specialist Group (ISSG) Wyoming Department of Game and Fish Yale University Occupational and Environmental Medicine Program

I.B.8 Investment cost reduction or efficiency improvement:

The NBII betters the return on investment of billions of dollars spent in the US each year on biological research and monitoring activities. Information on biological resources takes many forms and comes from many sources. Vast amounts of information have been collected by government agencies, scientists, and private organizations, including information on specimens gathered by early explorers of the United States (many of these specimens still exist today in natural history museums) to environmental data collected daily from Earth-orbiting satellites. This immensely valuable and varied information can be found in files, publications, and computers of government agencies and private organizations, and in universities, libraries, and museums around the nation. For decades, even though American taxpayers have invested considerable funds to support the collection of information on the nation's plants and animals, the citizenry has not enjoyed a solid return on its investment. Decision makers at all levels of the public and private sectors are often forced to make critical environmental judgments without the benefit of much existing information. This program helps to correct that problem.

Specific challenges in NBII's undertaking include: · Creating an infrastructure in which valuable legacy data, much of which now exists only in file cabinets, may be cost effectively digitized to facilitate sharing and use; · Identifying and acquiring critical natural resource data and information; · Keeping up with the ever-growing body of scientific knowledge; · Constantly rolling data and information formats forward to stay apace with new and emerging technologies; and · Discovering ways to enable users to meaningfully combine disparate data.

Integrating information from different sources may not be possible because the information was collected in different ways and according to different guidelines. Many of the individuals and agencies that could use this information to help address a multitude of issues often don't know it already exists. Unwittingly, they are still devoting substantial funds to information re-collection or make decisions without the benefit of available data. Much useful information, such as information on many museum biological specimens, is only available on paper and not in a computerized format. Thus, it is not easily accessible to anyone outside that institution. An example is information on most museum specimens or information from many local or state-level government agencies.

The NBII continues to make significant gains while addressing these challenges and others. Benefits to the government and the public of improving access to a broad array of biological information are considerable. There are many reasons why an investment in NBII will reduce costs and improve efficiencies. Some of these reasons include:

The value of existing data becomes exponentially greater than individual data sources used in isolation with the ongoing development of NBII standards and tools, which make it possible to integrate and compare two or more different data sources to answer a given question.

Cost savings to government agencies and to private industry will be maximized from not having to pay for the re-collection of biological information that already exists in hundreds of different state resource agency databases, in natural history museums, in libraries across North America, and from many federal agencies.

"Conservation vs. use" conflicts can be ameliorated if all the parties involved (public resource management agencies, private industry, and citizens) have full access to resources information in the early stages of decisions.

Educators and students at all levels need curricula and resources reflecting the latest scientific findings. The NBII investment envisions a day when students will be able to study specimens from natural history museums across the country without having to leave their classrooms, thus making education more efficient.

Finally, our citizens want, and deserve, easy access to information on the resources in their community, and their nation, to better understand and develop strategies for conserving the environment. The NBII Investment allows them to access this information from their own computers wherever they choose to do so.

I.9.a List all other assets that interface with this asset. N/A

I.9.b Have these assets been reengineered as part of this investment (Yes/No) No

Requested Investment Summary of Spending for Project Stages (\$Millions)

BY 2005 Planning Resources:	1.10
BY 2005 Acquisition Resources:	6.00
BY 2005 Maintenance Resources:	1.65
BY 2005 Total, All Stages Resources:	8.75
Life Cycle Total, All Stages Resources:	92.05

DOI BUDGET YEAR 2005 IT INVESTMENT OVERVIEW

Investment Identification

Agency: Department of the Interior
Bureau: U.S. Geological Survey
Location in Budget: Hydraulic Monitoring, Assessments and Research
Account Title: Surveys, Investigations, & Research
Account Identification Code: 010-12-14-0804-0
Program Activity: Water Resources Investigations
Name of Investment: [National Water Information System \(NWIS\)](#)
Unique Investment Identifier: 01012010501120700117056
(IT Only)(see section 53)

Investment Justification

I.A Investment Description: The U.S. Geological Survey (USGS) investigates the occurrence, quantity, quality, distribution, and movement of the surface and underground waters that constitute the Nation's water resources. The National Water Information System (NWIS) is both a work-flow application and a long-term database for national records of ground water quality and levels; surface water quality, flow, stage and discharge; and, therefore, must be managed and maintained as a national archive of data. USGS personnel in all 50 States, plus Puerto Rico and Guam use NWIS for the collection/acquisition, processing, review, storage and dissemination of data. Data quickly and easily available from NWIS are essential to the implementation and successful completion of a broad range of interpretive studies addressing ground-water, surface-water, water-quality, and water-use issues that are critical to USGS partners in local, state, tribal, and Federal government. For example, the hydrologic data stored and made available by NWIS are used not only for determining the adequacy of water supplies, but also for implementing flood-warning systems; designing dams, bridges, and flood control projects; allocating irrigation water; locating sources of pollution, planning for energy development; and investigating the contamination potential of water supplies due to natural and human influences. NWIS's real-time data processing features enables data transmitted via satellite or other telemetry to be processed, screened for outliers and made publicly available from the NWIS website 5-10 minutes after transmission.

NWIS is steady-state system with no expected ending date. NWIS should continue to undergo incremental transformation as new methodologies and instruments to investigate, capture and record hydrologic data are discovered and used. In an effort to keep risk low, remain within budget allocation, and more effectively respond to technology changes, the NWIS Project Office (with it's Executive Steering Committee) annually evaluates its business requirements and changing computer/software technologies, and then plans the delivery of software updates. Due to the past several years of level funding, the NWIS efforts have been restricted to modifications necessary to extend the useful life of the application software, provide effective information technology (IT) security, and maintain the integrity of the "archive" of water data and information.

From October 2000 through September 2001, an Operational Analysis Review was performed on the NWIS Project by a technical consulting firm, AMS, and reviewed by the USGS Water Resources Information Technology Advisory Committee and USGS Water Resources Senior Staff. As part of the Operational Analysis Review, AMS, interviewed the NWIS Project teams (NWIS leaders, developers and User Groups) and facilitated several workshops with the NWIS teams, senior managers and AMS technical specialist that produced the following reports/recommendations:

· NWIS Current State Assessment/Description, · NWIS Process Improvements and Recommendations, · NWIS Future Architecture Vision, · NWIS Future Architecture State (draft version 1.0), · NWIS Future Architecture Roadmap (draft)

The USGS Water Resources Information Technology Advisory Committee and USGS Water Resources Senior

Staff endorsed the NWIS Current State Assessment, Process Improvement/Recommendations and the Future Architecture Vision, and the highest priority Process Improvement Recommendation, the formation of the NWIS Executive Steering Committee (ESC). The NWIS ESC was chartered and had their first meeting and review in October 2001. Based on the Operation Analysis Recommendations, the NWIS ESC endorsed the decision to continue to provide support to maintain NWIS, to adjust resources and priorities in order to begin the recommended NWIS Process Improvement "Activities"; and to endeavor to determine when future architectural planning process could begin – starting with a wider review of the documents produced during the NWIS-AMS workshops and the sponsorship of some technology investigations. Prior to the 2002 fiscal year, NWIS did not have a management structure in place that could allow for the ability to increase resources to meet schedule demands or have the authority to alter the project schedule and prioritize competing user requirements. The NWIS Executive Steering Committee (ESC) was established to regularly review the NWIS Project to assess project progress and risks, and to adjust resources and priorities, or initiate remedial action if necessary. The NWIS ESC is also chartered to provide strategic direction and to champion NWIS. NWIS ESC performs formal quarterly reviews (minimum) of 2-3 days duration and monthly conference calls if needed (4 per year or more).

To date, the NWIS effort is on schedule and operating within the allocated budget. The NWIS Executive Steering Committee continues to perform regularly quarterly reviews and conference calls to monitor progress. If progress is not acceptable, resource re-allocation, priorities and timelines are adjusted, or remedial action is initiated. In addition to the ESC management oversight, the USGS Investment Review Board and enterprise architecture team will review the NWIS future architecture plans. As part of the NWIS future architecture strategy, NWIS will be working with the DOI CIO team to incorporate an E-Government Strategy Review. NWIS will also investigate the use of the Value Measuring Methodology, suggested by the Best Practices Committee of the OCIO.

I.B.1 Agency mission and strategic goals and objectives supported:

(Resource Protection, Resource Use, Recreation, Serving Communities, Management)

The continued support and enhancement of the National Water Information System (NWIS) will improve USGS performance in support of Serving Communities Outcome Goal 4.2 Advance Knowledge through Scientific Leadership and Inform Decision Making in the DOI Strategic Plan. User communities and stakeholders will have improved access and use of USGS hydrologic data. Enhancements to NWIS will increase the amount and type of water data and related metadata available to customers, including more information about the quality of the data (Goal 4.2, Strategy 1 Expand the Scientific Knowledge Base, Measure 1: Content and expanse of knowledge base; and Strategy 2 Enhance the Quality and Objectivity of DOI Science, Measure 1: % data validated through peer review or other method). Improvements made to the NWIS applications and interfaces to other agencies will increase customer satisfaction in the areas of ease, speed, and effectiveness of data access and data integration (Goal 4.2, Strategy 3 Lead and Facilitate Exchange and Use of Knowledge, all Measures: Exchange of Knowledge, Use of Knowledge, Ease of Exchange, Ease of Use, and Expand the Use of Technology in Decision Making).

NWIS data for the entire Nation is available to governmental agencies, resources managers, and the public via the World Wide Web (WWW) through the use of the NWISWeb application (<http://waterdata.usgs.gov/nwis/>). NWISWeb makes data that are collected in real time available to all within a few minutes or hours of collection (depending on telemetry transmission schedules). On a routine basis and during times of crisis, the public, resources managers, and emergency management agencies can now make critical decisions concerning lives and property based on real-time water information. The NWIS is a critical tool used to accomplish the Department's strategic goals. For example, NWIS "Serves Communities" as a vital information source for flood warnings, drought monitoring, and for water resource allocations for human and commercial uses and to protect aquatic life. Water managers monitoring hydroelectric power generation also rely on up-to-date river and reservoir information that NWIS/NWISWeb can provide them. As a reliable source for water quality and quantity information, NWIS contributes greatly to the goal of "Resource Protection". In support of the "Recreation" goal, NWISWeb allows recreationists, such as fisherman, canoers, and kayakers, to access real time stream flow and stream-quality information to ensure their safe and enjoyable recreational use of the water resources. Prior to traveling to a remote site for a river trip, a recreationist can easily check the height of the water, through NWISWeb, to determine if it is safe for their recreational activity.

I.B.2 President's Management Agenda strategic goals supported:

(Human Capital, Competitive Sourcing, Financial Performance, E-Government, Budget and Performance Integration)

NWIS also directly supports the electronic government component of the President's Management Agenda by enhancing the delivery of USGS hydrologic data and information to citizens by providing an efficient and easy-to-use portal called NWISWeb. The value of the NWIS's public website, NWISWeb, was recently demonstrated by being awarded a 2002 Grace Hopper Government Technology Leadership Award sponsored by GSA's Federal Technology Service and Government Executive Magazine. The USGS NWISWeb was awarded under the category of "Providing individuals and enterprises with access to useful government information".

The NWIS is a distributed network of computers, databases, and supporting software for the storage and retrieval of the water data collected at approximately 1.5 million sites around the country. Many types of water data are stored in the NWIS, including site information, time-series of flow, stage, precipitation, and chemistry, peak flow, ground water, water use, and water quality. As a long-term database and information delivery system, NWIS provides continual access to over a century of data on the water resources of the United States collected by the USGS and other agencies. Data quickly and easily available from NWIS are essential to the implementation and successful completion of a broad range of interpretive studies addressing ground-water, surface-water, water-quality, and water-use issues that are critical to USGS partners in local, state, tribal, and Federal government. NWIS data for the entire Nation is available to governmental agencies, resources managers, and the public via the World Wide Web (WWW) through the use of the NWISWeb application (<http://waterdata.usgs.gov/nwis/>). The NWISWeb makes data that are collected in real time available to all within a few minutes or hours of collection. On a routine basis and during times of crisis, the public, resources managers, and emergency management agencies can now make critical decisions concerning lives and property based on real-time water information. The NWIS (NWIS and NWISWeb) also promote an improved use of Human Capital by providing a standardized system for capturing, processing, storing and disseminating data to the WWW for a wide variety of government and private-sector users.

I.B.7 Agencies and organizations affected by this initiative:

Although the NWIS program does not receive direct funding from other federal agencies or organizations, many agencies and customers benefit and rely on NWIS to access the hydrologic data and information provided by the USGS. Below is a partial listing of agencies and organizations that benefit from the different data and information in NWIS.

State/Local Government Agencies

Fish & Wildlife Service

Bureau of Reclamation

Corps of Engineers

Chemical Companies

Dept. of Health and Human Services

EPA

National Park Service

Consulting Engineers (Civil)

News Media

Native American Tribes

Dept. of Agriculture

NOAA - National Weather Service and other offices involved in climate, general hydrology and coastal studies

Dept. of Energy

Institutions of Higher Learning and Schools

Bureau of Land Management

Congress

Dept. of Defense

Dept. of Transportation

FEMA

FERC

Foreign Nations (Data Exchange)

Industrial Corporations

Land Grant Colleges

Public Utilities, especially water resource managers (water treatment, supply and regulatory facilities)

Recreationalists (kayakers, hunters, etc.)

Value Added Data Resellers

Although the NWIS Investment is not a lead or managing partner, Recreation One-Stop, Geospatial One-Stop and the Disaster Management E-Gov initiatives provide linkages into NWISWeb web services for real-time streamflow and other types water data.

I.B.8 Investment cost reduction or efficiency improvement:

NWIS provides standardized software applications and database structure for hydrologic data and information collected, analyzed and disseminated throughout the USGS offices and external customers. This reduces the need to train users in multiple systems and the need to provide special interfaces to each USGS project and district hydrologic database. NWIS standardization allows for easy aggregation of hydrologic data for regional/spatial queries since the metadata are consistent across all NWIS databases. The consistency and standardization of NWIS and its development process ensures the effective implementation and monitoring of NWIS district operations, which is critical to providing real-time hydrologic data to the nation. Also due to the standardization of NWIS software and databases, NWIS has been able to provide the general public a geographically seamless WWW interface to USGS hydrologic data and information. This NWIS application/subsystem is called NWISWeb. As a result, cooperators, partners and the general public can obtain water data and information for the entire U.S. via the Internet without having to contact individual USGS offices. The standardization of the USGS data programs and the use of the data by other government agencies and cooperators prevents the need to duplicate a hydrologic staff in these agencies and assures that the collected data will be entered into a standardized national database so the information will be readily available to all potential users. The use of NWIS/NWISWeb has increased the collaboration with the USGS cooperators and Federal partners; this collaboration has provided for the sharing of new techniques and capabilities that enhance the use of the USGS resources. For example, in collaborating with the National Weather Service (NWS) on improving the NWIS reliability via redundant processing and web services, NWS should be able to more confidently rely on USGS real-time data and not have to invest in additional redundancy (This is only true for USGS real-time streamgage sites that NWS relies on). Also, the collaborative work with groups such as EPA's Window to My Environment (WME) developers and American White Water Association developers has provided the NWISWeb development team with useful technical information for improving performance. The maintenance and enhancement of NWIS will continue to: 1) Reduce cost of providing water data to the customers/stakeholders; 2) Increase amount/type of metadata managed by the NWIS including data archives; 3) Increase availability and usability of NWIS data improving the access through the world wide web (NWISWeb); 4) Leverage new technologies to improve data flow and business processes; and 5) Improve the reliability and security of the systems and databases

I.9.a List all other assets that interface with this asset.

There are no assets that interface directly to NWIS

I.9.b Have these assets been reengineered as part of this investment (Yes/No)

No

Requested Investment Summary of Spending for Project Stages (\$Millions)

BY 2005 Planning Resources:	.00
BY 2005 Acquisition Resources:	.00
BY 2005 Maintenance Resources:	7.10
BY 2005 Total, All Stages Resources:	7.10
Life Cycle Total, All Stages Resources:	114.92

DOI BUDGET YEAR 2005 IT INVESTMENT OVERVIEW

Investment Identification

Agency: Department of the Interior
Bureau: U.S. Geological Survey
Location in Budget: Cooperative Topographic Mapping, Land Remote Sensing and Geographic Analysis and Monitoring
Account Title: Surveys, Investigations and Research
Account Identification Code: 010-12-14-0804-0
Program Activity: Mapping, Remote Sensing &Geographic Investigations
Name of Investment: [The National Map Reengineering Project](#)
Unique Investment Identifier: (IT Only)(see section 53) 01012010501121000109026

Investment Justification

I.A Investment Description: Geographic information is an essential tool for land and natural resource management, economic and community development, and health and security services. A common set of current, accurate, and consistent basic information that describes the Earth's surface and locates features is the starting point for most geographic activities. The National Map will be a composite of continuously maintained basic geospatial data for the United States and its territories and will serve as the Nation's topographic map for the 21st Century. The National Map will be developed and operated through extensive, sustainable partnerships and business arrangements with other organizations. It will be a data foundation to which additional data, both public and private, would be tied. It will contain sufficient detail to support national, regional, and local activities. Guaranteed availability of The National Map will allow Federal agencies to concentrate on data unique to their mission needs and to avoid expending resources to find, develop, and integrate basic geospatial data each time they are needed. The proposal for The National Map Reengineering Project describes the plan to provide the information technology and infrastructure to implement the vision of The National Map in order to meet national needs for basic geospatial data.

Costs shown for FY04 through FY08 for initial implementation phase. In FY08 evaluation will be made and plans adjusted for next phase of project. Under USGS leadership, The National Map Reengineering Project will implement the capability to provide data that includes the following: High-resolution digital orthorectified imagery from aerial photographs or satellite imagery that will provide some of the feature information now symbolized on topographic maps. High-resolution surface elevation data including bathymetry to derive contours for primary series topographic maps and to support Earth surface modeling and the production of accurate orthorectified imagery. Vector feature data for hydrography (rivers and water bodies), transportation (roads, railways, and waterways), structures, government unit boundaries, and publicly-owned lands boundaries. Geographic names for physical and cultural features to support the U.S. Board on Geographic Names and other names such as for highways and streets. Land cover data that classify the land surface into categories such as open water and high-density residential. Information Technology that will support the archive, integration, and dissemination of the data. Under USGS leadership, The National Map Reengineering Project will implement the capability to provide services that include the following:

Changes affecting The National Map will be captured and integrated with existing data in a process of continuous update, rather than through cyclical inspection and revision. Currentness will be measured in days and months rather than years. Data will be seamless and consistently classified, enabling users to extract information for irregular geographic areas, such as counties or drainage basins, and to spatially analyze the information. Data resolution and completeness will vary depending on geographic area and need. For example, The National Map will contain higher resolution elevation data in areas of subtle relief variation, such as river flood plains, to support hydrographic modeling. Content will be mapped in its true geographic position. This will eliminate the offsets and feature generalizations that exist in data collected from existing maps. Positional accuracy will be sufficient to vertically and logically align features from different data themes. Thus,

river course will correspond to land surface slope, and boundaries will align with corresponding features, such as roads or rivers. The National Map will contain data for many areas that surpass the standards that have been applicable to primary series topographic maps. All content of The National Map will be documented by metadata that comply with Federal Geographic Data Committee Standards supporting the National Spatial Data Infrastructure.

The USGS will provide the national leadership to develop and maintain The National Map. This leadership includes being the (1) guarantor of national data completeness, consistency, and accuracy, (2) organizer responsibility for awareness, availability, and utility of The National Map, (3) catalyst and collaborator for creating and stimulating partnerships, (4) integrator and certifier of basic geospatial data from other participants, (5) owner and data producer of content for The National Map when no other suitable and verifiable source for those data exist, and (6) leader in the development and implementation of national geospatial data standards. The USGS will also ensure the quality of The National Map data through standards development, by devising and implementing quality assurance procedures, and by promoting process certification criteria for content providers.

The National Map Reengineering Project will support a two-pronged strategy for implementation of the vision that has been described using an analogy of a blanket and quilt in the National Research Council report Weaving A National Map (The National Academies Press, 2003). With this strategy, consistent National digital map datasets at one or more scales, including framework layers, will provide blanket coverage of the conterminous US. At the same time, through formation of essential partnerships with other Federal, state, local, and tribal governments, and non-governmental sources, patches of data at various scales can be made available. Eventually, the patches will be joined. The complexity of the interdependencies on this approach requires a rigorous reengineering effort. The goals described for this project are directly tied to and support the accomplishment of the long term goals in the FY 2004 PART analysis of The National Map and address requirements necessary to achieve the long term key performance measures.

This project has been reviewed and approved by the USGS Investment Review Board, the Department of the Interior IT Management Council, and the Department of the Interior Management Initiatives Team through the FY2005 CPIC process.

I.B.1 Agency mission and strategic goals and objectives supported:

The National Map Reengineering Project will improve USGS performance in support of the Serving Communities goal of the Department's Strategic Plan – Outcome Goal 4.2, Advance Knowledge through Scientific Leadership and Inform Decision Making. Communities and stakeholders will be able to access and use USGS data in combination with that of other organizations engaged in similar research and data collection efforts. This will result in a more targeted research focus and more efficient and effective natural resource decision and policy making due to instantaneous access to a broader scope of data and information. In addition, The National Map Reengineering Project will improve customer satisfaction through speed and ease of access (Strategy 1 Expand the Scientific Knowledge Base and Strategy 3 Lead and Facilitate Exchange and Use of Knowledge).

The USGS mission is to provide geospatial data and base topographic information to the Nation, including the needs of its own scientific programs and those of other Federal agencies, is consistent with the Office of Management and Budget Circular A-16, "Coordination of Surveying, Mapping, and Related Spatial Data Activities." The National Map operational precepts are consistent with the spirit of OMB Circular A-130, which requires Federal agencies to take the initiative to disseminate information, maximize its usefulness to the government and the public, and assist the public in locating government information.

I.B.2 President's Management Agenda strategic goals supported:

The National Map Reengineering Project directly supports the President's Management Agenda and Secretary's priorities for 1) science-based decision-making, by making available to scientists and the public, base data and information produced through partnerships with organizations in every sector; and 2) electronic government, by simplifying and enhancing the delivery of data, information, and tools to citizens consistent with the principles of Geospatial One-Stop. The USGS has been designated as the lead agency for three of the seven framework data themes for Geospatial One-Stop: digital orthophotography, elevation and hydrography. The National Map will be the vehicle for implementing the Geospatial One-Stop initiative for these three USGS-led framework themes. The geospatial data that is made available from The National Map also supports Recreation One-Stop, and Disaster Management E--Government Initiatives.

I.B.7 Agencies and organizations affected by this initiative:

The National Map Reengineering Project, while not technically a multi-agency initiative, is essentially a partnership-driven enterprise. The project is responding to the requirement to make a common set of basic spatial data from all levels of Federal, State, and local government available through a variety of partnerships. The USGS has been designated as the lead agency for three of the seven framework data themes (digital orthophotography, elevation and hydrography) for the Geospatial One-Stop E-Government initiative. The National Map will be the vehicle for implementing the Geospatial One-Stop initiative for these three USGS-led

framework themes. The National Map will also provide current, nationally consistent geographic base information for the Recreation One-Stop, and Disaster Management E-Government initiatives.

I.B.8 Investment efficiency improvement: The National Map Reengineering Project will provide improvements in the information infrastructure that will reduce costs of maintaining older technologies and enable sharing archive responsibilities with partners. It will also introduce efficiencies based on the greater capacity to manage the metadata and data holdings that are used and exchanged by customers and partners. The heavy emphasis on forming cooperative partnerships with other geospatial data producing organizations will result in greater availability of more current data than would be possible otherwise. The end result will be an overall lower average cost of data to customers as a whole, including Federal customers. The type of partnerships envisioned will also result in more efficient update of data because of the sharing of responsibilities.

I.9.a List all other assets that interface with this asset. The National Map interfaces with and contributes to the Geospatial One-Stop, Recreation One-Stop, and Disaster Management E-Government initiatives, which all represent the reengineering of major segments of the Federal Government business. The National Map Reengineering Project also interfaces with the USGS Landsat program, which is documented on a separate Exhibit 300. The Landsat program provides imagery for the digital orthoimagery layer of The National Map.

I.9.b Have these assets been reengineered as part of this investment (Yes/No) Yes

Requested Investment Summary of Spending for Project Stages (\$Millions)

BY 2005 Planning Resources:	1.38
BY 2005 Acquisition Resources:	11.32
BY 2005 Maintenance Resources:	8.48
BY 2005 Total, All Stages Resources:	21.18
Life Cycle Total, All Stages Resources:	105.75

DOI BUDGET YEAR 2005 IT INVESTMENT OVERVIEW

Investment Identification

Agency: Department of the Interior
Bureau: U.S. Geological Survey
Location in Budget: Land Remote Sensing, Cooperative Topographic Mapping, and Geographic Analysis and Monitoring
Account Title: Surveys, Investigations, and Research
Account Identification Code: 010-12-14-0804-0
Program Activity: Mapping, Remote Sensing & Geographic Investigations
Name of Investment: [The Landsat Project](#)
Unique Investment Identifier: 01012010501121100108023
(IT Only)(see section 53)

Investment Justification

I.A Investment Description: A common set of current, accurate, and consistent data depicting the Earth's surface and revealing its features is basic to most geographic activities. Image data from satellites, such as the Landsat series, are one of the most efficient, cost-effective sources of essential information for the scientific and operational land and resource management communities. The Landsat Project includes Landsats 5 and 7. Since the program's inception in the late 1960's, the U. S. Government has repeatedly evaluated and approved the concept of a Landsat system for the Nation and repeatedly hoped that the private sector will emerge as a substantial investor in such a system. Two things have remained constant across the years: the Government continues to be the primary user and investor in Landsat and the private sector is yet to share the burden. For additional information on the Landsat Project see <http://landsat7.usgs.gov/>.

This investment has been reviewed and approved by the USGS Investment Review Board and by the Department of the Interior (DOI) IT Management Council and the DOI Management Initiatives Team.

I.B.1 Agency mission and strategic goals and objectives supported: The mission of the USGS is to serve the Nation by providing reliable scientific information to:

- describe and understand the Earth,
- minimize loss of life and property from natural disasters,
- manage water, biological, energy and mineral resources, and
- enhance and protect our quality of life.

Remote sensing data and products from current missions, such as Landsat 7, improve the Department of the Interior's (DOI) ability to manage the Nation's public lands using new sources of Earth science information and support all of the USGS mission objectives. These data contribute to the USGS mission goals to provide science for a changing world in response to present and anticipated needs; to predict and monitor hazardous events in near-real and real time; to conduct risk assessments to mitigate loss (Hazards); and to expand our understanding of environment and natural resource issues on regional, national, and global scales and enhance predictive/forecast modeling capabilities (Environment and Natural Resources). The USGS has a vested interest in the Nation's civilian satellite remote sensing program and is a member of the international

community, Committee on Earth Observation Satellites (CEOS).

The Landsat Project will improve USGS performance in support of the Serving Communities goal of the Department's Strategic Plan – Outcome Goal 4.2, Advance Knowledge through Scientific Leadership and Inform Decision Making. Communities and stakeholders will be able to access and use Landsat data in combination with data from other organizations engaged in similar research and data collection efforts. This will result in a more targeted research focus and more efficient and effective natural resource decision and policy making.

The USGS mission to provide geospatial data and base topographic information to the Nation, including the needs of its own scientific programs and those of other Federal agencies, is consistent with the Office of Management and Budget Circular A-16, "Coordination of Surveying, Mapping, and Related Spatial Data Activities." The Landsat Project directly contributes to the digital ortho imagery and Earth cover data themes.

The Landsat Project also supports the mission and strategic goals of the USGS Geography Program by acquiring, processing, archiving, managing, and disseminating land remote sensing data of the Earth. Specifically, Goal 13 identifies Geography as a center of excellence for archiving, preserving, and processing land remote sensing and other geospatial data, and it expands Geography's role in the management and implementation of land remote sensing satellites, including operational activities. Landsat data will support essential science activities such as The National Map.

The Landsat Project supports the USGS's Land Remote Sensing (LRS) Program 5-year program plan. The LRS Program strives to "...provide and encourage the use of historical, current, and future remotely sensed data and derived scientific information to facilitate monitoring, scientific description, and understanding of the Earth and its natural and man-induced processes..." The LRS Program goals are to: (1). Define and direct the acquisition of regional and global remotely sensed data sets from Government, commercial, and international sources. (2). Ensure the preservation of and access to all of the Nation's remotely sensed data assets through the National Satellite Land Remote Sensing Data Archive (NSLRSDA).

I.B.2 President's Management Agenda strategic goals supported:

The Landsat Project directly supports the E-Government component of the President's Management Agenda by greatly increasing citizen access to key satellite data assets of the Nation. Electronic cataloging provides rapid access to coverage information (see <http://earthexplorer.usgs.gov>). Digital browse images of acquired scenes are posted within 24 hours of acquisition and users are able to download them without cost (see <http://glovis.usgs.gov>). Processing and distribution costs for full data are based on cost of reproduction; hence, the relatively low cost of data make the imagery more widely accessible. The Landsat Project is the primary source of key geographic base data for E-Government initiatives in Geospatial One-Stop and Disaster Assistance and Crisis Response.

The Landsat Project represents the same approach to public data as the priorities listed in the President's Management Agenda. Science based decision making is citizen centered. The low cost of Landsat data, as well as the elimination of copyright, have fostered an environment in which users are free to experiment with novel applications, use large quantities of data for existing applications, and openly share their results without fear of violating licensing agreements. The Program is designed for access and responsiveness to the needs of the global user community. Advisory groups, Federal agency partnerships and the strong constituency represented by the commercial Business Partners offer regular direction on how to make the data more accessible and useful.

In addition, Competitive Sourcing is used for 95% of the Landsat flight and ground system operations, including the archiving, processing and distribution components.

The result of careful, deliberate planning, based on citizen access, has been an expanded level of interest in, use of, and support for the Landsat Project.

I.B.7 Agencies and organizations affected by this initiative:

Landsat data are used by E-Government initiatives for Geospatial One-Stop and Disaster Assistance and Crisis Response.

Landsat observations fill an important niche for the science community between the highly-repetitive but coarse spatial resolution observations from the NOAA AVHRR, NASA EOS MODIS, and French VEGETATION instruments and the high-resolution, local observatories from the Space Imaging Corporation IKONOS instrument and the Digital Globe QuickBird instrument. Landsat provides systematic global coverage at a frequency sufficient to capture seasonal variations and at a spatial resolution where land cover dynamics, under the influence of natural processes and human activities, are clearly evident.

A Landsat Coordinating Group (LCG) of senior-level managers at NASA and the USGS has managed the

Landsat Project for over 15 years. Although this has been a NASA/USGS effort, the Landsat Project is responding to the requirement to make Landsat data available to all levels of Federal, State, and local government.

I.B.8 Investment cost reduction or efficiency improvement: The Landsat Program provides an essential data set that supports the science and operational activities of many Federal, State, and local agencies, and other users of moderate-resolution satellite data. Making Landsat data available at a low cost to any user with an open redistribution policy will provide a key data set and subsequent information that will impact decisions and policies on how our resources are managed. These data will be used by the Landsat user community in such areas as global crop monitoring and yield prediction, forest vitality and deforestation monitoring, international mapping and land-surface analysis, flood measurement and monitoring, coastal environmental assessment and monitoring, and global famine detection and warning promoting better decisions to be reached at lower costs.

I.9.a List all other assets that interface with this asset. The Landsat Project interfaces and provides essential data layers to The National Map. The Landsat program interfaces with The National Map Reengineering Project, which is documented on a separate Exhibit 300.

I.9.b Have these assets been reengineered as part of this investment (Yes/No) No

Requested Investment Summary of Spending for Project Stages (\$Millions)

BY 2005 Planning Resources:	1.14
BY 2005 Acquisition Resources:	.40
BY 2005 Maintenance Resources:	10.30
BY 2005 Total, All Stages Resources:	11.84
Life Cycle Total, All Stages Resources:	85.56

DOI BUDGET YEAR 2005 IT INVESTMENT OVERVIEW

Investment Identification

Agency: Department of the Interior
Bureau: U.S. Fish and Wildlife Service
Location in Budget: Federal Aid in Sport Fish
Account Title: Summary of IT Investments
Account Identification Code: 010-18-14-8151-0
Program Activity: Federal Aid Programs
Name of Investment: [Federal Aid Information Management System \(FAIMS\)](#)
Unique Investment Identifier: 01018040001181800207088
(IT Only)(see section 53)

Investment Justification

I.A Investment Description: To continue basic operations support of FAIMS and the end users through FY 2005 and beyond. Complete development of an electronic interface with FFS for the purpose of receiving grant program budget authority electronically from FFS into FAIMS. This will establish funding controls levels for the various grant programs in FAIMS.

Develop basic infrastructure to receive grant packages electronically from grantees. Will require close coordination with Department and other government-wide initiatives.

I.B.1 Agency mission and strategic goals and objectives supported: This investment allows the Service to accomplish its fiduciary responsibilities related to the grant management programs it is responsible for and improves the business operations and internal and external accountability of these grant programs. More specifically this investment relates directly to the Service Long-term goal 4.2 From 2001 through 2005, the service will improve grants management through automation for 80% of the States' and territories' grant proposals.

FAIMS contributes to the following Departmental goals:

Goal #1. Protect the environment and preserve our nation's natural and cultural resources. Goal #2. Provide recreation for America. Goal #3. Manage natural resources for a healthy environment and strong economy. Goal #6. Manage for Excellence and Accountability.

FAIMS is a key contributor to two expressed focus areas of goal #6 Use of information technology (IT) to better manage resources and serve the public, and, Ensure financial and managerial accountability.

I.B.2 President's Management Agenda strategic goals supported: FAIMS supports the President's Management Agenda of improved financial performance and expanded electronic government by providing: Tracking of grant information and funds. Accountability of grant information and funds. Electronic transfers of funds to grantees. Reporting of financial and performance information related to grants. Increased communication of grant information between grantees, state organization and the public. Reduced costs for managing grants. A common repository of Bureau grant information. Provide the public with grant information.

I.B.7 Agencies and organizations affected by this initiative:

N/A

I.B.8 Investment cost reduction or efficiency improvement:

This investment will allow the Service to manage all grants through the same system and provide standardization and uniformity in grant management practices and accountability. It will also provide the framework for supporting and implementing Electronic grant management consistent with Departmental and government-wide efforts.

I.9.a List all other assets that interface with this asset.

Health and Human Services Payment Management System Federal Financial System Neither of these systems have been reengineered as part of this Project. In the future, there will also be an interface with the Grants.gov initiative.

I.9.b Have these assets been reengineered as part of this investment (Yes/No)

No

Requested Investment Summary of Spending for Project Stages (\$Millions)

BY 2005 Planning Resources:	.10
BY 2005 Acquisition Resources:	.70
BY 2005 Maintenance Resources:	1.10
BY 2005 Total, All Stages Resources:	1.90
Life Cycle Total, All Stages Resources:	23.70

DOI BUDGET YEAR 2005 IT INVESTMENT OVERVIEW

Investment Identification

Agency: Department of the Interior
Bureau: National Park Service
Location in Budget: Summary of IT Investments
Account Title: Operation of the National Park System (ONPS)
Account Identification Code: 010-24-14-1036-0
Program Activity: Budget Formulation WASO, Program, Region and Park
Name of Investment: [Project Management Information System/Operations Formulation System \(PMIS/OFS\)](#)
Unique Investment Identifier: 01024010101240500402125
(IT Only)(see section 53)

Investment Justification

I.A Investment Description: System Overview PMIS/OFS is the official budget formulation system of the National Park Service used by all organizations Servicewide to identify unfunded, recurring and non-recurring budgetary requirements. Although PMIS/OFS is comprised of two separate systems, they are conceptually managed as one and together comprise the entire scope of data necessary to formulate all required budget submissions for the National Park Service. PMIS contains project requests that serve as the backup detail for individual budget requests identified in OFS. PMIS/OFS is a Servicewide, Intranet based application used to allow easy identification, review, formulation, and presentation of the NPS budget request. This tool allows NPS park units and offices to submit proposals for funding using a single centralized system and is the mechanism by which requests are reviewed, approved, and prioritized at the park, Region, and Servicewide level.

PMIS and OFS are dynamic databases. Users are encouraged to enter their program needs into PMIS and OFS at any time throughout the year. In response to the annual Servicewide Comprehensive Budget Call (SCC), parksacting within the parameters of guidance received from DOI and NPS senior leadership, as well as regional and program managers ensure the most recent requirements are identified. Existing requests within these databases are reviewed and refined as needed and invalid entries are purged from PMIS and OFS. The SCC is traditionally issued in November, with the all data entry and actions to be completed by the following March.

Prior to the due date of the SCC, projects in PMIS are identified, reviewed, and evaluated against specific criteria, before being prioritized and approved for consideration by NPS program managers and later formulated by funding source. At the same time, requests in OFS are identified, reviewed, evaluated within the context of stated areas of emphasis, prioritized, and approved for consideration by NPS senior leadership for inclusion in the annual budget request. The prioritization of requests in both PMIS and OFS are done within the context of a five-year time period. The system also provides a mechanism for tracking progress of funded requests and includes project completion data functionality. A limited amount of historical information on funded requests is stored in these systems (OFS from FY 1994 and PMIS from FY 1999). Most importantly, however, the information contained in the system serves as the sole source for formulating the three formal NPS budget requests each year (to the Department, OMB, and Congress). Information is taken directly from the database and used in the budget submissions. In addition, information contained in the database is used to provide the official NPS response to all internal and external inquiries about unfunded budgetary needs and the strategy for addressing those needs.

Historical Overview of System Development Efforts Since NPS considers individual project needs and overall budget needs separately, PMIS and OFS were developed on different tracks. Only after both were developed

as web-based, interactive databases were they combined into one system application.

PMIS grew out of the need to identify deferred maintenance projects so the backlog of these projects could be quantified and progress against reducing this backlog monitored and reported. The NPS has been criticized by both the Executive Branch and Congress for its inability to quantify such a universe and report on completed projects. This administrative deficiency was cited as the rationale for not providing additional funds to address this specific requirement. Prior to the inception of PMIS, each budget exercise retraced the same steps in compiling manually this requested information. Data, when available, was based on individual spreadsheets and word processing files prepared by individual offices. This approach was tremendously inefficient, inconsistent, and time-consuming and repeatedly resulted in the failure to obtain additional funding allowances. A particularly ineffectual NPS response to a December 1997 data call for maintenance projects led NPS Deputy Director Denis Galvin and Comptroller Bruce Sheaffer to convene a group in March 1998 to examine the feasibility of having a common system for managing backlogged projects.

This group, later named the PMIS Task Force, was charged with making recommendations, which would allow the NPS to respond more successfully to any future requests similar to the December 1997 exercise. The PMIS Task Force was comprised of representatives from all disciplines within the NPS, including Budget, Administration, Park Operations, Facilities Management, Natural Resources, Cultural Resources, Professional Services, Strategic Planning, and Information Management. Additionally, these representatives were drawn from all levels of the NPS, to include parks, regional offices, and headquarters. In order to meet the deadline for the upcoming call for park needs, the PMIS Task Force was required to design, develop, test, and implement an automated system within a three to four month period.

During the discussion of system design alternatives, the group examined the feasibility of using a Commercial Off-the-Shelf (COTS) product called Future Projects. At the time, the Park Facility Management Division of the NPS was also considering using Future Projects as a means to resolve their automation needs. Upon the conclusion of the alternatives analysis, the integrated project team rejected the Future Projects proposal due to time constraints (extensive software modification through a lengthy service contract), software limitations (it was not web-based nor interactive), and the desire of management to establish one system for ALL projects under consideration for funding by the NPS. As a result, the integrated project team recommended the NPS develop a web-enabled, Cold Fusion and MS-SQL based system in-house to not only accommodate the current requirements, but also the future vision of the NPS. This approach was approved by the Deputy Director and the Comptroller in April 1998.

The integrated project team provided the Information Technology Center (ITC) with a preliminary functional requirement deliverable document in May 1998. The actual computer code for PMIS was developed in-house by an NPS ITC employee and two college interns during the summer of 1998. The functional requirement document was revised on the fly by the integrated project team members who worked with ITC to complete the development of the system within the limited time available.

Since 1998, approximately four version upgrades of PMIS have been released. Most notably, in Version 3.0 the database portion of PMIS was upgraded to Oracle. These versions have enabled system stakeholders to meet long and short term vision goals. This vision of PMIS is centered upon the design, development, and maintenance of a single consolidated system used to justify, prioritize, and approve requests for all needs, regardless of fund source. It further seeks to become the most cost-effective integrated enterprise system in the NPS carrying out these functions. While the system currently meets the needs of its users, stakeholders continually seek to improve PMIS by examining means to streamline system functionality and components in order to align with the President's results-oriented Management Agenda.

OFS is the end result of a 19 year effort to fully automate the budget formulation process for the National Park Service. In 1984, a prototype system was developed in-house using dBaseIII, a PC-based (DOS) database application software package. Database templates were completed by budget analysts in the field, stored on disks, and mailed to the NPS Headquarters Budget Formulation branch. In the early 1990's, the system was enhanced with addition of fields and email transmission functionality.

After the implementation of PMIS was complete, members of the Budget Formulation Division turned their attention to examining the overall process of budget formulation. Since PMIS only handled the non-recurring project side of the budget formulation process, the need to automate the overall process remained unaddressed. The successful implementation of PMIS convinced NPS leadership to implement a general system, later referred to as OFS, based on the PMIS model to address these remaining needs. The Budget Office prepared a functional document outlining the system requirements for the proposed system with the assistance of a summer intern. The Chief of Budget Formulation, who is responsible for analyzing budget needs as well as formulating and preparing the NPS annual budget justification, together with one ITC employee developed the code for OFS from October 1998 to April 1999. OFS Version 1.0 was released for use in the formulation of the FY 2001 budget request. Currently OFS is operating in Version 2.0. The migration from version 1.0 to 2.0 improved system performance, enhanced existing search capabilities, and added a reporting module. These changes, along with those planned and currently in development, will assist the NPS in ensuring OFS continues to operate as a best in breed application.

CPIC Reviews PMIS and OFS are currently classified as mixed life cycle projects. Although the initial system development for PMIS and OFS is complete hence their alignment as Steady State phase projects under DOI's Capital Planning and Investment Control (CPIC) lifecycle the future incremental funding of planned enhancements changes its classification designation. A formal CPIC review of PMIS has not been completed to date since the system predates the review process.

To date, no other reviews of PMIS have been scheduled by the NPS or Department of Interior (DOI). To supplement this gap, a formal PMIS Task Force, comprised of Steering Committee and User Group members, assesses PMIS' continued effectiveness in supporting mission requirements, assesses potential life cycle improvement opportunities, and considers retirement or replacement options on a quarterly basis. Additionally, in 2002 the NPS Information Technology Investment Council (ITIC) was formed. To date, they have formally reviewed several large planned and existing IT projects. The ITIC conducted a formal review of PMIS and OFS on 4/22/2003. The approach and continued operation of PMIS and OFS was approved by the ITIC for FY 2005.

I.B.1 Agency mission and strategic goals and objectives supported:

The mission of the US Department of Interior is to protect and provide access to, and information about, our nation's natural resources, natural heritage, and cultural heritage. OFS and PMIS support Secretary Norton's strategic goal of Management through the NPS mission goal of Operational Effectiveness since PMIS and OFS are the primary systems used to develop, prioritize, and manage the NPS's annual budget submission to the Department, OMB, and Congress. Additionally, NPS has embraced the President's Management Agenda under its focus on "managing for results." Under the guidance of Director Mainella, all managers in Washington, regional offices, and parks are implementing management reform concepts already in use within other government agencies. During this implementation the NPS is aligning all of its programs to support the President's Management Agenda and the Department of Interior's Strategic Plan. Specifically, Secretary Norton's global vision for citizen-centered management excellence is reflected, in tangible terms, in the FY 2004 budget request. These functions with PMIS and OFS also support the Federal Business Architecture Support Delivery of Services line of business as a sub-function of Planning and Resource Allocation in order to improve Budget Formulation, Capital Planning, Strategic Planning, and Project Planning.

The NPS is in the process of implementing state-of-the-art business management practices Servicewide. Under this initiative Director Mainella has led the NPS towards the goal of developing a comprehensive inventory of all NPS assets. Leveraging industry wide standard asset management practices and cutting edge software tools, employees are now better able to properly identify, maintain, and repair the continually expanding portfolio of assets under the care of NPS. OFS and PMIS are the result of a re-engineering initiative to integrate disparate business processes to provide a centralized comprehensive inventory of park and program needs. Needs are entered into OFS and PMIS throughout the year and prioritized based on mission goals and organizational initiatives with embedded processes for approval at appropriate organizational levels.

Information in PMIS and OFS is also evaluated and coded to indicate priority in relationship with the NPS's annual strategic plan. This ensures high priority objectives receive priority for funding. The resulting prioritized information is then used for project justifications, five year reports, and budget formulation. As a result, both PMIS and OFS support all of NPS's strategic goals and objectives. PMIS and OFS also provide the Nation Park Service with a means of tracking current and justifying future appropriations. Specifically, PMIS and OFS are two systems being leveraged in order to increase program effectiveness and accountability for two key areas: the deferred maintenance backlog and management of assets. According to a recent memorandum issued by Director Mainella, since FY 2002 nearly \$2.9 billion has been provided to address the original \$4.9 billion deferred maintenance backlog. While the NPS is on target to meet or exceed its goal of eliminating this backlog by FY 2006, a secondary focus of changing the fundamental ways in which we manage our assets is being implemented to prevent the further occurrence of a backlog in the future.

I.B.2 President's Management Agenda strategic goals supported:

The National Park Service is committed to improving performance by implementing the President's Management Agenda. In an April 2003 message to NPS employees, Director Mainella noted the importance this initiative plays to all of us as stewards of our national treasures. Specifically, her message highlighted the importance of management accountability, use of performance measures, and a focus on strategically targeting and prioritizing funding to support our greatest needs.

The President's Management Agenda focuses on fourteen areas of improvement targeted to address the most apparent deficiencies within Government. These areas of improvement are organized into either government-wide initiatives or program initiatives. The areas within the government-wide initiatives include the following: Strategic Management of Human Capital, Competitive Sourcing, Improved Financial Performance, Expanded Electronic Government, and Budget and Performance Integration. Areas within the President's Program Initiatives include: Faith-Based and Community Initiatives, Privatization of Military Housing, Better R&D Investment Criteria, Elimination of Fraud and Error in Student Aid Programs and Deficiencies in Financial Management, Management and Performance, Broadened Health Insurance Coverage Through State Initiatives, A Right-Sized Overseas Presence, Reform of Food Aid Programs, and Coordination of VA and

DoD Programs and Systems. None of these agency-specific program initiatives apply to the Department of Interior, and thus the National Park Service.

PMIS and OFS directly support numerous strategic goals outlined in the government-wide initiatives area of the President's Management Agenda. Both systems satisfy the goal of Strategic Management of Human Capital by providing a means of integrating budget and performance through a comprehensive approach to budget formulation. PMIS and OFS provide the key information and metrics needed by management throughout NPS in order to justify and make decisions about current and future funding needs. These tools reduce the time it takes to make decisions and thereby maximizing NPS's flexibility in getting the job done effectively and efficiently.

In the President's Management Objective, Secretary of the Treasury Paul O'Neill states, accurate and timely information to manage your financial program activities on a day-to-day basis are part of a core value set that world class organizations have adopted. This sentiment is further emphasized in the President's Management Agenda under the Improved Financial Performance area. PMIS and OFS assist the NPS in remaining accountable to internal and external entities, such as DOI, OMB, and Congress, regarding the use of appropriated funds. The web-based reporting tools within PMIS and OFS provide management with a basic understanding of current and future needs. The PMIS project team continues to strive for excellence in this area through the implementation of functionality which will integrate financial and performance information and measurements from other Servicewide applications, such as FMSS, OFS, AFSIII, and RAMS, to provide users and management with a centralized repository for metrics of past, current, and future funding. In turn, this practice will produce information that is timely, to measure and effect performance immediately; useful, to make more informed operational and investing decisions; and reliable, to ensure consistent and comparable trend analysis over time and to facilitate better performance measurements and decision making.

Improvements in the Management of Human Capital and Improved Financial Performance will matter little if they are not linked to better results. In 1993, Congress enacted the Government Performance and Results Act (GPRA) to get the federal government to focus federal programs on performance. According to the Budget and Performance Integration section of the President's Management Agenda, progress toward the use of performance information for program management has been discouraging. Most managers do not have access to timely and complete information in order to monitor, manage, and measure their results. Additionally, the inherent structure of the federal budget makes identifying the cost of individual programs difficult for managers. PMIS and OFS force users to identify the performance factors satisfied from the time a project need is initially entered. Access to this information from a centralized location provides project managers within OFS and PMIS with the ability to better justify priorities when distributing appropriated funds. In the future, program managers will have the ability to track the performance of in progress projects through viewing their accomplishments at predetermined milestones. Efforts of this caliber will assist NPS in standardizing integrated budgeting, performance, and account information systems at the program level to provide timely feedback for management. A secondary long term benefit of this effort will allow managers to upload financials for consolidation at the agency and government levels.

I.B.7 Agencies and organizations affected by this initiative:

PMIS and OFS were not developed as, nor are they currently a part of, any multi-agency initiatives. Therefore, there are no agencies or organizations impacted by the creation, development, or modification of these systems.

I.B.8 Investment cost reduction or efficiency improvement:

PMIS and OFS seamlessly automate components of the budget formulation process which require coordination among and input from individuals and organizations in both remote and centralized locations. Both systems currently accommodate a number of complex processes to include current year and five year planning, reporting and prioritization of needs across nearly 400 field locations, review and approval of park needs at the regional level, and culminate in an auditable set of records that clearly link financial resources to accomplishments and performance measures. Prior to the development of these systems, both individual parks and programs submitted budget information to WASO with little regard to standardizing information or procedures. These groups operated as independent silos creating decentralized thought processes which utilized manual systems and methods in the storage of information. With the creation and implementation of PMIS and OFS, the NPS has been able to standardize the process of budget formulation to expedite decisions, accelerate response times, eliminate manual information gathering and analytical processes, track progress, monitor performance, and eliminate the entry of redundant information across systems. The SCC is used in conjunction with PMIS and OFS as a formalized process to transmit policy guidance, signal the start of the budget formulation process for the BY+1 timeframe, and provide individuals with an opportunity to verify the accuracy of system information. Issued guidance also helps to standardize the types of information entered into PMIS and OFS, thus safeguarding their database integrity.

I.9.a List all other assets that interface

. GPRA goal information from PMDS and account information from AFSIII are currently used in PMIS and OFS. However, no formal interfaces between PMIS or OFS and other Servicewide applications currently exist. By the end of FY 2003 it is anticipated that three systems, RAMS, AFSIII, and FMSS, will interface with PMIS.

with this asset. These interfaces will allow PMIS to receive information from other Servicewide applications and reduce the amount of redundant information entered into PMIS. Starting in FY 2004, discussions on formal interfaces between OFS-PMIS and OFS-RAMS are planned in order to continue linking information between systems within the NPS network and enterprise architecture of the Department of Interior.

I.9.b Have these assets been reengineered as part of this investment (Yes/No) No

Requested Investment Summary of Spending for Project Stages (\$Millions)

BY 2005 Planning Resources:	.00
BY 2005 Acquisition Resources:	.17
BY 2005 Maintenance Resources:	1.07
BY 2005 Total, All Stages Resources:	1.24
Life Cycle Total, All Stages Resources:	10.43

DOI BUDGET YEAR 2005 IT INVESTMENT OVERVIEW

Investment Identification

Agency: Department of the Interior
Bureau: Bureau of Indian Affairs
Location in Budget: Summary of IT Investments
Account Title: Operation of Indian Programs
Account Identification Code: 010-76-14-2100-0
Program Activity: Information Resource Technology
Name of Investment: [TrustNet](#)
Unique Investment Identifier: 01076020003200400404139
(IT Only)(see section [53](#))

Investment Justification

I.A Investment Description: The purpose of TrustNet is to transition the BIANET to a standards-based network backbone that leverages existing networks, platforms, and computing environments to provide secure, timely, and controlled access to trust data. TrustNet will support DOI, its bureaus and offices, and systems that process trust data to uphold DOI trust responsibilities to Native Americans and Alaska Natives and ensure the confidentiality, integrity, availability, and accountability of trust data. TrustNet supports the Department's and its bureaus' and offices' strategic goal of fulfilling their trust responsibilities.

To achieve the network transition, TrustNet must be secured in accordance with the provisions of OMB Circular A-130, Appendix III, and certified and accredited in compliance with National Institute of Standards and Technology (NIST) IT security standards.

TrustNet will provide the BIA and DOI communities with a secure, reliable network capable of properly safeguarding trust assets. This network will provide the security and reliability that is lacking in the current environment. TrustNet is a work in progress and uses a multiphase approach that evolves as new requirements arise.

It is essential that BIA provide secure communication with its tribal contractors and tribal governments in order to comply with the court ordered preliminary injunction. TrustNet is the conduit to establish direct, secure communications with the Individual Tribes and individual Indian account holders.

TrustNet supports the DOI Active Directory initiative providing communications, hardware, and software. BIA Active Directory is the core of the TrustNet security model. The BIA Active Directory provides a common Network Operating environment to foster consolidation of network file and print servers.

The majority of the Local Area Networks (LANs) within BIA are wired using outdated or substandard cable and the hubs and switches have exceeded their life expectancy. Thus, security risks are greatly elevated and cannot be properly mitigated until the cable, hubs and switches are replaced.

To improve security and ensure compliance with OMB Circular A-130, email, server consolidation, increase network bandwidth, and increased tape backup is required. Additional high volume servers are required for the consolidation.

TrustNet is in the Control Phase of the DOI CPIC. Through comprehensive business and investment

analyses the Department provided funding and guidance for TrustNet. The Department sponsored executive decision-making bodies reviewed and approved TrustNet as the best support for the mission of the Bureau of Indian Affairs, DOI's Strategic Plan, and BIA customers.

I.B.1 Agency mission and strategic goals and objectives supported:

This investment supports DOI Strategic Goal #4, Safeguard property and financial assets, advance scientific knowledge, and improve the quality of life for communities we serve; and DOI Strategic Goal #5, Manage the Department to be highly skilled, accountable, modern, functionally integrated, citizen-centered, and results oriented.

The enactment of GPRA has focused BIA's attention on improving its delivery of services to its customers—the American Indian and the Alaska Native. BIA is responsible for administering federal Indian policy and discharging the federal trust responsibility to American Indians, Alaska Natives, and tribal organizations. TrustNet will support DOI, its bureaus, and its offices in attaining their strategic goal of fulfilling trust responsibilities. This initiative will provide a consolidated and secure network that will enable BIA to meet its customers' needs.

This investment will enable BIA to transition from the BIANET to TrustNet, which will provide a secure, consistent, and comprehensive network that can accommodate the needs of all stakeholders. One of BIA's mission goals is to "ensure the Trust responsibility to protect and preserve Trust lands and Trust resources." To meet this goal, BIA must manage rents and royalties from approved activities on Indian land; but the lack of a comprehensive, reliable network has prevented the agency from adequately doing so. It was determined by the court-appointed Special Master that the current BIANET lacks reliability and security. These deficiencies possibly contribute to inaccuracies and inconsistencies in the data. This situation with its network has kept BIA from accurately tracking trust information and making timely payments to customers, causing a great deal of frustration for both BIA and its customers.

The U.S. District Court has declared that BIA is in breach of its trust responsibilities and ordered that all major trust data systems be disconnected from the Internet until BIA can provide a secure, reliable network. TrustNet will provide BIA with the resources and security needed to restore Internet access and to improve the services provided to customers. In addition, TrustNet will enable BIA to comply with the U.S. District Court order and requests of the Special Master.

I.B.2 President's Management Agenda strategic goals supported:

The President has called for "active, but limited" government: one that empowers states, cities, and citizens to make decisions; ensures results through accountability; and promotes innovation through competition. According to the President's Blueprint for New Beginnings, if reform is to help the Federal Government adapt to a rapidly changing world, its primary objectives must be a Government that is citizen centered, results oriented, and market based.

Funding of TrustNet is justified by its support of several of the five key elements in the President's Management and Performance Plan: Expanded Electronic Government. As articulated by OMB, "The vision of e-Government is an order of magnitude improvement in the federal government's value to citizens." To realize this vision, the President's e-Government Task Force identified four categories: service to individuals, service to businesses, intergovernmental affairs, and internal efficiency and effectiveness. TrustNet fits into the following categories:

Service to individuals, which focuses on "building easy to find one-stop shops for citizens to create single points of easy entry to access high quality governmental services."

Internal efficiency and effectiveness to "improve the performance and reduce costs of Federal Government administration by using best practices in areas such as supply chain management, financial management, and knowledge management."

Competitive Sourcing, which achieves efficient and effective competition between public and private sources, the BIA has committed itself to simplifying and improving the procedures for evaluating public and private sources, to better publicize the activities subject to competition, and to ensuring senior level management attention for the promotion of competition.

I.B.7 Agencies and organizations affected by this initiative:

BIA will lead this initiative with the assistance of multiple agencies that will benefit from TrustNet. BIA will work with potential partner agencies; however, it is not clear at this time what level of participation these agencies will have in this initiative. Partner agencies are those organizations that have a business responsibility for Indian trust management or organizations that will use TrustNet to access information or to provide BIA with data and that have some level of interest in the design of the network.

The agencies identified as primary partners in the TrustNet initiative include: • Department of the Interior • Bureau of Indian Affairs • Office of Historical Trust Accounting • Office of the Special Trustee • Minerals Management Service • Bureau of Land Reclamation • Office of the Inspector General • National Parks Service

The agencies identified as secondary partners in the TrustNet initiative include: • U.S. Geological Survey • Office of Hearings and Appeals • Office of Surface Mining • Department of the Treasury • Office of American Indian Trust • Office of Management and Budget • Office Trust Funds Management • U.S. Fish and Wildlife Service

I.B.8 Investment cost reduction or efficiency improvement:

Data networks allow effective communication among users, applications, and data systems. Without a networked environment, it is difficult to operate efficiently and economically. A networked operating environment by itself, however, does not guarantee that secure and reliable information exchange will occur. Guidelines, standards, and a common set of expectations are required. The role of TrustNet is to provide a secure, stable and reliable environment, allowing management to focus resources in other areas that provide value to the customer and to ensure that Trust responsibilities are met. TrustNet will enable BIA to direct attention towards its primary goals. TrustNet enables change to take place by fostering process improvement, improving internal controls, increasing accuracy of accounting, providing built-in audit procedures, and enabling the automation of manual processes. TrustNet also serves as the foundation on which efficiency improvements and cost reduction initiatives can be built. As this initiative progresses, additional opportunities to reduce costs and improve efficiencies will be explored.

This investment will provide benefits that will be calculated using qualitative and quantitative measures. Part I.E.3. (A) Provides a detailed description of the quantitative benefits associated with the implementation of TrustNet. Foremost among the qualitative benefits afforded by TrustNet is that system implementation will allow BIA to securely reconnect to the Internet. This will allow BIA staff to return to their normal operating routines so that they can complete their tasks. Internet reconnection will alleviate the frustration that has grown while the DOI information systems have been disconnected from the Internet. The restoration of service will improve morale; this improvement will be perceived by the customer as an improvement in customer service. TrustNet will also increase users' ability to access information, decreasing the amount of time it takes to complete tasks. These benefits would ultimately lead to increases in employee morale and customer/stakeholder satisfaction.

I.9.a List all other assets that interface with this asset.

Trust Systems Other DOI Bureau's and Agency networks Tribes and individual Indians The Internet

I.9.b Have these assets been reengineered as part of this investment (Yes/No)

Yes

Requested Investment Summary of Spending for Project Stages (\$Millions)

BY 2005 Planning Resources:	.00
BY 2005 Acquisition Resources:	.00
BY 2005 Maintenance Resources:	24.04
BY 2005 Total, All Stages Resources:	24.04
Life Cycle Total, All Stages Resources:	162.58

DOI BUDGET YEAR 2005 IT INVESTMENT OVERVIEW

Investment Identification

Agency: Department of the Interior
Bureau: Bureau of Indian Affairs
Location in Budget: Summary of IT Investments
Account Title: Operation of Indian Programs
Account Identification Code: 010-76-14-2100-0
Program Activity: Office of Trust Responsibilities
Name of Investment: [Integrated Records Management System \(IRMS\)](#)
Unique Investment Identifier: 01076010501760200117057
(IT Only)(see section 53)

Investment Justification

I.A Investment Description: IRMS is a trust information system, which incorporates ownership, leasing, and people subsystems. IRMS allows the user to access, create and modify records in the database for Indian individual leasehold interests and income-producing encumbrances and tracks the distribution of income derived from trust property to the Indian beneficiary. There are four modules within IRMS that are critical. The modules are: ownership (leasehold and lease income allocation), lease, Royalty Distribution and Reporting System (RDRS) and Individual Indian Monies (IIM). IRMS is part of the Indian Trust System (ITS), a target system, which fulfills the requirements established by Cobell vs. Norton.

IRMS is a fully developed system, which has reached its maximum capacity and functionality. Development of a trust system that integrates land title ownership and trust property data is currently being explored as a replacement for IRMS and the title system, LRIS. Therefore, the life cycle of IRMS is only being projected thru FY 2007. Project costs will be to maintain, modify and enhance in order to maintain IRMS functionality until a new automated trust system is developed deployed and fully implement. These modules maintain data about individual leasehold interests and income-producing encumbrances, and the modules distribute trust income derived from trust property to the Indian beneficiaries.

The IRMS is a trust information system that is undergoing BIA's new CPIC process for the first time. It has been approved by Bureau capital review boards and is pending review at the Department level. The figures represented within this Capital Asset Plan are realistic and are based on estimates or projections.

I.B.1 Agency mission and strategic goals and objectives supported:

IRMS directly supports the DOI Missions of:

Serving Communities - Safeguard property and financial assets, advance scientific knowledge, and improve the quality of life for communities we serve (Strategic Goal #4) Fulfill Indian Trust Responsibilities: Improve Indian trust beneficiary services Improve Indian trust ownership information Improve management of land and natural resource assets Manage trust fund assets for timely and productive use Support Indian self-governance and self-determination

Management - Manage the Department to be highly skilled, accountable, modernized, functionally integrated, citizen-centered and results oriented (Strategic Goal #5).

The mission of the Bureau of Indian Affairs is to fulfill its trust responsibilities and promote self-determination on behalf of Tribal Governments, Americans and Alaska Natives. This project supports the strategic goals and objectives to assist in protecting and preserving their natural resources and to protect and preserve trust lands

and resources. Additionally, it is part of and subject to the federal government's responsibility to provide an accounting to the Indian beneficiaries of their trust assets and funds. IRMS supports the Bureau goal to provide efficient and effective processing of transactions and distributions of trust funds and protecting and preserving the trust land and resources. This goal is met by Trust programs use of IRMS as their main management and trust fund distribution mechanism. The IRMS assist in the management of Trust lands and resources by providing trust program managers with the capability to generate reports (rents due, tracts leased, names of lessees, lease effective and expiration dates, ownership (title and distribution), etc. as well as eliminating time consuming notification tasks e.g. generating bills to lessees, notices to owners of leasing actions, and distributing trust income, etc. The BIA's trust programs use IRMS to help furnish technical advice and assistance and land use counseling to Indian beneficiaries. The IRMS also provides data necessary for and used in the planning and probate of landowner estates.

I.B.2 President's Management Agenda strategic goals supported: The President's Management Agenda requires "active, but limited Government" that empowers states, cities, citizens, and Indian tribes to make decisions ensures results through accountability; and promotes innovation through competition. This project supports the Presidents Management Agenda:

Expanded Electronic Government Goal by automating internal processes to reduce costs internally. o Citizen-Centered, not bureaucracy-centered - Manages Indian individual and tribal interests in trust lands & resources for the trust beneficiaries - Provides the primary land title application or tool that enables the Federal government to meet its trust responsibilities to Indian tribes and individuals - Implement management discipline and structure to plan for capital investments and to operate and maintain Indian Affairs systems for the benefit of American Indians and Native Alaskans - Staffed by government employees and supplemented with contractor staff in accordance with OMB Circular A-76 o Results-oriented, not process-oriented - Enable agencies to share data across the network - Improve the quality, effectiveness, timeliness, and fairness of services provided to the millions of American Indians and Native Alaskans served by BIA - Enable employees to focus on providing essential economic, social, law enforcement, and safety services to its Indian constituents with less duplication - Provide management and executives with the management information available in real-time or near real-time concerning the baseline statistics and associated service levels being provided to their customers - Enable BIA employees who respond to customer requests at all levels to be better served, thus, BIA service will become faster and more effective

I.B.7 Agencies and organizations affected by this initiative: IRMS is not a multi-agency initiative. However, its use is required for the successful operation of the Office of Trust Funds Management, Office of the Special Trustee. The RDRS component of the IRMS is an output source for oil and gas income data from the Minerals Management Service. Specifically, the IIM and RDRS modules of IRMS are utilized to process trust funds to the accounts of the Indian beneficiaries.

I.B.8 Investment cost reduction or efficiency improvement: There is a cost associated with the need to maintain, enhance and make it fully operational until IRMS is rolled into TAAMS. TAAMS will allow for the more cost effective use of human capital as it allows for automation of many manual and time intensive processes.

The investment in IRMS is necessary for the Indian beneficiaries to receive trust income from leases and contracts in a timely manner. The re-engineering/enhancement of IRMS will modernize and enhance the current IRMS functional capabilities.

I.9.a List all other assets that interface with this asset. Trust Funds Accounting System (Office of Trust Funds Management) Systems of the Office of Minerals Royalty Management, Minerals Management Service

I.9.b Have these assets been reengineered as part of this investment (Yes/No) Yes

Requested Investment Summary of Spending for Project Stages (\$Millions)

BY 2005 Planning Resources: .00

BY 2005 Acquisition Resources:	.00
BY 2005 Maintenance Resources:	4.16
BY 2005 Total, All Stages Resources:	4.16
Life Cycle Total, All Stages Resources:	23.94

DOI BUDGET YEAR 2005 IT INVESTMENT OVERVIEW

Investment Identification

Agency: Department of the Interior
Bureau: Bureau of Indian Affairs
Location in Budget: Summary of IT Investments
Account Title: Operation of Indian Programs
Account Identification Code: 010-76-14-2100-0
Program Activity: Office of Indian Education Programs
Name of Investment: [Educational Native American Network - II \(ENAN\)](#)
Unique Investment Identifier: 01076010501760700404139
(IT Only)(see section 53)

Investment Justification

I.A Investment Description: The Educational Native American Network – 2 (ENAN-II, a.k.a. EDNet) is the logical interconnection of all the Office of Indian Education Programs' (OIEP) data networks over MCI's commercial network. The ENAN-II is a legacy network system that has not been through the CPIC process until now. The figures represented within this Capital Asset Plan are realistic and are not based on estimates or projections.

I.B.1 Agency mission and strategic goals and objectives supported: The U.S. Department of the Interior (DOI), with eight bureaus, is the nation's principal conservation agency, charged with the mission "to protect and provide access to our Nation's natural and cultural heritage and honor our trust responsibilities to Indian tribes and our commitments to island communities." Additionally, the Secretary of the Interior has specifically addressed "Improving Indian Education" as a cornerstone of her commitment to serving the public interests.

As outlined in the DOI Strategic Plan, February 2003 – Page 36

"Fulfill Special Responsibilities to American Indians – The Educational Native American Network (ENAN) aims to meet DOI's Trust responsibilities to Native American tribes and commitments to island communities by measuring: 1) number of tribal education groups served; 2) number of bureau funded schools, line offices, and field offices; and 3) number of community learning centers served from providing Wide Area Network / internet connectivity.

The School Statistics Initiative aims to evaluate: 1) percentage of students who will be proficient in reading by the end of the third grade; 2) percentage of students with Limited English Proficiency who will be proficient in English; 3) percentage of students who will be educated in learning environments that are safe, drug free, and conducive to learning."

ENAN-II directly supports "honoring our trust responsibilities to Indian tribes" and more directly "Improving Indian Education" by providing the technology infrastructure to the DOI Indian Schools that opens up various educational resources and experiences that were not previously available. In doing such, the DOI is, in part, meeting its trust responsibilities to the Indian children under its educational care. The GPRA act focuses the OIEP's Attention on improving delivery of services to its customers, the Indian Children attending the OIEP Funded Schools, Their Parents, and Local School Boards. The Purpose of the ENAN-II is to provide a standards based network that encompasses all school networks, platforms, and other computing environments to provide timely access to Educational Resources and OIEP Data Stores. This investment will allow the ENAN-II to continue to provide and increase these services as the educational demand increases. By leveraging this investment, OIEP Schools and the Indian Children who have been

historically behind national standards and lacking in technology educational mechanisms, will have the same, if not better, technology playing field as those students in high economic based school systems.

"The mission of OIEP is to provide quality education opportunities from early childhood through life in accordance with the Tribe's needs for cultural and economic well-being in keeping with the wide diversity of Indian Tribes and Alaska Native villages as distinct cultural and governmental entities. OIEP shall manifest consideration of the whole person, taking into account the spiritual, mental, physical, and cultural aspects of the person within a family and Tribal or Alaska Native village contexts. (25 CFR Part 32) "

Identified Goals supporting this Mission are: 1.) All Children will read independently by completion of the Third Grade 2.) Seventy Percent (70%) of students are proficient/advanced in reading and Math 3.) Individual Student attendance rate will be 90% or Better 4.) Students demonstrate knowledge and language and culture to improve academic achievement 5.) Increase enrollment, retention, placement and graduation rates for Post Secondary

To meet these goals and subsequently the mission of the OIEP, the ENAN-II will support OIEP Principles as follows. • "Establish scalability extensibility, interoperability, affordability, and open standards in the ENAN-II Network Environment." ENAN-II is a network that is a network that is based on common, open standards that facilitate the exchange of educational information. ENAN-II has adopted standards with the DOI guidance that will result in a lower cost of ownership (FTS2001). ENAN-II is architecturally flexible and seamless which will provide for sharing of educational data in multiple methodologies, i.e. Distance Learning, etc. • "Security Will be designed in all educational processes, where necessary." Student and/or School Data are protected from unauthorized access at the School level. The ENAN-II will aid in protecting systems from unauthorized access. Information will be properly secured at all times according to the OIEP data classification standards. • "Information is vital to the Educational Process and is to be considered an Asset to be managed effectively without compromising or restricting the educational process." The ENAN-II as the prime communications system employed by the OIEP to provide students access to information stores that are not available otherwise will manage access to that information in a manner consistent with protecting the Students from Harmful or destructive information. The OIEP realizes that an effective data management system is required to maintain balance between these two opposing data stores. • "The ENAN-II will be available 7 Days a week, 24 hours a day." Since networks fill an increasingly important role in the execution of the OIEP's mission, ENAN-II will be available 24x7 for all students, whether they are traditional, community learning center based, vocational, etc. The Availability will also allow authorized access by parents, at their convenience to monitor their students' performance.

The ENAN-II supports two primary functions that are required for the effective management of the duties of the Office of Indian Education Programs: • "Internet Access." The ENAN-II provides for direct Internet Access for all OIEP Network locations. This is critical for information sharing and research resources for the OIEP student and teacher populations. • "Access to OIEP Administrative Systems and DOI Administrative Systems." The ENAN-II Provides each school the connectivity it requires for OIEP administrative systems, ie, Annual Reports, SSI, email, etc. and DOI administrative systems, i.e. FFS and FFPS.

Additionally, the ENAN-II directly supports the Department of the Interior's mission of "...honor[ing] our trust responsibilities to tribes..." by supporting and providing services to Native American Children.

I.B.2 President's Management Agenda strategic goals supported:

The President's Management Agenda requires "active, but limited Government" that empowers states, cities, and citizens to make decisions ensures results through accountability; and promotes innovation through competition. ENAN-II supports these goals in the following ways:

Citizen-Centered, not bureaucracy-Centered.

"I will expand the use of the Internet to empower citizens, allowing them to request customized information from Washington when they need it, not just when Washington wants to give it to them. True re-form involves not just giving people information, but giving citizens the freedom to act upon it." Governor George W. Bush

ENAN-II is the heart and soul of Intra and Internet access to systems within the OIEP school system. Without the ENAN-II, the President's objective as stated above cannot be accomplished. The ENAN-II provides the public access to the OIEP's programs and websites that permits them to research the OIEP and its performance. In addition the ENAN-II is absolutely required to provide parents of Indian children within the OIEP school system access to their child's and their child's school's performance statistics. ENAN-II provides a secure, reliable network that allows OIEP to meet its Educational Treaty Obligations to Indian School Children and their Parents. The ENAN-II does not provide bureaucracy-centered service by nature. ENAN-II is the transport that provides direct intra and Internet access.

Additionally, ENAN-II serves not only the federal government both those of Tribal Governments (via the Contract and Grant Schools and their school boards) and 23 Individual States in the transmission of State Required Reporting. To further enhance the ENAN-II to meet the President's Agenda, an E-Gov strategy review will be requested FY2003-QTR2.

Results-Oriented

"Government should be results-oriented –guided not by process but guided by performance. There comes a time when every program must be judged either a success or a failure. Where we find success, we should repeat it, share it, and make it the standard. And where we find failure, we must call it by its name. Government action that fails in its purpose must be reformed or ended." Governor George W. Bush

The ENAN-II will increase Schools and Students ability to share data across the network, provide access to information stores to increase knowledge and ability in mathematics, reading, etc. all to raise test scores and student comprehension and competency to compete in an increasingly "wired world". In conjunction with the OIEP's School Statistics Initiative, the ENAN-II provides the transport mechanism as to reporting school results across the whole gambit of the Indian Education Programs.

Empowerment of the 51st State for Education

"[Student] assistance has allowed [Texans] to expand their minds and improve their job prospects. [Student aid] enhances individual lives and ensures a brighter future for our state." Governor George W. Bush

The OIEP acts in both a federal and state role. The OIEP, as recognized by the Department of Education and Congress, is the 51st State Education Authority. As such the ENAN-II provides the access mechanism to "expand their minds and improve their job prospects" of Indian Students across the nation. This expanded knowledge effectively relates to higher paying job prospects that normally would not be available. With the addition of technology based curriculums, the ENAN-II becomes the learning environment for Indian Students. ENAN-II does " enhance[s] individual lives and ensures a brighter future for our state."

No Child Left Behind Act of 2001 (Part D – Native American Education Improvement (H.R. 1-583)

"SEC. 1133. COMPUTERIZED MANAGEMENT INFORMATION SYSTEM. "(a) In General. —Not later than 12 months after the date of enactment of the Native American Education Improvement Act of 2001, the Secretary shall update the computerized management information system with the Office."

The computerized management information system notated within the law is the Office of Indian Education Programs' School Statistics Initiative (SSI) program. This program is designed and will be implemented in a centralized site that will require the ENAN-II connectivity for each school. Without the ENAN-II, access to this system is impossible.

I.B.7 Agencies and organizations affected by this initiative:

The OIEP, its programs and services are self-contained; the General Services Administration is used for contracting services only.

I.B.8 Investment cost reduction or efficiency improvement:

Data Networks allow for communication between users, applications and data systems. Without a networked environment, it is difficult to operate efficiently and economically. A networked operating environment by itself does not guarantee that secure and reliable information exchange will occur. OIEP Guidelines, Standards, and common set of expectations are required. The Role of ENAN-II is to provide a stable, secure, and reliable environment, allowing OIEP Management to focus resources in other areas that provide educational value to the Customer and to ensure that Educational Treaty requirements are met. ENAN-II serves as the foundation from which efficiency improvements and cost reduction initiatives can be built while providing for superior delivery of educational content to the 50,000 Students who use the ENAN-II. As the ENAN-II evolves additional opportunities to deliver this content while at the same time, reducing costs and improving efficiencies will be explored.

This investment will provide both qualitative and quantitative benefits through the implementation of the SSI system and the ability to network student achievement results in real time.

I.9.a List all other assets that interface with this asset. The OIEP School Statistics Interface is dependent upon this Capital Asset. The SSI is in development stage and ENAN-II considerations are incorporated as part of its base design.

I.9.b Have these assets been reengineered as part of this investment (Yes/No) No

Requested Investment Summary of Spending for Project Stages (\$Millions)

BY 2005 Planning Resources:	.04
BY 2005 Acquisition Resources:	.00
BY 2005 Maintenance Resources:	5.60
BY 2005 Total, All Stages Resources:	5.64
Life Cycle Total, All Stages Resources:	40.36

DOI BUDGET YEAR 2005 IT INVESTMENT OVERVIEW

Investment Identification

Agency: Department of the Interior
Bureau: Bureau of Indian Affairs
Location in Budget: Central Office Operations
Account Title: Operation of Indian Programs
Account Identification Code: 010-76-14-2100-0
Program Activity: Information Resources Technology
Name of Investment: [Enterprise Information Management \(EIM\)](#)
Unique Investment Identifier: 01076010501760800404142
(IT Only)(see section [53](#))

Investment Justification

I.A Investment Description: Enterprise Information Management (EIM) is an operational IT management framework that will protect the IT operating infrastructure by restructuring management practices, procedures, and functional boundaries, while providing automated tools to reduce user and systems administrator workload. EIM is an enterprise-wide approach to information management that: • provides real time business information; • provides standard policies, procedures, and integrates dependent services, functions, and tools; • supports nested enterprises with integrated monitoring/reporting and Agency management independence; • provides integrated corporate management and reporting across all lines of business; • addresses networks, systems, security, asset management, problem management and IT services across the enterprise; and • links Service Level Agreements, Standard Operating Procedures, and maintenance agreements to the infrastructure components, contractor management, and standard product procurement.

EIM was presented as an initial investment to the Department CPIC councils (Information Technology Investment Council, Management Initiatives Council, and Management Executive Council) and approved for submission to OMB. For the BY2004 submission, EIM Exhibit 300 received a passing OMB score of four (4) out of 5.

BIA has begun a comprehensive effort to improve the quality, effectiveness, timeliness, and fairness of services provided to the millions of American Indians and Native Alaskans served by BIA. Customer service is a prominent element of BIA accountability and self-assessment, so the Department's strategic plan reflects the emergence of new priorities and implementation strategies, as well as management challenges. In addition, discussion of internal and external coordination provides a clear sense of where the BIA's programs and activities intersect with each other and with organizations outside the Department. To realize the strategic objectives, vulnerabilities and adoption of an enterprise security framework are addressed. EIM encompasses the BIA CPIC, architecture, and security.

I.B.1 Agency mission and strategic goals and objectives supported: Enterprise Information Management (EIM) directly supports the Department of the Interior (DOI) strategic goal "Management." EIM is both the instrument and technical framework to move the Bureau toward the DOI's "Modernization" outcome goal. EIM describes the strategy for improving the Bureau's IT Management Processes, IT Investment Management, Software Acquisition, Information Security, Enterprise Architecture, Software Development, IT Human Capital, and Data Management. These strategies will enable the Bureau to achieve a Capability Maturity Model (CMM) Level 3, by September 2004.

The Bureau of Indian Affairs (BIA), an agency under the Department of Interior (DOI), is committed to administering government-sponsored programs to the betterment of all American Indians and Alaskan Natives. To support this commitment, the BIA requires efficient, effective and economical Information Technology (IT)

Resources. These services are necessary within the BIA to fulfill its mission in support of tribal self-government, protection of the rights of the Indian people and in the fulfillment of trust obligations.

In order to carry out the Department of the Interior mission and ensure protection of its assets, BIA will optimize the management of its information systems (IS) infrastructure through the development of the Enterprise Information Management (EIM) architecture strategy. Following the information technology (IT) guidance provided by the Clinger-Cohen Act (CCA) and OMB Circular A-130, EIM will build greater consistency and efficiency into information technology management across BIA.

Threats to computer security, automating manual processes, e-Gov and the need to minimize information technology costs invite the enterprise approach to technology management that BIA is pursuing. The EIM effort emphasizes the importance of developing information systems that meet the need for more reliable network and systems availability, configuration management and software distribution, and flexibility in supporting changing needs while providing state-of-the-art security and privacy.

On December 5, 2001, the United States Court signed a Temporary Restraining Order, which required the Department of the Interior (DOI) to disconnect from the Internet any information technology system that housed or provided access to individual Indian trust data. As a result, all Department networks were disconnected from the Internet and many information technology systems were turned off to ensure protection of individual Indian Trust data. On December 17, 2001, a signed Consent Order provided the channel for the Department to provide assurances to the Special Master that information technology systems containing individual Indian Trust data were secured, and those systems and their supporting networks could be turned back on and/or reconnected to the Internet.

In planning to reconnect to the Internet the Bureau of Indian Affairs identified its trust data systems and its non-trust data systems that were connected to the network. What was found was the following. No Systems Life Cycle was present. Limited Number of Business Processes was defined. No Investment and Portfolio Management was conducted. Few Business Cases, Alternative Analysis, and Cost Benefit Analysis were conducted. No Architecture existed. No Change Management existed. No Segmented Test Environment existed. No Complete Documentation existed for the systems. No Certification and Accreditation Process was implemented. The workforce was fragmented, understaffed, not fully trained and had limited investment management experience. Technology was out of date, lacking security management, and under funded. No standards were in place. It was then determined that an enterprise information management approach was needed to permanently put in place the management discipline and structure to plan investments and operate and maintain BIA systems in support of American Indians and Native Alaskans.

I.B.2 President's Management Agenda strategic goals supported:

This investment directly supports the President's goal of Citizen-Centered E-Government and Information Technology Management. Specifically, this investment establishes the technical framework for providing economic development within Indian Country.

This investment supports the Presidents Management Agenda:

Citizen-Centered, not bureaucracy-centered - Provide the infrastructure to enable BIA to meet its trust responsibilities. - Implement management discipline and structure to plan investments and operate and maintain BIA systems in support of American Indians and Native Alaskans. - Staffed by government employees and supplemented with contractor staff in accordance with OMB Circular A-76.

Results-oriented, not process-oriented - Improve the quality, effectiveness, timeliness, and fairness of services provided to the millions of American Indians and Native Alaskans served by BIA. - Enable employees to focus on providing essential economic, social, law enforcement, and safety services to its Indian constituents with less duplication. - Provide management and executives with the management information available in real-time or near real-time concerning the baseline statistics and associated service levels being provided to their customers. - Enable BIA employees who respond to customer requests at all levels to be better served, thus, BIA service will become faster and more effective.

I.B.7 Agencies and organizations affected by this initiative:

This investment affects BIA.

I.B.8 Investment cost reduction or efficiency improvement:

EIM incorporates an information infrastructure and systems management approach that is embodied in a set of best practices often referred to as Infrastructure Resource Planning (IRP), Enterprise Resource Planning (ERP), or Enterprise Systems Management (ESM). The EIM approach to infrastructure management offers potential value, in terms of a high quality and highly efficient computing environment. EIM is the framework for

standardizing processes and using automated tools to track information flow will streamline critical information management functions making BIA much more efficient in terms of dollars and time, and help BIA to transition from operating in a stovepipe environment. A high quality-computing environment is the result, since EIM is better at meeting end user requirements (i.e., investment prioritization, reliable systems; available systems; efficient sharing of information; and proper access to applications, data integrity, and secure information and applications). An efficient computing environment results because user requirements can be met in less time and with less labor compared to other information management approaches. EIM key benefits are: • improves IT security confidentiality, integrity, accessibility, • improves customer service, • improves critical business decision support information, • reduces total of ownership, • uses COTS tested solution that will work, • provides automated IT management for implementation of policies, and • automates rollup of information Agency needs

The major IT business processes improved through the implementation of EIM include: Capital Planning, Portfolio Management, Enterprise Architecture/Infrastructure, Asset Management, Change Management, Certification and Accreditation (C&A), Security Management, Network and Systems Management, Enterprise Directory, Public Key Infrastructure, User Account Management, Problem Management (Event Management and Help Desk).

The above stated components of the EIM are required to establish the minimum baseline necessary for an IT organization to provide reliable information management services and consistent high-quality, cost-effective IT systems and accurate and secure data and software products. In an ideal business environment, C&A is a process of reviewing system documentation and risk assessments for conformance to OMB Circular A-130 Appendix III. The DOI and NIST stipulate that C&A process be conducted to review the system documentation for appropriate security compliance and readiness. Unfortunately, since the legacy systems within BIA were not developed using a standard system life cycle, most of the documentation must be created from scratch. Therefore, additional costs beyond the average C&A costs are required for BIA C&A. Within BIA the legacy Trust Systems, at least one of which is 30 years old, were not documented from the conception of their life cycle. The same is true for many non-trust systems. Therefore, the C&A process BIA has undertaken has caused us to create the required documents along with other documentation that sound configuration management requires, and institutionalize the process of periodic evaluation and review of every system in the BIA inventory. The NIST guidance requires that a full C&A be done every three (3) years. Thus, BIA will have to perform these reviews on approximately 1/3 of their systems from now on. It will take three (3) years to go through the cycle once and gain the experience that a mature IT organization will need in order to make the C&A process truly institutional.

Reducing costs and improving efficiencies will be shown by and will have the greatest impact on the Indian Affairs programs, trust and non-trust, which provide services and products directly to Indian tribes and individuals. For instance, the projected annual trust and non-trust income processed and distributed by 2 Bureau of Indian Affairs' systems is \$132,360,145 paid primarily to Indian individuals (based on distributions reported since the December 2001 judicially ordered shutdown). The figures are lower than normal because no new business was being conducted in Indian Country due to the system shutdown. A shutdown of a week or less would result in more than \$1.6 million not being distributed to the Indian beneficiaries while interest continued to accrue. The result could be the same if the interruption in system processing occurred on the actual day when the distribution was running. A greater but less evident source of liability occurs when the operation of the official Federal land title system is interrupted.

The loss of income, of benefit of contract, and of personal and financial security, can be the direct result of the failure of the official Indian Affairs land title system (e.g., LRIS and/or TAAMS). When the title system fails to operate no mortgages can be closed, no lands or resources can be acquired or developed, no leases or other encumbrance contracts can be properly or dependably entered into — in effect no business involving the Indian lands and resources can be conducted until the title system is operating in an accurate, dependable and secure manner. For instance, since the shutdown of the Federal title system 2 of the 9 Land Title and Records Offices (LTROs) have received requests for 1,471 certified titles to be issued. At the pre-Cobell level, title determination and certification averaged about 8.5 hours per title which would required almost 5.4 years for the average LTRO to issue certified titles. This means that the mortgage or tribal development loan would have to wait 5 years before closing, or that the lease of lands and resources would have to wait — all of which creates Federal liability.

The liability that can result from the failure of Indian Affairs systems to operate in a timely, accurate, dependable, and secure manner can substantially exceed the funding requested to implement the EIM. Also, as has been shown in the Cobell case, liability can arise even if there is no demonstrable loss of income or direct damage, but only the appearance or potential for harm resulting from a lack of normal or standard operations capability or infrastructure. The EIM is proposed to eliminate this seed of liability, and to build the initial IT infrastructure for Indian Affairs to carry out its trust, statutory and treaty obligations.

The current and impending litigation have a substantial cost that cannot be ignored when considering a course of action that has legal as well as business consequences. The cost of litigation has 2 components: the losses or damage claimed by the Plaintiff and the losses and unrecoverable costs incurred by the Defendant. In other words the cost of litigation includes not only the losses from the income stream, as discussed above, but also the loss in program and employee productivity, the cost of work stoppages, the continuing cost of idle

computers, network and telecommunication systems, equipment, etc., is part of the overall litigation expense. For instance, as of July 12th the Land Title and Records program and the LRIS title system were not in production for 56% of the past 52 weeks, the Lease-Payout systems were not in production for 10% of the last 52 weeks, and the Oil & Gas system was not in production for 25% of the past year. When applied to the Trust Services and Natural Resource programs budget for FY 2002, the trust business and resource management functions alone, the potential liability of loss for the Federal Government exceeds \$114 million in annual Federal program losses and more than \$132 million in annual trust income losses, or a total annual loss or at-risk amount of more than \$247 million. The implementation of the EIM would be a major step toward the reduction or elimination of litigation costs, losses, and liability arising from the lack of a proper IT management, infrastructure and security.

This investment will establish the management controls to limit future lawsuits against the U.S government for the lack of IT infrastructure and security. Hence, employees will be able to focus on providing essential economic, social, law enforcement, safety, and trust land and resource management services to its Indian constituents and beneficiaries without concern for the integrity and quality of their IT systems and operations.

- BIA issues included identifying critical infrastructure assets, shared interdependence, and addressing vulnerabilities, including leading awareness partnership outreach to the public and private sector for Indian Affairs. Additionally, the operating procedures are manual and antiquated. An integrated enterprise-wide horizontal view of operations is non-existent. Vertical stovepipe processes, service level agreements, and systems run independent of each other. Executive management does not have real-time access to business and IS issues. Statistical analysis of operations performance is manually intensive.

- The inventory system is inaccurate, difficult and very expensive to maintain. The cost for manual and inaccurate inventory is two to three times the cost of purchasing and maintaining COTS inventory system. Redundant independent help desks exist. Twenty-four hour a day by seven days week (24/7) service availability cannot be implemented with the architecture and tools that are in place. The enterprise network uses manual tools, and network and system devices are not configured for automatic discovery (remote identification of system components).

In accordance with the Clinger-Cohen Act, the Office of Management and Budget (OMB) Circular A-130, Presidential Decision Directive 63 (PDD-63), the Government Performance and Results Act (GPRA), and the Government Information Security Results Act, BIA is committed to reengineering its IT structure to improve the lives of American Indian and Native Alaskans. The DOI Strategic Plan outlines these objectives in the form of strategic goals and guiding principles and aims to make the Department more accountable through balanced measures of performance and an optimally managed information systems infrastructure.

I.9.a List all other assets that interface with this asset.	TrustNet, LRIS, and IRMS are primary assets will have an interface with EIM. At the present, the assets listed are not being reengineered.
I.9.b Have these assets been reengineered as part of this investment (Yes/No)	No

Requested Investment Summary of Spending for Project Stages (\$Millions)

BY 2005 Planning Resources:	.00
BY 2005 Acquisition Resources:	.00
BY 2005 Maintenance Resources:	25.12
BY 2005 Total, All Stages Resources:	25.12
Life Cycle Total, All Stages Resources:	149.76

DOI BUDGET YEAR 2005 IT INVESTMENT OVERVIEW

Investment Identification

Agency: Department of the Interior
Bureau: Bureau of Indian Affairs
Location in Budget: Summary of IT Investments
Account Title: Operation of Indian Programs
Account Identification Code: 010-76-14-2100-0
Program Activity: School Statistics ADP
Name of Investment: [School Statistics Initiative \(SSI\)](#)
Unique Investment Identifier: 01076010501760900106015
(IT Only)(see section 53)

Investment Justification

I.A Investment Description: The SSI investment will provide all BIA funded schools (K-12) with a centralized School Administration System that will provide automation to track and monitor student attendance, grades and proficiencies, master class scheduling, lunch counts, special education requirements, funding distribution based on the BIA Indian Student Equalization Program, etc. this system will provide real time access to records and performance indicators by Teachers, Administrators and Parents of Indian Students within the system. This investment has been operating in the Pilot stage and is ready for implementation. Given such, this is the first submittal of a capital asset plan for this investment. This investment provides the basis for implementing the ESEA No Child Left Behind Act of 2001 and reporting school performance measures on a daily basis.

I.B.1 Agency mission and strategic goals and objectives supported: The U.S. Department of the Interior (DOI), with eight bureaus, is the nation's principal conservation agency, charged with the mission "to protect and provide access to our Nation's natural and cultural heritage and honor our trust responsibilities to Indian tribes and our commitments to island communities." Additionally, the Secretary of the Interior has specifically addressed "Improving Indian Education" as a cornerstone of her commitment to serving the public interests.

As outlined in the DOI Strategic Plan, February 2003 - Page 36

"Fulfill Special Responsibilities to American Indians -- The Educational Native American Network (ENAN) aims to meet DOI's Trust responsibilities to Native American tribes and commitments to island communities by measuring: 1) number of tribal education groups served; 2) number of bureau funded schools, line offices, and field offices; and 3) number of community learning centers served from providing Wide Area Network / Internet connectivity. The School Statistics Initiative aims to evaluate: 1) percentage of students who will be proficient in reading by the end of the third grade; 2) percentage of students with Limited English Proficiency who will be proficient in English; 3) percentage of students who will be educated in learning environments that are safe, drug free, and conducive to learning."

The OIEP's focus is improving delivery of services to its customers, the Native American Children attending the OIEP funded schools, their parents, and local school boards. The purpose of the SSI is to provide a standards based school administration system that homogenizes all school administration systems to provide uniformity in the manner in which schools collect, track, and use student data. By doing such, a common environment is established to enable a higher level of accountability and achievement in the education of Native American Children.

Identified Department and Department IT Strategic Goals supporting are: 1.) Serving Communities 2.)

Capital Planning & Investment "The mission of OIEP is to provide quality education opportunities from early childhood through life in accordance with the Tribe's needs for cultural and economic well-being in keeping with the wide diversity of Indian Tribes and Alaska Native villages as distinct cultural and governmental entities. OIEP shall manifest consideration of the whole person, taking into account the spiritual, mental, physical, and cultural aspects of the person within a family and Tribal or Alaska Native village contexts. (25 CFR Part 32) "

Identified OIEP Goals supporting this mission are: 1.) All Children will read independently by completion of the Third Grade 2.) Seventy Percent (70%) of students are proficient/advanced in reading and Math 3.) Individual Student attendance rate will be 90% or Better 4.) Students demonstrate knowledge and language and culture to improve academic achievement 5.) Increase enrollment, retention, placement and graduation rates for Post Secondary

To meet these goals and subsequently the mission of the OIEP and the Department, the SSI will support OIEP Principles as follows. • "Establish scalability extensibility, interoperability, affordability, and open standards in the SSI application system." SSI is an application service provider (ASP) system that is based on common, open standards that facilitate the exchange of educational information. SSI has adopted standards with the DOI guidance that will result in a lower cost of ownership (FTS2001). SSI is architecturally flexible and seamless which will provide for sharing of educational data in multiple methodologies, i.e. Distance Learning, etc. • "Security will be designed in all educational processes, where necessary." Student and/or school data is protected from unauthorized access at the School level. The SSI will aid in protecting systems from unauthorized access. Information will be properly secured at all times according to the OIEP data classification standards. • "Information is vital to the Educational process and is to be considered an Asset to be managed effectively without compromising or restricting the educational process." The SSI as the centralized school administration system employed by the OIEP to provide students access to information stores that are not available otherwise will manage access to that information in a manner consistent with protecting the students from harmful or destructive information. The OIEP realizes that an effective data management system is required to maintain balance between these two opposing data stores. • "The SSI will be available 7 Days a week, 24 hours a day." Since student achievement results fill an increasingly important role in the execution of the OIEP's mission, SSI will be available 24x7 for all students, whether they are traditional, community learning center based, vocational, etc. The availability will also allow authorized access by parents, at their convenience to monitor their student's performance.

This investment addresses the mandate of Public Law 107-110, i.e., the No Child Left Behind Act of 2001, Part D, i.e., the Native American Education Improvement Act of 2001, Section 1042, Amendments to the Education Amendments of 1978, Part B, Bureau of Indian Affairs Programs, Section 1133, Computerized Management Information System. The purpose of the School Statistics Initiative (SSI) program is two-fold. The first objective is to replace aging, DOS/xBase based computerized school administration systems at the few BIA schools that have computerized school administration systems, and at the majority of BIA schools, to introduce computerized school administration systems for the first time. The second objective is to replace the current semi-automated, annual method of collecting school statistics, known as the Indian School Equalization Program (ISEP). A computerized school administration system at each school, connected via the Educational Native American Network – II (ENAN –II) to a centralized database or databases makes it possible to achieve continuous collection of school statistical data by using up-to-date, current standard, client-server computer or browser-based centralized computer systems. Based on a modular procurement approach, the Bureau has funded a SSI Proof of Concept (POC) pilot program to gauge the utility and effectiveness of automated school administration systems at selected BIA schools over the past three years.

The SSI supports two primary functions that are required for the effective management of the duties of the Office of Indian Education Programs: • "School Administration at the Local Level." The SSI will provide for local School Administration to track and monitor Student Achievement, Special Education Requirements, Health Requirements, Average Daily Attendance/Average Daily Membership, Free and Reduced Lunch Programs, etc. • "Indian School Equalization Program." The SSI will replace the old outdated XBASE ISEP program and will reduce costs in tabulating the ISEP counts both yearly and daily, if necessary. SSI additionally will increase student and school accountability standards.

I.B.2 President's Management Agenda strategic goals supported:

The President's Management Agenda requires "active, but limited Government" that empowers states, cities, and citizens to make decisions ensures results through accountability; and promotes innovation through competition. SSI supports these goals in the following ways:

Citizen-Centered, not bureaucracy-Centered.

"I will expand the use of the Internet to empower citizens, allowing them to request customized information from Washington when they need it, not just when Washington wants to give it to them. True re-form involves not just giving people information, but giving citizens the freedom to act upon it." Governor George

W. Bush

SSI provides a secure, reliable school administration system that allows OIEP to meet its Educational Treaty Obligations to Indian school children and their parents. The SSI does not provide bureaucracy-centered service.

Results-Oriented

"Government should be results-oriented -guided not by process but guided by performance. There comes a time when every program must be judged either a success or a failure. Where we find success, we should repeat it, share it, and make it the standard. And where we find failure, we must call it by its name. Government action that fails in its purpose must be reformed or ended." Governor George W. Bush

The SSI will enable schools and students to share data across the network, provide access to parents to monitor and evaluate their students progress in core curriculum such as mathematics, reading, and so forth.

Empowerment of the 51st State for Education

"[Student] assistance has allowed [Texans] to expand their minds and improve their job prospects. [Student aid] enhances individual lives and ensures a brighter future for our state." Governor George W. Bush

The OIEP acts in both a federal and state role. The OIEP, as recognized by the Department of Education and Congress, is the 51st State Education Authority.

No Child Left Behind Act of 2001 (Part D – Native American Education Improvement (H.R. 1-583) "SEC. 1133. COMPUTERIZED MANAGEMENT INFORMATION SYSTEM.

"(a) In General.—Not later than 12 months after the date of enactment of the National American Education Improvement Act of 2001, the Secretary shall update the computerized management information system with the Office."

The computerized management information system notated within the law is the Office of Indian Education Programs' School Statistics Initiative (SSI) program.

I.B.7 Agencies and organizations affected by this initiative:

The OIEP programs and services are self-contained.

I.B.8 Investment cost reduction or efficiency improvement:

When SSI is fully deployed throughout the BIA school system, this investment will reduce costs and improve efficiencies by eliminating the current semi-automated student census system that presently takes six months each year to complete and costs \$1.172M per year. Student census and other school statistical information will be current to within days and capable of being updated throughout the year as opposed to just once a year. Under the SSI proof of concept/pilot phases, participating schools have reported numerous instances of increased efficiencies. For example, the ability to know exactly how many and which students are absent shortly after school opens. Another example is the reduction in time to generate school and state reports by approximately half the time currently. SSI life cycle costs will be kept to a minimum through the centralization of databases and key support personnel.

I.9.a List all other assets that interface with this asset.

This system will be hosted on ENAN II.

I.9.b Have these assets been reengineered as part of this investment (Yes/No)

Yes

Requested Investment Summary of Spending for Project Stages (\$Millions)

BY 2005 Planning Resources:	.00
BY 2005 Acquisition Resources:	.00
BY 2005 Maintenance Resources:	.69
BY 2005 Total, All Stages Resources:	.69
Life Cycle Total, All Stages Resources:	16.07

DOI BUDGET YEAR 2005 IT INVESTMENT OVERVIEW

Investment Identification

Agency: Department of the Interior
Bureau: Bureau of Indian Affairs
Location in Budget: Summary of IT Investments
Account Title: Operation of Indian Programs
Account Identification Code: 010-76-14-2100-0
Program Activity: Office of Economic Development
Name of Investment: [Loan Management & Accounting System \(LOMAS\)](#)
Unique Investment Identifier: 01076010501761200206085
(IT Only)(see section 53)

Investment Justification

I.A Investment Description: LOMAS, the BIA loan and accounting management system, is a customized system that was designed for the Bureau of Indian Affairs (BIA) by the Department of Interior's National Business Center (NBC). LOMAS' primary use is to support the BIA Loan Program. The BIA Loan Program is responsible for promoting the economic development of Tribes and individual American Indian and Alaskan Natives by providing financial assistance through direct or guaranteed loans. (The BIA Loan Guarantee Program is authorized by the Indian Financing Act of 1974 and the Federal Credit Reform Act of 1990.) This system is critical to BIA's mission and is shared between the Office of Economic Development and Office of the Chief Financial Officer. LOMAS software is maintained on a server at the BIA data center located in Reston, VA.

LOMAS is a subsidiary finance and accounting system designed to: 1) administer BIA loans; 2) provide a database for loans and private lenders; 3) provide management information; 4) interface with the BIA core accounting and finance system, FFS (Federal Financial System); 5) generate required delinquency and activity reports to OMB and Treasury departments; and 6) support the BIA Central Office, Regional Offices, and Agency Field Offices in generating loans. Approximately 40 percent of the total IT investment budget authority is associated with the financial components. The LOMAS system is used to manage both direct and guaranteed loans. A replacement system for LOMAS is currently being considered because: 1) the system is not JFMIP or FFMA compliant; 2) the system is programmed in a computer language that has limited industry support; 3) the system does not have many functionalities that are needed by program personnel, and 4) the system is not interfaced or integrated with the BIA finance system.

LOMAS does not comply with FFMA federal guidelines for the Standard General Ledger or level of transaction detail, and does not meet the JFMIP mandatory requirements for loan systems. LOMAS is written in SMALL TALK, a computer language that is an older language that few personnel in the private or public sectors are trained to support. The NBC, who designed and programmed LOMAS, has only one person that is qualified to make changes or enhancements to the application. Currently BIA personnel are not able to process required functions in LOMAS. For example, the NBC database administrator must be contacted to perform functions such as, modifying the date of a loan guarantee, modifying a payment date, reopening a loan when it has been written off, and modifying the loan history and balance because of a delay in receiving IPAC monies. LOMAS also does not provide for required functions, such as lender portfolios needed for insured loans or activity reports needed by date for new loans, subsidies, payouts, new assigned loans, etc. Additionally, LOMAS is not interfaced or integrated with the BIA finance system, which necessitates duplicate manual entry of transactions and creates timing and reconciliation issues.

This is the first time a CPIC review has been conducted on the LOMAS system. The Bureau and the Department of Interior Review Boards have completed their review of the LOAMS system.

LOMAS needs significant enhancement because the system does not comply with FFMA or meet the JFMIP mandatory requirements for loan systems. Each year during the annual audit by KPMG a finding is documented stating that LOMAS does not provide the Standard General Ledger or level of transaction detail necessary for a loan system. LOMAS has been a forgotten system, which has not had any committee reviews or oversight processes over the years.

The planning, acquisition and maintenance costs stated in the spending plan for fiscal year 2006 address the cost for contracting out the function to a contractor to perform full service loan processing. However, it has not been determined if the contractor will perform the full service loan processing or a portion of the loan processing. The costs values were inflated 4% each year. The risks associated with using a contractor were reviewed. Another government agency, HUD, currently contracts out their loan processing function and is very satisfied with the results.

I.B.1 Agency mission and strategic goals and objectives supported:

LOMAS supports the DOI's management strategic goal #5, "Manage the Department to be highly skilled, modernized, functionally integrated, citizen-centered, and results oriented." Specifically, LOMAS addresses an intermediate outcome of strategy #2 titled "Improved Financial Management." The outcome goal or measure that is addressed is to improve the "accountability" of the LOMAS data. In addition, LOMAS supports DOI's strategic goal #4, "Safeguard property and financial assets, advance scientific knowledge, and improve the quality of life for communities we serve." The intermediate outcome that LOMAS addresses is strategy #4 "increase economic self-sufficiency for insular areas." The outcome goal or measure that is addresses is "improve economic growth."

The LOMAS investment supports the agency's mission, goals and objectives in that it provides a means to administer the loan management and accounting program and serves Indian borrowers, lenders, all regional BIA offices within the Indian community, and the Central Office.

I.B.2 President's Management Agenda strategic goals supported:

The LOMAS system supports the President's vision for government reform that is guided by three principles. — Citizen-centered, not bureaucracy-centered; — Results-oriented; — Market-based, actively promoting rather than stifling innovation through competition.

The specific goals that LOMAS supports are competitive outsourcing, improved financial performance and E-Government. The outsourcing initiative seeks to achieve efficient and effective competition between public and private sources. Specifically, BIA has committed itself to simplifying and improving the procedures for evaluating public and private sources, to better publicizing the activities subject to competition, and to ensuring senior level agency attention to the promotion of competition. Acquiring a replacement system for the current LOMAS system will ensure that BIA achieves this initiative.

The improved financial performance seeks to ensure that federal financial systems produce accurate and timely information to support operating, budget, and policy decisions. This initiative will improve the financial information derived from the loan program will be more timely, useful, and reliable. Specifically, the modernization of the loan system will assist BIA in immediate reconciliation between FFS and the loan program thus reducing errors and duplicate entries.

Further, the LOMAS system facilitates the E-government initiative in that it will make it simpler for citizens to receive high-quality service from the federal government, while reducing the cost of delivering those services. Specifically, LOMAS addresses the initiative through accepting loan requests, interest subsidy requests and payments, and lender reporting by electronic means. E-Government will automate internal processes and assist in the reducing the business reporting burden

I.B.7 Agencies and organizations affected by this initiative:

This project is not a multi-agency initiative.

I.B.8 Investment cost reduction or efficiency improvement:

Investment in a replacement system for the current LOMAS system will further reduce costs and improve efficiencies within the BIA loan management program. A new (replacement) system will provide additional functionalities not part of the current system, which will lead to more effective and efficient transaction processing and reporting. Additionally, the current LOMAS system is not fully interfaced with the BIA core accounting and finance system, the Federal Financial System (FFS). This requires transactions to be entered manually in both LOMAS and FFS, and creates reconciliation and timing issues. The replacement system for LOMAS will be fully interfaced with FFS and will preclude duplicate data entry and eliminate timing and reconciliation issues.

I.9.a List all other assets that interface with this asset. LOMAS interfaces with FFS. These interfaces will be expanded in the proposed replacement implementation of LOMAS. However, the enhancement will adhere to existing FFS interface specifications, thus requiring no reengineering of FFS to accommodate the expanded interfaces.

I.9.b Have these assets been reengineered as part of this investment (Yes/No) Yes

Requested Investment Summary of Spending for Project Stages (\$Millions)

BY 2005 Planning Resources:	.00
BY 2005 Acquisition Resources:	.01
BY 2005 Maintenance Resources:	.26
BY 2005 Total, All Stages Resources:	.27
Life Cycle Total, All Stages Resources:	23.03

DOI BUDGET YEAR 2005 IT INVESTMENT OVERVIEW

Investment Identification

Agency: Department of the Interior
Bureau: Bureau of Indian Affairs
Location in Budget: Summary of IT Investments
Account Title: Construction
Account Identification Code: 010-76-14-2301-0
Program Activity: Office of Facilities Management and Construction
Name of Investment: [Facilities Management Information System \(FMIS\)](#)
Unique Investment Identifier: 01076010701761300401119
(IT Only)(see section 53)

Investment Justification

I.A Investment Description: FMIS was designed and developed to support the mission of the Office of Facilities Management and Construction to ensure the efficient and effective stewardship of resources for planning, design, construction, improvement, repair, operation and maintenance of BIA-owned and BIA-funded Indian Education, Law Enforcement and General Administration program support facilities. FMIS provides the functionality and business process features that will provide information to manage BIA facilities over their entire useful life. The completed system will contain modules to support Asset Inventories, Deferred Maintenance Backlogs, Safety Management Inspections/Abatements, Construction Project Management, Budget Development and Tracking, Field Work Tickets, Field Work Planning, Environmental and Ad Hoc Reporting.

FMIS provides BIA with a very powerful automated support tool to help manage the BIA Facilities Program. It is used to justify funds and account for funds appropriated to operate, maintain and repair BIA facilities as well as provide program management capabilities for the scheduling and planning of facilities management activities. The system is used for recording the identification of all improvement, repair, health and safety issues abatement, and construction projects plus the allocation of funds for these purposes. It is also used to monitor new construction and all facilities improvement and repair activities from conception to conclusion. The system also serves as an on-going communications link with its users. It provides management planning, engineering, operations and maintenance, and fiscal control to central office, area offices, agency offices and school locations.

FMIS is in the Steady State Phase of the BIA CPIC cycle. FMIS was developed using the latest information technology with planning for future growth. An analysis is performed on any recommended changes/enhancements to make sure they meet mission requirements and needs before they are included into the system. With the exception of not having Internet connectivity, FMIS has been well received by the user/customer community. FMIS costs are reviewed as part of the OFMC CPIC process on a continuing basis to make sure continued maintenance and upgrades are within budget and within schedule.

I.B.1 Agency mission and strategic goals and objectives supported: DOI STRATEGIC GOAL: Manage the Department to be highly skilled, accountable, modernized, functionally integrated, citizen-centered and results oriented. The Bureau of Indian Affairs' mission is to fulfill its trust responsibilities and promote self-determination on behalf of Tribal Governments, American Indians and Alaska Natives to provide Tribes with the resources they need to strengthen their Tribal governments and to exercise their authority as sovereign nations through grants, and by contracting and compacting Bureau programs is supported by the development of FMIS which supports Facility Management programs that are granted, contracted or compacted.

Two broad goals within the BIA Strategic Plan are supported by the development of FMIS. The first is the

Administrative and Support Services goal to address material weakness declarations for Facilities Management and goal 02.05.02 to improve the safety and functionality for facilities for clients by a reduction in the number of safety deficiencies that will be managed in the new FMIS. The second goal is the Education improvements in academic performance and attendance supported by the maintenance, operation and repair of school facilities to provide a safe and supportive environment for education programs which will be managed with the new FMIS that is Y2K compliant and accessible via an improved data communications. The FMIS Deferred Maintenance Backlog module along with other supporting modules will efficiently and effectively collect and track information that will support and affect improvement toward these goals.

OFMC purchased the MAXIMO MMS software to supplement the FMIS system. After conducting a pilot to try and implement Work Tickets, Project Management and Budget modules within MAXIMO it was decided to discontinue the use of MAXIMO and implement Work Tickets, Project Management and Budget modules within FMIS. MAXIMO could not implement the OFMC required business requirements without extensive and costly modifications. Version upgrades to MAXIMO would have been cost prohibitive. In-house expertise could not support updates to MAXIMO to meet changing mission requirements.

I.B.2 President's Management Agenda strategic goals supported:

(1) Strategic Management of Human Capital: A Business Process Reengineering (BPR) analysis was developed and documented for the current "AS-IS" mission functions, including those perceived to be core/priority, were also developed in the "TO-BE" analysis documentation. As part of the BPR analysis, core competencies of existing staff were determined. A strategy was developed to invest in building internal capacity and to contract for services from the private sector for those functions that are not inherent, to tribal or private entities, this will maximize OFMCs ability in getting the job done effectively and efficiently. FMIS was developed as a knowledge management system with corporate business rules built-in to accommodate the capture of corporate skills and knowledge.

(2) Competitive Sourcing: As part of the BPR analysis and reviewing the core competencies of the existing staff, it was determined that using the existing staff to develop requirements, designing input screens, reports, testing functionality and evaluating the effectiveness of the system, while out-sourcing the design and development of FMIS would be the most cost effective and the most efficient means to accomplish the design and development of FMIS.

(3) Improved Financial Performance: All program activities are well supported by FMIS, which produces savings in program staff time, increased efficiency of data handling, improved coordination between activities and the use of common business rules in FMIS that are compatible with the day-to-day operations. FMIS will be used as part of an overall facility operations and maintenance improvement plan. Improved equipment/systems maintenance will result in increased equipment life, fewer breakdowns and shorter time to complete repairs. By collecting, analyzing and using data more completely, potential problems can be rapidly identified, solutions defined, projects implemented and personnel deployed to expediently and effectively resolve issues. Cost data and maintenance history of physical assets will be maintained in FMIS. This data will be reviewed to determine repeat failures, cost trends, reliability and maintainability, allowing an improvement in the current strategies for equipment and system selection, operation, maintenance and replacement. This data allows OFMC to make more informed operational and investing decisions and to ensure consistent and comparable trend analysis over time and to facilitate better performance measurement and decision-making.

(4) Expanded Electronic Government: FMIS provides a relational, Windows-based, user-friendly information system with marked improvements in flexibility that targets customer/employee needs. Based upon user roles the customer/employee has access to the same data whether at a location, area office, regional office or central office which allows the automation of internal processes to reduce costs internally. FMIS creates a single point of access to OFMC facility management data for individuals. OFMC central office is able to reduce their reporting burden by being able to run bureau wide reports. FMIS uses an inbound process with the Federal Finance System (FFS) to collect construction expenditures on OFMC projects, which allows the project managers to manage their projects in a real time environment.

(5) Budget and Performance Integration: The basic functionality of the Inventory, Backlog/Safety Tracking, Budget, Project Management and Work Tickets modules designed within FMIS will enable the facilities management program to achieve strategic mission goals within the framework of GPRA. As each location utilizes FMIS to manage/control their data, this will be an indication of their performance measures within the facilities management program and will determine their level of budget participation.

I.B.7 Agencies and organizations affected by this initiative:

FMIS is not a multi-agency initiative.

I.B.8 Investment cost reduction or efficiency improvement: By developing an MMS that supports the entire scope of the Facilities Management process, the various program activities efficiency savings are significant. All program activities are well supported by FMIS, which produces savings in program staff time, increased efficiency of data handling, improved coordination between activities and the use of common business rules in FMIS that are compatible with the day-to-day operations. FMIS will be used as part of an overall facility operations and maintenance improvement plan.

Improved equipment/systems maintenance will result in increased equipment life.

Fewer breakdowns and shorter time to complete repairs.

Collecting, analyzing and using data more completely can rapidly identify potential problems identified, solutions defined, projects implemented and personnel deployed too expediently and effectively resolve issues.

Cost data and maintenance history of physical assets will be maintained in FMIS. This data will be reviewed to determine repeat failures, cost trends, reliability and maintainability, allowing an improvement in the current strategies for equipment and system selection, operation, maintenance and replacement.

Because a high percentage of the Facilities Management business rules (both previous and improved rules) are included in the FMIS software, extraneous databases do not have to be developed, maintained and supported to conduct BIA Facilities business. The need for fewer updates and upgrades will be needed to capture the facilities program requirements. The updating and upgrading process for new releases of a COTS-MMS is expensive especially when commercial specialized expertise is required at premium rates to perform any updates or modifications. In-house expertise can be used to update FMIS as needed to meet changing mission requirements, which results in a much lower annual life cycle cost.

I.9.a List all other assets that interface with this asset. No other assets interface with this asset.

I.9.b Have these assets been reengineered as part of this investment (Yes/No) Yes

Requested Investment Summary of Spending for Project Stages (\$Millions)

BY 2005 Planning Resources:	.00
BY 2005 Acquisition Resources:	.00
BY 2005 Maintenance Resources:	2.15
BY 2005 Total, All Stages Resources:	2.15
Life Cycle Total, All Stages Resources:	30.75

DOI BUDGET YEAR 2005 IT INVESTMENT OVERVIEW

Investment Identification

Agency: Department of the Interior
Bureau: Bureau of Indian Affairs
Location in Budget: Summary of IT Investments
Account Title: Operation of Indian Programs
Account Identification Code: 010-76-14-2100-0
Program Activity: Land Title & Land Resource Management
Name of Investment: [Trust Asset Accounting Management System \(TAAMS\)](#)
Unique Investment Identifier: 01076010501763500117057
(IT Only)(see section 53)

Investment Justification

I.A Investment Description: This business case establishes a new baseline for the project based on the need for a land resource management system, continuation of the current operation of TAAMS, and for the rollout of TAAMS title history.

In May 2000, the Department of the Interior approved the deployment of a new information system to improve management of Indian Trust assets. TAAMS, developed by Applied Terravision Systems Inc. (ATS, now CGI Inc.) was to provide BIA and tribal officials nationwide access to Indian trust and land resource data. TAAMS is a trust information system. TAAMS allows the user to access, create and modify records in the database for Indian land title ownership and encumbrance documents. TAAMS performs title functions including the issuances of certified reports required for Indian title. Title information on historical transactions is available on V1.49.

The first phase of TAAMS title development, was prototyped and tested in an Integrated Users Acceptance Test (IUAT). The current title module was deployed to four BIA regions (Rocky Mountain, Southern Plains, Alaska, and Eastern Oklahoma). These four regions have been using the Title module. TAAMS is providing current status title for land under the jurisdiction of the title offices named above. The TAAMS land resource management functionality was developed and tested. It was put on hold without making the changes identified in the tests. The TAAMS Title Module project was reviewed and approved at appropriate points in the current departmental planning and approval process. Prior to the development of TAAMS Title Module, the Land Record Information System (LRIS) was the system of record for legal trust data. While providing all the LRIS functionality, TAAMS greatly expands the capabilities of retrieving and using the legal trust data. For the four BIA regions, currently operating under TAAMS, the LRIS data was converted to TAAMS and additional information was added. Therefore, the data cannot be reconverted to LRIS. LRIS has exceeded its planned maximum capacity and useful life. LRIS must be retired within the next year to decrease the risk of failure, and loss and corruption of data. LRIS and TAAMS must be operated and maintained concurrently, until LRIS is terminated.

TAAMS strongest asset is the data security features and functions built into the software. Users cannot create the erroneous data in TAAMS that they can in other legacy systems (LRIS and IRMS). TAAMS forces users to use established names and id numbers, drop-down menus to enter codes, does not allow duplicate id or document numbers, allows managers to identify the employees have corrupted data, and countless other data safety features.

TAAMS is in a mixed life cycle state of planning, acquisition and maintenance. The TAAMS operational system equipment and licenses need to be upgraded and deployed to approximately 100 locations (e.g. Agency offices, LTRO) with interconnectivity to over 500 tribes.

The original COTS software selected for TAAMS did not have any land title functionality. The land title functionality currently existing within TAAMS was developed to replace all the functions of LRIS, the existing legacy land title system, and to incorporate enhancements needed to properly monitor and maintain trust assets.

BIA/OTR was designated as the responsible office for the planning, acquisition and maintenance of TAAMS on May 16, 2003. This business case establishes a new baseline for the project derived from the current operation of TAAMS as expressed above.

The TAAMS is a trust information system that is undergoing the BIA CPIC process for the first time. It has been approved by Bureau capital review boards and is pending review at the Department level. The figures represented within this Capital Asset Plan are realistic and are based on estimates or projections.

I.B.1 Agency mission and strategic goals and objectives supported:

The U.S. Department of the Interior (DOI), with eight bureaus, is the nation's principal conservation agency, charged with the mission "to protect and provide access to our Nation's natural and cultural heritage and honor our trust responsibilities to Indian tribes and our commitments to island communities." TAAMS directly supports the DOI Missions of:

- Serving Communities - Safeguard property and financial assets, advance scientific knowledge, and improve the quality of life for communities we serve (Strategic Goal #4) o Fulfill Indian Trust Responsibilities: β Improve Indian trust beneficiary services β Improve Indian trust ownership information β Improve management of land and natural resource assets β Manage trust fund assets for timely and productive use β Support Indian self-governance and self-determination
- Management - Manage the Department to be highly skilled, accountable, modernized, functionally integrated, citizen-centered and results oriented (Strategic Goal #5).

TAAMS is a mission critical system designed to support the BIA goal "to protect and preserve trust lands and trust resources to ensure trust responsibility" and the Department's goal of meeting trust responsibility to Indian tribes and individual Indians. TAAMS has the capability to provide a comprehensive, national system for the determination and management of Indian land title and records for Indian Tribes and individuals, Regional and agency-field locations. It is the system of record for title in the regions where it is deployed. TAAMS is strategic to the DOI Trust comprehensive management plan.

The Land Records Information System (LRIS) is a 23-year old system. It is based on database software that is no longer made. LRIS is archaic, fragile, and at risk of failure. This system is scheduled for incorporation into TAAMS by FY 2005. The system does not properly operate with the current hardware and software and will cease to operate shortly.

I.B.2 President's Management Agenda strategic goals supported:

The President's Management Agenda requires "active, but limited Government" that empowers states, cities, citizens, and Indian tribes to make decisions; ensures results through accountability; and promotes innovation through competition. TAAMS supports these goals in the following ways:

- Expanded Electronic Government Goal by automating internal processes to reduce costs internally.
- o Citizen-Centered, not bureaucracy-centered β Manages Indian individual and tribal interests in trust lands & resources for the trust beneficiaries β Provides the primary land title application or tool that enables the Federal government to meet its trust responsibilities to Indian tribes and individuals β Implements management discipline and structure to plan for capital investments and to operate and maintain Indian Affairs systems for the benefit of Indians and Native Alaskans β Is staffed by government employees and supplemented with contractor staff in accordance with OMB Circular A-76
- o Results-oriented, not process-oriented β Enables agencies to share data across the network β Improves the quality, effectiveness, timeliness, and fairness of services provided to the millions of Indians and Native Alaskans served by BIA β Enables employees to focus on providing essential economic, social, law enforcement, and safety services to its Indian constituents with less duplication β Provides management and executives with the management information available in real-time or near real-time concerning the baseline statistics and associated service levels being provided to their customers β Enables BIA employees who respond to customer requests at all levels to be better served, thus, BIA service will become faster and more effective

I.B.7 Agencies and organizations affected by this initiative: TAAMS affects BIA, OST, OHA, OHTA within DOI.

I.B.8 Investment cost reduction or efficiency improvement: TAAMS is estimated to reduce the increased labor (not system) and cost to address probate backlog by one-third the time and one-half the cost. Because TAAMS is an "active" title system (automatically computes official title at the time each title document is entered into the system) rather than a "passive" title system (does not compute official title until requested to do so – like LRIS, which also does not store computed official title data), the land title stored in the system is maintained in an up-to-date status, which means the official title is available and can be queried at all times. The result is a reduction in title determination and certification costs by allowing reuse of title certification reports and data at multiple locations; it also increases customer output by eliminating the "waiting period" of 1-2 weeks minimum for the issuance of certified land title (which is a condition precedent for leasing, mortgaging, and the execution of conveyances or issuance of Orders Determining Heirs or Approving Will).

Also, TAAMS' ability to store up-to-date land ownership on-line (including simultaneous display of title/legal interests and beneficial/equitable interests) will have the following effects: reduces or eliminates errors and liability arising from reliance on out-of-date title ownership and encumbrance; and allows the immediate construction, drafting and execution of land title documents (which reduces time and costs, increases output, and increases customer satisfaction). Once TAAMS is allowed to be active in the Internet, the users will be able to request services online thus reducing the time spent in the regional offices requesting the titles.

I.9.a List all other assets that interface with this asset. TAAMS interfaces with the OST TFAS system, which has been reengineered. The land resource management function will interface with TFAS and FMIS. Currently BIA is not allowed to interface electronically with other system/agencies. When that obstacle is removed, BIA will develop an interface with TFAS.

I.9.b Have these assets been reengineered as part of this investment (Yes/No) Yes

Requested Investment Summary of Spending for Project Stages (\$Millions)

BY 2005 Planning Resources:	.00
BY 2005 Acquisition Resources:	9.80
BY 2005 Maintenance Resources:	5.00
BY 2005 Total, All Stages Resources:	14.80
Life Cycle Total, All Stages Resources:	93.78

DOI BUDGET YEAR 2005 IT INVESTMENT OVERVIEW

Investment Identification

Agency: Department of the Interior
Bureau: Office of the Solicitor
Location in Budget: Summary of IT Investments
Account Title: Salaries and Expenses
Account Identification Code: 010-86-14-0107-0
Program Activity: Legal Services
Name of Investment: [SOL IT Modernization and Consolidation \(SOL-Net\)](#)
Unique Investment Identifier: (IT Only)(see section 53) 01086020003200500404142

Investment Justification

I.A Investment Description: The project will provide a means by which the Solicitors Wide Area Network (SOLNET) can be connected to an enterprise network and/or the Departments Trust Network (TrustNet). It includes all of the storage devices necessary to provide for a transition away from distributed computing to centralized storage, so that all of the Solicitors data will be stored and maintained centrally rather than out in 17 regional and field offices around the United States. Further, it provides for certification and accreditation of the system pursuant to law and regulation.

This investment will allow the DOI Solicitors Office (SOL) to establish a network that meets today's business needs, complies with departmental architecture objectives and provides the security, availability, reduced cost of ownership, and interconnectivity that are requirements of the current and future environment. It also provides a much-needed modernization to the DOI Solicitors Office computing infrastructure. It reduces long-term cost of ownership while increasing operational efficiency by moving storage and server resources out of field offices and into a centralized facility, where the hardware and software may more easily be maintained and the information more easily managed. It also provides for connecting SOL to DOI via TrustNet, which was established as a result of the Cobell case, and will allow SOL to communicate with the Internet and other parts of DOI.

In the past, the Solicitors Office has relied on a patchwork of network links provided by other DOI bureaus. The Solicitors office has also relied upon other bureaus for support and maintenance services for servers and desktop workstations. As a result of the court ordered disconnection, and due to the ITM data passed by the SOL network, most other bureaus will no longer carry SOL traffic, as it would require them to bring their networks up to court accepted standards. Other bureaus have also become increasingly reluctant to provide the necessary bandwidth and support labor without compensation. BLM has agreed to carry SOL traffic until TrustNet is created, but that is a short-term solution.

This investment will allow the reconnection of SOLs network to DOI via TrustNet, and will also implement a more centralized, more easily managed infrastructure by implementing a Storage Area Network (SAN) supporting a Thin Client-based service delivery model. This project has been designed to complement the migration to Microsoft Office, TrustNet, and the replacement of the desktop hardware scheduled for FY2003. SOL-net will provide the SOL community with a secure, reliable network that is capable of properly safeguarding information assets. This network will provide the security and reliability that is lacking in the

current environment.

As part of the upgrade, network wiring and equipment that is two generations old, dating back to 1993 will be replaced. Solicitors Office Network, or SOL-Net, will utilize TrustNet for connectivity to the Internet and other DOI bureaus. However, TrustNet will not provide any of the LAN infrastructure at the Solicitors Washington, remote, or field offices. The locations to be connected and recabled by this project are:

Alaska, Albuquerque, Atlanta, Billings, Boise, Boston, Denver, Knoxville, Oakland, Palm Springs*, Phoenix, Portland, Pittsburg, Sacramento, Salt Lake, Santa Fe, Tulsa, Twin Cities

* 1-2 person office, will use dial-up connectivity.

This investment, known as the SOL-Net project involves three phases and aspects. The first phase includes replacing the network wiring and equipment at the field offices. This wiring is old, a frequent cause of failure and is not able to carry data at today's network speeds. The next phase includes connecting the local offices to TrustNet when it becomes available. The final phase includes moving all server and desktop applications from field offices to a central facility in Washington with a backup in Denver. The order of the final two phases may be reversed if TrustNet is delayed; however, both are dependent on rewiring of the remote offices.

Use of thin client technology and a SAN will allow all data and applications to be provided from the Washington (primary) or Denver (backup) facility. There will be no need to install Microsoft Office or other applications on remote desktops or remote servers. All software configuration, troubleshooting, reloading, security patching, and upgrading will be performed in Washington, for all remote sites. Remote PCs will have minimal (virtually no) software installed. All server hardware, for files, mail, and desktop and enterprise applications will be located in Washington, allowing more efficient management, maintenance, load balancing, and troubleshooting. There will be less need to upgrade desktop workstations as new, more demanding software is released, since the workstations are largely display devices only; the computing is performed on the servers. This will significantly extend the life of the desktop workstations.

The operational benefits of centralizing application and storage services include: Reduced requirements for on-site IT personnel at the remote offices, including recruitment and training Increased responsiveness to remote office problems through the use of the Washington staff Improved contingency planning and recovery for field offices through creation of a backup site Ability to develop enterprise-wide applications and electronic government (e-gov) projects through centralized data storage Improved ability to respond to information requests, such as FOIA and the Cobell case.

The reduced operational support requirements are key to offsetting the anticipated increase in support after migrating from a Novell LAN and Lotus Notes environment to an all Microsoft environment. The Microsoft environment is also expected to increase the need and importance of prompt installation of security patches.

The first phase will require the re-cabling of most of the field offices using category 5 or better wiring to support 100Base-T Ethernet. This improved cable plant will support today's networking requirements, reduce failures, facilitate workstation moves/adds/changes, and allow connectivity to BLM and later TrustNet. It will replace network infrastructure implemented before the Internet era.

The second phase will connect the LANs to TrustNet. TrustNet will provide connectivity to the Internet and to other DOI bureaus. BLM has agreed to provide SOL with WAN services while TrustNet is being built. This phase will not require a major expenditure, but will involve an annual recurring cost estimated to be \$100,000 per year for TrustNet services.

The third phase will implement a Storage Area Network (SAN), central server cluster, and thin clients for office applications (word processing, spreadsheet, etc.) The primary application servers, SAN, and communications hub will be located on the 6th floor of the main Interior Building, with a backup site at the Denver office. All computing services will be provided by this facility. This investment request funds the design, development, testing, and implementation of the central facility, SAN, and thin client implementation, a one-time cost.

This project will centralize data storage, allowing improved security, storage management, and data retrieval. It will eliminate the need for servers at each of the field sites, where they are difficult to maintain and upgrade. The centralized information store will facilitate future e-government initiative and allow more rapid search for information, such as in response to the Cobell case, FOIA requests, or for as part of an internal or external e-gov information access initiative.

The central facility will be operated and managed by the existing Washington SOL IT staff, with little or no growth. The central management will eliminate the need to provide approximately three to six Full Time

Equivalent (FTE) staff to manage the remote servers and desktops, spread between the 18 offices.

This initiative has been carefully planned to meet departmental and bureau management objectives. It complements and integrates with other ongoing and anticipated projects. It provides cost savings, intangible operational improvements such as faster trouble diagnosis, and allows the SOL IT staff to provide quality support to its customers and the Solicitors Office to provide excellent, uninterrupted service to the other bureaus. The result will be a secure, interconnected, and productive information infrastructure that meets the workflow requirements of the Solicitors Office, complies with the DOI Enterprise Architectures, and meets the goals of the Secretary's Management Agenda. Costs and risks have been carefully considered to ensure that the project is on time and within budget.

The project will take one year for planning, one year for implementation, and estimates are provided for 4 years on ongoing operational maintenance thereafter. The project completed the Departments CPIC process and was approved. It was particularly important because of the need for the Solicitors Office, with limited IT personnel resources, to develop the capability to manage its data centrally given the expense and lack of IT support available in its 17 field and regional offices.

I.B.1 Agency mission and strategic goals and objectives supported:

The mission of the US Department of the Interior is to protect and provide access to, and information about, our nations natural resources, natural heritage, and cultural heritage. The mission of the Office of the Solicitor is to provide high quality legal services and counsel to the Secretary and the bureaus within the Department. Specific legal services include representation in litigation, preparation of legal opinions, legal review of legislation, and furnishing informal legal counsel to our clients in a wide variety of circumstances. This requires frequent and effective communication within the Solicitors Office, between the Solicitors Office and the other bureaus, and to the public. The Departments bureaus directly support the Agency's mission. Absent sound legal advice from the Solicitors office, the bureaus, which are the Solicitors clients, would be unable to act within the confines of Federal law while seeking to achieve the Agency's mission. This investment provides the centralized data storage that will permit access to legal information across the Solicitors office to permit data sharing on legal advice given to the bureaus throughout the country. Each of the 17 regional and field offices, along with the headquarters, will be able to access and share data to ensure consistent legal advice to all parts of the Department served by the Solicitors Office. This investment supports our goals and objectives by allowing secure, effective communication within the Department and information exchange with outside entities, while reducing long-term costs.

This project will serve Secretary Norton's strategic goal of protecting resources by safeguarding the information resources used by DOI and SOL, preventing threats to any physical assets that the information describes. It will also help meet the Secretary's goal of serving the community by allowing SOL to better serve its customer community and the public by providing faster, more reliable information and response.

I.B.2 President's Management Agenda strategic goals supported:

This investment supports Government-wide initiative number 1 of the Presidents management agenda (Strategic Management of Human Capital) by implementing a solution that uses technology to reduce the amount of human effort necessary to operate the Solicitors information infrastructure. It supports the Presidents Government-wide initiative number 2 (Competitive Sourcing) by implementing an open architecture that allows competitive choice among products, and by using competitive procurement to acquire the products and services this investment requires. It will facilitate the Presidents Government-wide initiative number 4 (Expanded Electronic Government) by collecting information from all field offices into a central data store where it may more easily be made available to the public or other agencies as appropriate.

I.B.7 Agencies and organizations affected by this initiative:

This is not a multi-agency initiative.

I.B.8 Investment cost reduction or efficiency improvement:

A data network and interconnection between offices, regions, and bureaus is a necessity for modern business efficiency. The sharing of information, instant communication, and enterprise-wide applications that are permitted by a network are fundamental requirements for efficient operation. However, a network does not guarantee that these efficiencies will be realized, and the network must also provide secure, reliable information transmission. The architecture of the network and of the applications and servers it supports will affect the efficiency of the network itself, and of the users who rely upon it.

This investment will reduce costs by realizing economies of scale from the server resources and storage resources. Combining the servers from 17 of the field sites into a single server farm will allow the use of fewer, larger, and more cost-effective servers. The same applies to combining the storage from the 17 locations, to where it may more easily be managed, backed-up, or expanded. Efficiency improvement will

come from simplified software maintenance and greatly reduced need to visit field sites to troubleshoot or upgrade workstations.

I.9.a List all other assets that interface with this asset. This asset will directly interface with only TrustNet. TrustNet will provide access to other bureaus and with the Internet in a controlled and secure manner. TrustNet is new and is currently being implemented. Therefore, no reengineering is required.

I.9.b Have these assets been reengineered as part of this investment (Yes/No) No

Requested Investment Summary of Spending for Project Stages (\$Millions)

BY 2005 Planning Resources:	.00
BY 2005 Acquisition Resources:	.00
BY 2005 Maintenance Resources:	.30
BY 2005 Total, All Stages Resources:	.30
Life Cycle Total, All Stages Resources:	2.81

DOI BUDGET YEAR 2005 IT INVESTMENT OVERVIEW

Investment Identification

Agency: Department of the Interior
Bureau: Office of Special Trustee for American Indians
Location in Budget: Program Operations and Support -- IT Services
Account Title: Office of the Special Trustee for American Indians
Account Identification Code: 010-90-14-0120-0
Program Activity: Trust Funds Management
Name of Investment: [Trust Funds Accounting System \(TFAS\)](#)
Unique Investment Identifier: 01090010501900300205081
(IT Only)(see section [53](#))

Investment Justification

I.A Investment Description: TFAS is SEI Investment Inc.'s Trust 3000 commercial-off-the-shelf trust accounting system. The principal objective of this project is to implement a commercial off the shelf (COTS), private sector used and approved, trust accounting system and supporting information technology (IT) systems to meet the fiduciary responsibilities set forth in the American Indian Trust Fund Management Reform Act of 1994 and to assist the Secretary in meeting her trust responsibilities. This system is operated in a service bureau environment with the contractor being responsible for the operation and maintenance of the system and the hardware. Therefore, there are no full acquisition costs associated with this project, as the Government does not own the system.

The contract for this project was initially competed under commercial full and open competition in FY98 and awarded to SEI Investments for five years. It was re-competed in FY03 in a second commercial full and open competition and awarded again to SEI for another five years. Unlike the first contract, the new contract was awarded as a firm fixed price contract. This change in contract terms and pricing is reflected later in the Exhibit as a proposed change to the OMB baseline. The figures are presented in this document represent only those costs associated with the operation and maintenance of TFAS.

TFAS replaced a Government general ledger accounting system not able to properly account for trust fiduciary transactions.

OST enterprise-wide IT projects begin with a business need that is presented to the OST Office of the Chief Information Officer and to the OST Investment Review Board (IRB). The CIO's office reviews the project as to technical viability and adherence to the mission and strategic goals of both the Department and OST. OST began a formal CPIC process in FY03. The IRB meets once a quarter and approves/disapproves projects. The OST Chief Financial Officer is a member of the IRB and ensures that an appropriate funding source is available.

TFAS has been reviewed through the OST CPIC process.

I.B.1 Agency mission and strategic goals and objectives supported: TFAS supports the DOI mission of Serving Communities- Contribution to Society, goal #3: Fulfill Indian Trust Responsibilities by providing a commercial off-the-shelf trust accounting system that incorporates private sector system standards. Further, OST will use Strategy #4, Manage Trust Fund Assets for Timely and Productive Use to ensure that 100% of beneficiaries who have valid addresses on TFAS receive a periodic statement of performance.

I.B.2
President's
Management
Agenda
strategic goals
supported:

1. Strategic Management of Human Capital

This project allows OST personnel to concentrate on assisting the Indian/Tribal accountholder by utilizing the automated features contained within the system and by allowing the system to perform certain automated error checking routines. The use of automated functions allows OST personnel to operate more efficiently.

2. Competitive Sourcing

This project utilized full and open competition in FY98 and commercial full and open competition in FY03 to select a private sector vendor who could operate and maintain a trust fiduciary accounting system in a service bureau environment.

3. Improved Financial Performance

TFAS allows for the production of comparative quarterly financial statements, accelerating end-of-year reporting, and enhanced OST's ability to meet OMB and Treasury requirements accurately and timely. Use of TFAS has allowed the government to conduct trust accounting functions in the same manner as the private sector. The system being utilized is the same system that is currently in use by approximately 70% of the US bank trust departments.

4. Expanded Electronic Government

TFAS does not serve the general public, rather a subset (Indian trust beneficiaries). The beneficiaries have benefited from the use of this system by allowing the beneficiary to receive electronic direct deposits to their checking or savings accounts. This feature was not available previously. TFAS is a real-time system that allows the government to provide real-time account information to the beneficiary.

I.B.7 Agencies
and
organizations
affected by this
initiative:

N/A

I.B.8
Investment
cost reduction
or efficiency
improvement:

The implementation of standardized commercial-off-the-shelf trust funds accounting system technology (investment portfolio data management, cash accounting, trust accounting, etc.) supports agency mission requirements by ensuring generally accepted, auditable accounting practices are used. Therefore a very high level of assurance is gained to support the payment of Indian trust funds to the beneficiaries. The system users gain an increased level of efficiency.

Through the use of TFAS automated cash management features, overall cash management for Indian trust funds is enhanced. TFAS provides for the notification of upcoming investment maturities and related interest payments. TFAS also facilitates the printing of statements of performance for each Tribal and individual trust fund account on a regular basis.

The electronic storage of statements and report outputs from TFAS allow for increased efficiency when researching problems. This reduces personnel costs associated with the research.

I.9.a List all
other assets
that interface
with this asset.

MMS provides information to BIA who in turn provides an interface to the OST GSS. The OST GSS provides an interface to TFAS. Local Area Network and Wide Area Network Desktop computers

I.9.b Have
these assets
been
reengineered
as part of this
investment
(Yes/No)

No

Requested Investment Summary of Spending for Project Stages (\$Millions)

BY 2005 Planning Resources:	.00
BY 2005 Acquisition Resources:	.00
BY 2005 Maintenance Resources:	13.98
BY 2005 Total, All Stages Resources:	13.98
Life Cycle Total, All Stages Resources:	151.05

DOI BUDGET YEAR 2005 IT INVESTMENT OVERVIEW

Investment Identification

Agency: Department of the Interior
Bureau: Office of Special Trustee for American Indians
Location in Budget: Summary of IT Investments
Account Title: Office of the Secretary
Account Identification Code: 010-90-14-0120-0
Program Activity: Historical Accounting
Name of Investment: [OHTA Reconciliation Application](#)
Unique Investment Identifier: 01090010501900400301091
(IT Only)(see section [53](#))

Investment Justification

I.A Investment Description: US, Department of Interior (DOI) was directed, by the US District Court for the District of Columbia (Court), to successfully reconcile historical Individual Indian Money (IIM) accounts. DOI has made the performance of a historical accounting of IIM funds a top priority. In July 2001, the Secretary established the Office of Historical Trust Accounting (OHTA). OHTA has been tasked with the process of performing historical accountings IIM accounts and verifying their accuracy. Upon completion of the historical accounting, DOI will be in a position to provide each IIM account holder, subject to approval of the Court, a Historical Statement of Account detailing the account transaction history. DOI also intends to be in a position to provide each IIM account holder, subject to approval of the Court, with its conclusions about the accuracy of the account transaction history and balances. To support these goals OHTA has contracted a total of five accounting firms for the IIM account reconciliation effort.

To assist the Government selected accounting firms in reconciling trust assets, OHTA has identified the need to develop a common Reconciliation Application. The Application will allow accountants at the various firms to use a common system to query transactions from legacy systems; link transactions to relevant source documents; and reconcile transactions and note discrepancies, where appropriate. The Application will also include functionality that assists the Government in performing quality control and monitoring of reconciliation activities. Through a secure, verifiable process, the Application will allow only those users with appropriate rights to access the network. This Application and supporting components, specifically the network and imaging technology, will conform to DOI's Enterprise Architecture strategy.

The purpose of this Business Case Analysis (BCA) and Capital Plan is to provide the business justification for the DOI-OHTA Reconciliation Application (the Application). Once implemented, this application will be shared among the accounting firms responsible for reconciling IIM accounts. The application is to provide OHTA with a standard and repeatable process that provides transparency into the accounting firms practice of reconciling accounts. This Exhibit 300 has been prepared in accordance with the direction and guidance provided by the Office of Management and Budget (OMB), DOI, along with government and commercial best practices.

I.B.1 Agency mission and strategic goals and objectives supported: The Reconciliation Application meets DOI's overarching strategic goal of, "Meets Trust responsibilities to Indian tribes and Commitment to Island Communities." DOI's Strategic Plan for FY 2003 - FY 2008 also places a major emphasis on such results. OHTA's Application will directly support the DOI strategic outcome goal of fulfilling Indian Trust responsibilities and will improve Indian Trust ownership information by successfully completing historical account reconciliations of the IIM accounts.

Under DOI's Annual Report on Performance and Accountability, OHTA is slated to be directly responsible for correcting the Federal Managers' Financial Integrity Act (FMFIA) Material Weaknesses of Trust Funds

Management with affiliation with other corrective measures within Bureau of Indian Affairs (BIA) and the Office of Special Trustee. This would aid in DOI's compliance with legal and regulatory requirements. The corrective action determined by DOI is for OHTA to ensure accurate historical accounting, which would aid in achieving a "Comprehensive Trust Management Plan." This Reconciliation Application will support meeting the target set by DOI in correcting the FMFIA material weaknesses by providing OHTA with a standard and repeatable process that provides transparency into the accounting firms practice of reconciling accounts. The target correction date planned in the report is for FY 2006.

Strategic Goal(s)Supported: Meet Trust responsibilities to Indian tribes and commitments to Island communities by complying with legal and regulatory requirements (Compliance with Trust Funds Management Reform Act of 1994 to account for the daily and annual balances of all funds held in trust by the US for the benefit of an Indian Tribe or an Individual, which are deposited or invested pursuant to the Act of June 24, 1938.)

How Initiative Supports Goals: - Provides accounting of IIM accounts to the satisfaction to the court - Completes reconciliation of 42,218 Judgment and Per Capita IIM accounts - Resolve the ownership of and close a total of 21,500 Inactive Special Deposit accounts - Reconcile 490,000 transactions for land-based IIM accounts for a total - Implement standard and replicable approach to conducting reconciliation of accounts to ensure accurate account reconciliation of IIM accounts - With implementation of Application, ensure Security and protection of Indian Trust data used in Application

I.B.2 President's Management Agenda strategic goals supported: The President has called for "active, but limited" Government: one that empowers states, cities, and citizens to make decisions; ensures results through accountability; and promotes innovation through competition. According to the President's Blueprint for New Beginnings, if reform is to help the Federal Government adapt to a rapidly changing world, its primary objectives must be a Government that is Citizen-Centered, Results-Oriented and Market-Based.

Funding of the Application is justified by its support of key elements in the President's Management Agenda (PMA):

Competitive Sourcing – In support of this goal to ensure a market-based Government, the Application maximizes opportunity to continue competitive sourcing of account reconciliation work due to a documented standard and replicable process.

Improved Financial Performance – By maximizing DOI's ability to render accurate historic accountings, the Application supports the objectives of this goal to improve accuracy of benefits payments to recipients and improve the timeliness and reliability of financial data

Expanded Electronic Government – The Application automates historical accounting process to cost effectively move data between government and accounting firms. This supports some of the objectives of this goal to reduce the expense and difficulty of doing business with the government and automates internal processes to reduce costs.

Budget and Performance Integration – The Application maximizes control over resources needed to conduct historical accounting process by implementing a performance-based management system to ensure costs, schedule, and performance goals are achieved. This supports the objectives of this goal to establish accountability systems that allow citizens to judge whether effective performance is taking place; share information more quickly and conveniently between federal and state, local, and tribal governments; make government more transparent and accountable; and expand the use of performance-based contracts.

I.B.7 Agencies and organizations affected by this initiative: This is not a multi-agency or department initiative. However, there are solutions that will be leveraged within DOI such as network monitoring and management of the Application by BIA's TrustNet environment. Additionally, OHTA will utilize DOI's enterprise wide licenses for Oracle, Microsoft operating systems and DOI suggested hardware specification to be compliant under the department's Enterprise Architecture Technical Reference Model.

I.B.8 Investment cost reduction or efficiency improvement: There is an increase in costs through the implementation of the Application, when compared to the current process of IIM account reconciliations, due to the development and operations of the Application to meet user requirements and OHTA guidelines. However, efficiencies can be gained and were quantified in the printing, mailing and productivity of accountant labor areas as a result of the use of the Application. The Application would eliminate the current process of mailing and printing reconciled transaction reports to OHTA and Quality Control contractors in Washington, DC. Time efficiencies are also assumed to materialize by the elimination of accountant's time to physically searching for supporting documents of IIM transaction data at various Trust

data storage facilities. The searching process of finding supporting documents to map to transactions will take place within the Application through imaged documents that can be referenced.

The Application will allow accountants to use a common system to query transactions from legacy systems, link these transactions to relevant source documents that are imaged, and reconcile transactions and note discrepancies, where appropriate. The Application will also include functionality that assists the Government in performing quality control processes such as audit logs and reports that further accountability on reconciled efforts. Through a secure, verifiable process, the Application will allow only those users with appropriate rights to access the network. Additional important benefits of Application include:

- Facilitate OHTA performing an accurate and complete accounting in a timely manner
- Establish standards for consistent accounting, usable by multiple firms for repeatability and quality assurance
- Ensure the security and protection of the Indian trust data used in performing the accounting
- Assist the Government in performing quality control functions and to monitor the reconciliation activities
- Assist DOI in honoring its special responsibilities and commitments to American Indians and Alaska Natives

The Application further supports goals of the President's Management Agenda through improvement in Government efficiency and effectiveness and responsiveness to citizens

I.9.a List all other assets that interface with this asset. The Reconciliation Application will be a stand-alone system with respect to other DOI assets. While the Application will reside on a server(s) located in the DOI-BIA Data Center, it will be firewall protected from all other DOI systems. The Application will interface with the imaging solution systems once operational.

I.9.b Have these assets been reengineered as part of this investment (Yes/No) No

Requested Investment Summary of Spending for Project Stages (\$Millions)

BY 2005 Planning Resources:	.00
BY 2005 Acquisition Resources:	.00
BY 2005 Maintenance Resources:	1.16
BY 2005 Total, All Stages Resources:	1.16
Life Cycle Total, All Stages Resources:	12.49