

# **U. S. Railroad Retirement Board**

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## ***Strategic Information Resources Management Plan 2009-2013***

# **Railroad Retirement Board Strategic Information Resources Management Plan 2009-2013**

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## **I. AGENCY AND IRM MISSION**

### **A. Introduction**

Information Resource Management (IRM) is a critical component of the Railroad Retirement Board's (RRB) strategy for achieving its objectives in all areas of its work, including its mission programs and support operations. To meet business goals and objectives, the RRB must effectively use Information Technology (IT) to increase staff efficiency, improve program effectiveness and enhance services to its customers.

The IRM Strategic Plan describes the RRB's vision, objectives and measures for long-term IT investments and management of technology resources. It ensures that technology goals are consistent with the RRB's Strategic Plan, and support mission and business needs. It additionally translates the strategic goals and visions into specific IT initiatives and activities and defines plans for focusing the RRB's resources toward implementation of these objectives.

### **B. Railroad Retirement Board Mission**

The Railroad Retirement Board's mission is to administer retirement/survivor and unemployment/sickness insurance benefit programs for railroad workers and their families under the Railroad Retirement Act (RRA) and the Railroad Unemployment Insurance Act (RUIA). These programs provide income protection during old age and in the event of disability, death or temporary unemployment and sickness. The Railroad Retirement Board also administers aspects of the Medicare program and has administrative responsibilities under the Social Security Act and the Internal Revenue Code.

In carrying out its mission, the Railroad Retirement Board will pay benefits to the right people, in the right amounts, in a timely manner, and will take appropriate action to safeguard our customers' trust funds. The Railroad Retirement Board will treat every person who comes into contact with the agency with courtesy and concern, and respond to all inquiries promptly, accurately and clearly.

### **C. IRM Mission**

The RRB's IRM mission is to provide increased value to the agency's business, through automated systems and technology, by enabling the Railroad Retirement Board to achieve its strategic goals and performance objectives in the most effective and efficient manner.

### **D. IRM Vision**

We are committed to provide our customers with choices to access information and services improve effectiveness of our systems and provide automated tools to our employees to better serve our customers. Our vision extends beyond the specific scope and time frame of this plan,



to that point in the future when all information and services are integrated around our customers. We envision an interconnected organization that provides information and services in a seamless manner, through electronic pathways which support intra-agency, as well as inter-governmental operations.

## **E. RRB Strategic Plan Objectives**

Technology and automation are key elements of the agency's strategy and ability to move successfully into the future. The following direction is provided in the agency's strategic plan.

### Strategic Goal 1 – The RRB will provide excellent Customer Service

#### Performance Actions:

- Pay benefits accurately and timely
- Provide a range of choices in service delivery methods, including additional choices to be available through the Internet and through the interactive voice response system.
- Expand paperless processing to increase efficiency and productivity.
- Improve automated systems to reduce referrals requiring manual handling.

### Strategic Goal 2 – Serve as Responsible Stewards for Our Customers' Trust Funds and Agency Resources

#### Performance Actions:

- Deploy advanced security technologies to protect against physical and cyber-security threats.
- Ensure the effectiveness, efficiency and security of operations, including conducting risk assessments, protecting against physical and cyber-security threats, and protecting the personally identifying information needed to conduct agency business.

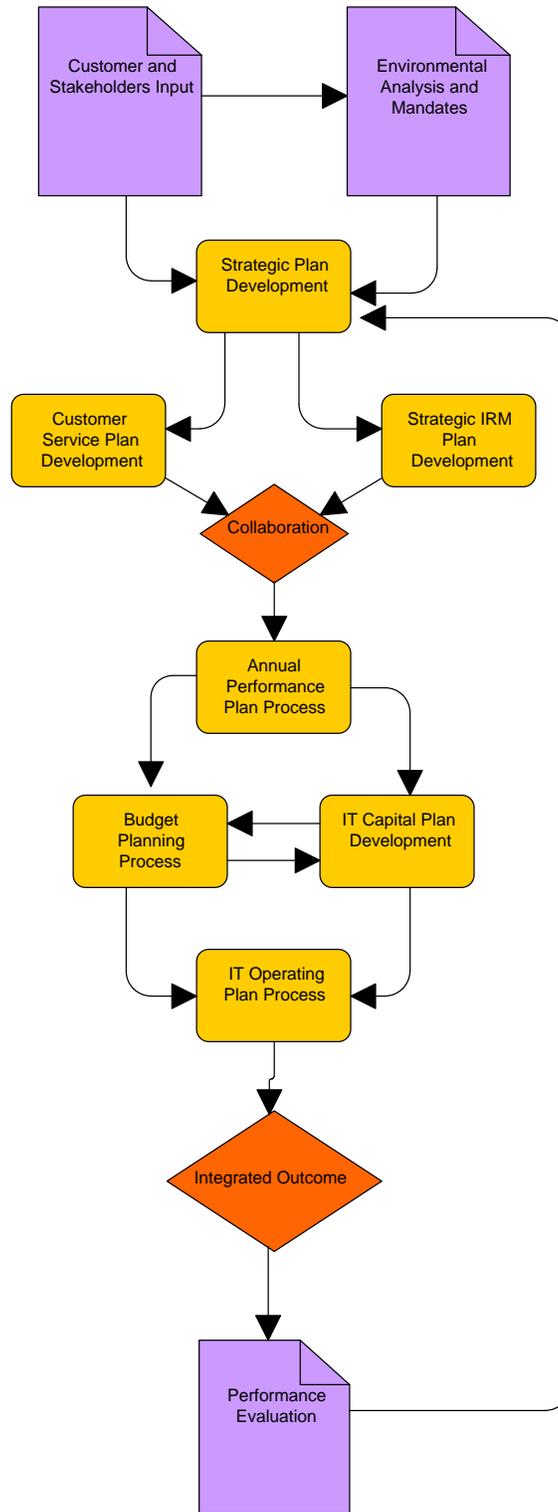
### Management Strategies - Effectively Manage Information Technology for Results

#### Performance Actions:

- Strive for better ways to plan and control our information technology investments and initiatives, to ensure that they perform as expected, provide a meaningful return, and are delivered on time and within budget.
- Develop metrics to analyze IT investments for compliance with agency plans and needs.

## **F. RRB Strategic Planning Process**

The following figure illustrates the RRB's strategic planning process.



**RRB Strategic Planning Process**



## II. IRM ENVIRONMENT

### A. Infrastructure

#### 1. Data Center

The RRB's data center is located in the headquarters building. It houses the mainframe computer, disk and tape storage devices, data communications equipment, network servers and other Information Technology equipment.

The mainframe computer system has a vital role at the RRB. The RRB's mainframe computer system is the hub of the agency's datacenter infrastructure. The agency relies on the mainframe to:

- Perform large-scale transaction processing of mission-critical legacy applications,
- Support a large number of users and application programs concurrently accessing numerous resources,
- Manage large volumes of information in databases, and
- Handle large-bandwidth communication.

Currently, we are using IBM's z9 mainframe computer. The processing environment is based on IBM's z/OS v1.7, IBM's DB2 UDB v8, IBM's CICS Transaction Server v3.1, IBM's COBOL and Assembler programming.

The agency's LAN operating system currently in use is Windows 2003 Advanced Server Domain with Active Directory Service incorporating 100 Intel-based servers. Those servers are connected to CISCO switches and embedded routers. An MS Windows 2003 Web applications environment and MS SQL 2000 databases environment support non-mainframe application needs. All agency users, mobile or fixed, are supported by the agency's Windows 2003 domain using TCP/IP access for Internet, Intranet, email/scheduling (Microsoft Exchange Server 2003), and mainframe computing. There are approximately 950 users, 300 of which are at 54 remote offices.

The network is configured with a gigabit fiber backbone, with switches on ten floors with two secondary distribution facilities on most floors. The headquarters building uses clusters of CISCO switches that connect users to that core infrastructure. The network uses 35 switches to provide 1,680 dedicated 10/100 mbps ports for dedicated desktop and network printer connectivity. The main distribution facility (MDF) in the data center uses two CISCO devices, two pairs of redundant CISCO PIX firewalls, and a CISCO communication server switch. A CISCO router connects the WAN. Intel based printer servers provide multi-platform connectivity to 110 headquarter printers and remote offices.

The Enterprise Storage System centers on the EMC Symmetrix DMX storage array. The storage system employs EMC Network Attached Storage (NAS). Four Brocade devices provide connectivity to the open system environment. Connectivity from the storage array to the mainframe computer is via FICON channels. The agency also utilizes the IBM Automatic





IPSec (Internet Protocol Security) processing with TCP-IP and other processing. Also, DB2 version 9 has support for the use of zIIP already built in.

In addition to enhancements to the mainframe, the agency is creating a virtualized server environment utilizing the VMWare Server to consolidate the agency's existing servers. In 2009 we migrated our Microsoft SQL database three-tier environment to the virtual server environment. Our next step is to migrate our main application servers. The advantages to the agency of a virtualized server environment are:

- centralized server administration,
- increased availability of applications for business continuity,
- reduction of servers,
- power and cooling savings, and
- faster recovery in the event of a disaster.

## 2. Desktop Computing

All desktop personal computers (PCs) have, at a minimum, a Microsoft Windows XP operating system and are configured in accordance with the Federal Desktop Core Configuration (FDCC) standards. These standards define the base configuration of desktop computers that are authorized to operate within the agency. The standard configuration differentiates among several basic user profiles to ensure that user groups with specialized needs, such as imaging users or system developers, are properly equipped. In addition to desktop computers, we also maintain an inventory of notebook PCs, as well as PCs used in other environments, such as training areas and conference rooms. When PC equipment is no longer in service, it is categorized as surplus, removed from the inventory, and if appropriate, donated to schools, in accordance with Executive Order 12999.

All desktop computers have access to the Internet, a standard e-mail package, and the RRB's mainframe computer, thus enabling a wide range of communication capabilities. Telecommuters utilize the agency's virtual private network (VPN) to access agency systems for the purposes of working from off-site locations.

***Desktop Computing – Future Potential*** During FY2009, the RRB initiated the *One Computer Model*. The RRB provides approved telecommuters (those whose work requires them to work with Personally Identifiable Information (PII) off-site) with a standard RRB approved notebook computer; RRB approved standard office system software, and a docking station for use at the RRB facility that includes a keyboard, monitor, notebook security cable and external mouse. The notebook with docking station replaces the employee's desktop computer as the employee's RRB workstation. The *One Computer Model* will be expanded to telecommuters who work on non-PII related agency work.

We have also begun researching the possible use of virtualized desktop PCs in the agency's desktop computing environment. From our current perspective, virtualization is the centralization of desktop computing onto a much smaller number of server platforms.



Virtualization holds potential to enable us to better leverage underutilized resources by running multiple logical environments on a single physical environment.

Virtualization can enable the RRB to meet a number of business, technical, and security objectives.

- Facilitates a common standard desktop across the organization or for homogenous user classes
- Facilitates provisioning and maintaining standard software, configurations, and applications
- Allows users to access their system from a multitude of locations and platforms
- Provides the ability to deploy stronger and more consistent security for office, home, or mobile workers
- Retains all PII data within the security of the data center

### 3. Advanced Technologies

**Image Processing and Document Workflow System** - Improvements have been made to the Agency's Imaging and Document Workflow System during the past several years to improve processing and lay the foundation for future efficiencies.

The benefits from these improvements include:

- Documents and files are updated to the Imaging system electronically, making document handling, scanning, and indexing unnecessary.
- Costs are reduced for paper and ink for documents that no longer need to be printed.
- Where documents are bar coded, they are automatically indexed by the scanning software saving staff time and increasing accuracy.

In 2006, the RRB completed a feasibility study to expand imaging nationwide by providing field offices the capability to scan documents into the system and to use the system to process work within the field office in a paperless environment. In March 2007, the RRB began a pilot study in four field offices that resulted in the successful deployment of scanning equipment to half of all field offices by July 2008. The RRB will complete deployment to all field offices in FY2009.

In June 2009, the Imaging system underwent a major upgrade and reengineering including new servers and software. The two domains, RRA and RUIA, were combined into one domain during this upgrade. Also, Unified Log-on was put in place for Imaging's thick client, WorkDesk. (Thick clients are full-featured computers that are connected to a network. Unlike thin clients, which lack hard drives and other features, thick clients are functional whether they are connected to a network or not.)

***Imaging – Future Potential.*** As we implement future phases of the document imaging project, we will be continually re-evaluating the bandwidth requirements needed to support the imaging



traffic. We plan to take advantage of the scalable bandwidth features available in the agency network to accommodate future growth. We also expect to:

- Simplify workflow paths,
- Streamline workflow in-boxes,
- Reduce the number of scanning applications, thereby reducing the number of scanning errors,
- Add more electronic output files to Imaging, and
- Add bar-codes to more documents, and expanding bar-code readability to headquarters scanned RRA documents.

**Communications:** The RRB's Interactive Voice Response (IVR) system supports customer service and personnel productivity. The IVR service, known as the RRB Help-Line, allows railroad unemployment and sickness insurance claimants to obtain automated claim and benefit payment information by calling a toll-free telephone number. Customers can also request replacement Medicare cards, rate verification letters, and letters showing their railroad service and compensation. In addition, callers can obtain the address of the field office serving their area.

Calls are handled according to a customized "script." " In order to access specific claim and benefit payment information contained in the RRB's databases, callers are required to enter their social security number and a personal identification number (PIN). General information and servicing field office information are available to callers without entry of a social security number and PIN.

The RRB's Automatic Call Distribution (ACD) system detects the area code/exchange of the customer's call from the toll-free number and uses this information, along with real-time data on the availability of local field office staff, to route their call to the next available claims representative. This minimizes delays to customers and efficiently distributes work.

Data Transport MPLS and VoIP - In FY2009 the RRB implemented a nationwide toll free service over a Multi-Protocol Label Switch (MPLS) network. The MPLS network carries both data and voice traffic. Voice over Internet Protocol (VoIP) telephone service is now being used at all RRB field offices. The RRB's VoIP system has replaced the Field Service office's phone network, or land line PSTN (Public Switched Telephone Network). Callers are able to access all IVR services and, for callers who want to speak to a claims representative, an Automatic Call Distribution (ACD) system automatically distributes incoming calls to field office staff serving the caller's geographic area.

VoIP provides the RRB with a cost savings for a number of reasons. It is no longer necessary to purchase local telephone service and long distance service for each Field Service Office. Data and voice traffic now traverses a single facility. Costs are also lower because of the way Internet access is billed compared to regular telephone calls. While regular telephone calls are billed by the minute or second, VoIP calls are billed per megabyte (MB). The amount charged for the data



transferred in a given period is far less than that charged for the amount of time connected on a regular telephone line.

In keeping with our objective to improve customer service and to establish easier access to data and applications from any place and at any time, the RRB provides notebook computers for use by field office representatives while they are traveling to remote locations. This equipment allows employees to access information as they do in the office, thus providing flexibility and a range of options for customer service delivery. Remote access is currently through mobile broadband wireless cards, which are only available to agency staff at certain customer outreach program locations. The RRB uses a virtual private network (VPN) technology as the most cost-effective way to provide services to employees at remote locations. The Networx contractor provides VPN services that allow RRB employees to connect to all systems from any location, using a portable computer.

***Communications – Future Potential*** We are continuing to research the added value and practicality of system modifications that would allow our customers to select and modify their own personal identifying numbers (PINs). Such modifications would be a prerequisite to expanding the customer service options offered through IVR.

We also plan to evaluate the feasibility and costs of enhancing the agency's Interactive Voice Response (IVR) system to include speech recognition. Speech recognition software would allow the IVR system to recognize words in addition to touchtone signals. The advantages to using speech recognition are a flattening of the IVR menu structure for a better caller experience and the ability to take advantage of more advanced system capabilities, such as speaker verification.

**Internet and World Wide Web** - The RRB maintains a public website ([www.rrb.gov](http://www.rrb.gov)) to provide viewers with a broad range of information about the agency and the services we perform. The website is currently hosted by a third party commercial service providing advanced capabilities and dedicated servers.

***Internet Environment – Future Potential*** We are continuing to evaluate improvements to the information provided to our customers and additional services that would allow our customers the ability to conduct business transactions through internet based systems.

**Intranet** - The RRB maintains an Intranet ("Boardwalk"), which is available throughout the agency to all employees at their desktops. The Intranet provides a common access method to a wide variety of the agency's documents, human resource information, procedures, newsletters and forms. The RRB continues to expand and enhance the Intranet. The intranet allows for a standard user interface to all application systems, as well as to documents, reports, forms, internal communications, and PRISM, the agency's internal library of policy and procedures.

***Intranet – Future Potential*** The agency has begun to use Microsoft SharePoint on a very limited scale. SharePoint is a collection of products and software elements that includes, among a growing selection of components, Internet Explorer-based collaboration functions, process management modules, search modules and a document-management platform. SharePoint can



be used to host web sites that access shared workspace, information stores and documents, as well as host defined applications. We plan to expand our use of this tool for business improvement.

## **B. Databases**

The RRB's mainframe database environment currently comprises several "master" databases and many "transaction" databases. Master databases are those which are permanently maintained and updated to reflect the current (and, in some cases, historical) views of the data, and are generally available for a variety of processing needs. Transaction databases temporarily house records of individual processing actions for use within a specific application, but are not generally maintained as permanent records.

Most of these databases are physically defined as tables within the IBM DB2 database management systems (DBMS). Data is accessible to appropriate employees and increasingly, the end user, through in-house written, online software applications. This data, stored in databases, is available to support defined business functions that increase customer service through the web interface from RRB.GOV. In addition to the mainframe databases supporting the legacy systems, the RRB also has developed numerous databases to support a wide variety of PC application systems. These include databases developed using Access, dBase, and Microsoft SQL. Microsoft SQL is being used as the principal database platform for a number of Microsoft .Net applications currently under design and development, including various Internet initiatives.

***Databases – Future Potential.*** The recent Data Optimization project created a single optimized master database for railroad employee, claimant, and beneficiary data. The optimized master database combines data drawn from 22 databases. In order to take full advantage of the efficiencies of the optimized master database, the existing application systems (frequently written in COBOL) must be modified to access data directly. The design of the optimized master database supports a more efficient and improved analytical as well as transactional processing. Modernizing our systems will require adapting legacy systems to access the optimized master database.

## **C. Applications**

The RRB application architecture currently includes over 200 major application systems consisting of more than 4,200 custom programs and approximately 7 million lines of code. The uniqueness of the agency mission has required development of specialized calculations, processing adjudication, financial transactions, and other routines. We have invested heavily in application system development to ensure the timeliness and accuracy of our mission-critical functions for our customers. Most of these legacy systems are designed for the mainframe platform. We have taken great strides in recent years to create applications utilizing PC and Web platforms that integrate with server based Microsoft SQL and mainframe DB2 databases.



The principle components of the claims adjudication application architecture include the following:

- The retirement and survivor daily and monthly check writing system,
- The claims processing systems for retirement and survivor claims,
- The unemployment and sickness insurance claims systems,
- The retirement taxation system,
- The Medicare systems,
- The payment, rate and entitlement history system, and
- The system that calculates annuity components using service and earnings records.

In addition to these, there are related application systems that perform a variety of other functions. These include suspensions and terminations, changes of address, enrollments in direct deposit, automated folder control, online referral messaging, various database corrections, specialized correspondence, and others. The RRB also maintains financial and administrative systems to support its mission.

***Applications – Future Potential.*** The proprietary applications which are critical to mission support would be considered legacy applications by any measure. They have been patched and adapted over the years to meet legislative demands and to incorporate exception processing, to the extent practical. As a result, the code is complex and difficult to interpret. While we have been able to address some code inefficiencies as we revise applications, the primary objective of the Systems Modernization (see section II. A. System Modernization) initiative is to improve the logic and coding of the applications and systems so that the programs can run more efficiently and be better understood. As many employees, who represent significant institutional knowledge, retire and new employees are hired or programming work is contracted out, it is very important that the programs be documented and their logic made easy to understand. The agency cannot afford to allow new employees extended periods of time to analyze and discover what a program does and how it works.

Software products are available to help identify and automate the process of identifying dead code, duplicative code and some logic errors. We plan to conduct research to determine whether these products can be used to expedite the reengineering of our legacy applications.

#### **D. Management Structure**

**Executive Committee (EC):** This committee is composed of senior executives of the agency and is responsible for the day-to-day operations of the agency in conformance with existing laws, regulation, policies and orders promulgated by the Board Members. The EC makes recommendations to the Board Members on agency-related policy issues; promotes coordination and communication on matters of agency-wide policy and direction.

**Chief Information Officer (CIO):** The RRB's CIO position, established in 1995, has helped to consolidate, streamline, and manage information services and operations throughout the



agency. The CIO position based on the Clinger-Cohen Act and, by reference, the Paperwork Reduction Act, includes the following major duties:

- Providing advice and assistance to the head of the agency and other senior management personnel to ensure that information technology is acquired and information resources are managed consistent with the Clinger-Cohen Act and the priorities established by the head of the agency;
- Developing, maintaining, and facilitating implementation of a sound integrated information technology architecture;
- Promoting effective/efficient design/operation of major IRM processes; and
- Monitoring and evaluating performance of IT programs, and making recommendations concerning the continuance, modification, or termination of such programs.

**Information Technology Steering Committee (ITSC):** This committee is composed of senior managers representing major program and administrative organizations within the agency. It functions as an advisory board to the CIO by evaluating spending and resources to be used in the IRM area, including system development projects and capital expenditures. The committee is responsible for preparing the Strategic IRM Plan, the IT Capital Plan, and individual major project plans for approval by the CIO.

**Architecture and Planning Group:** The Architecture and Planning Group is headed by the Chief Enterprise Architect. The purpose of this office is to provide project direction for building the enterprise architecture, the enterprise data model, infrastructure programs and internet/intranet strategies. The office focuses on achieving effective and efficient enterprise architecture for the RRB. It is responsible for coordinating stakeholder involvement, leading to the setting of standards and policies and designing architectures to guide the introduction of technology products and services.

**Standards Review Committee and Standards Approval Committee:** These committees are in place to maintain and update the RRB's IT Standards and Procedures Manual, the IT Guidelines, and the Computer Services Manual. They include representatives from various divisions within BIS as well as representatives from the primary user organizations.

### Organizational Responsibilities for Information Resources Management

#### **Bureau of Information Services (BIS)**

- Management of all major information technology activities, including management of resources and evaluations of whether to continue, modify or terminate IT programs or projects
- Centralized data center and mainframe management
- Application program development/maintenance
- Database administration and data integrity monitoring
- Telecommunications support
- Computer security and controls; disaster recovery plan coordination
- Privacy Act compliance



- Safeguarding of Internal Revenue Service (IRS) tax return information
- Paperwork Reduction Act and Clinger-Cohen Act compliance
- Local and wide area network management
- Management of end-user computing environment, hardware and software
- Management and technical administration of the agency's Website
- Records retention and disposition

**Office of Programs (OP)**

- Project initiation based on identified business need or problem, new legislation, business partner initiative, or customer service goal
- Perform user analysis
- Definition of requirements and specifications
- Development of implementation plans and strategies
- Preparation of end-user procedures and training
- Review and monitoring of production programs and systems, and provide end-user support
- Perform Certification and Accreditation of major applications
- Coordination of training for personal computer and mainframe software applications

Other bureaus and offices have similar functions with respect to their systems and applications.

### **III. MAJOR ISSUES TO BE ADDRESSED DURING THE PLANNING PERIOD**

The next few years hold enormous potential for the RRB. To realize this potential, the agency must seek new ways to serve and satisfy its customers while managing continuing constraints on resources. We intend to meet this challenge by exploiting the potential offered by information technology, to the maximum extent allowed within our designated operating resources each year. Following is a summary of some of the major enterprise-wide issues and challenges we will face during this planning period.

#### **A. System Modernization**

In the context of the Railroad Retirement Board, System Modernization is a process of understanding and evolving existing software and hardware assets. Existing software is defined as any production-enabled software system, regardless of the platform it runs on, language it's written in, or length of time it has been in production.

Legacy software systems often resist evolutionary change because their ability to adapt, and therefore, their strategic value have diminished through factors not exclusively related to the systems functionality. Common examples of such factors are a system's inability to be maintained cost-effectively because of increasing complex code due to years of maintenance



changes, a lack of understanding of the system, inability to interoperate or dependence on undesired technologies or architectures.

We are impelled to undertake the modernization effort because the reality is that many of the agency's existing systems are old and complex and require a large investment in maintenance from both a technical and business perspective. The programmers and business subject matter experts (SME) which support those legacy systems are retiring or moving on to other careers at a faster rate than we are hiring. We are not only losing the resource but also the knowledge about those particular systems.

Modernization restores the value of existing applications because it extracts and leverages the investment in the intellectual property of entrenched software in order to deliver new solutions that address changing business requirements. Our efforts will eliminate unnecessary or reduce redundant activities, improve accuracy and security of the systems and their transactions, make the systems more user-friendly for agency employees and our customers, improve interoperability and flexibility of systems, and improve ability to collaborate with agency partners. By modernizing its systems, the RRB will ultimately decrease the time and cost to develop and operate the systems to allow us then to focus on new initiatives. Some of the objectives of the System Modernization initiative will include:

#### **Adopting a Service Oriented Architecture (SOA) approach to application development**

SOA is a modernization solution to designing software that breaks-up the business applications into separate reusable code assets or "services" that can be used independent of the applications of which they are a part and computing platforms on which they run. When individual services within the applications are available as discrete building blocks, the agency can integrate and group them in different ways to create completely new capabilities. The application assets produced will populate a shared repository, rather than being trapped in a narrow application-specific solution. SOA provides the ability to break traditional applications into smaller component processes, ultimately facilitating plug-and-play software that can easily change with business requirements.

Simply adopting SOA will not trim the fat from our architectural designs; nor will it instantly improve the way we develop and deliver software solutions. Adopting SOA is a lifestyle change that has to become integrated into all aspects of the agency's culture, including business processes, software requirements development, software architecture, system development lifecycle, enterprise architecture, project management and hardware and software purchases.

#### **Expanding use of BusinessObjects for Business Intelligence**

The faster we move to a single master database the easier it will be to fully implement a formalized business intelligence strategy. Business Intelligence (BI) is a broad category of applications and technologies for gathering, storing, analyzing, and providing access to data to help enterprise users make better business decisions. BI applications include the activities of decision support systems, query and reporting, online analytical processing, statistical analysis, forecasting, and data mining.



BusinessObjects enables users to track, understand, and manage the wealth of information stored in the agency's enterprise. The business units will realize with replacement of the standard reports that we have been generating with our COBOL programs how much further we can drill down for more specific information. It is at that point that the agency can fully use BusinessObjects as the BI platform.

### **Perform Risk Analysis on Existing Systems**

Using a risk based approach; we will analyze our existing applications to determine which of those pose the biggest risk to the agency. That analysis will provide the application priority for system modernization. The Medicare system modernization has been identified as the first system to be modernized.

### **B. Risk Management and Privacy**

In order to provide appropriate protection of information and information systems in the face of a changing risk environment, a comprehensive security program requires continuous management to control the risks that threaten the agency's critical assets. Complementary use of both technology and well-trained personnel can effectively reduce those risks to an acceptable level. Our projects for the planning period focus on adherence to the Federal Information Security Management Act (FISMA), security training, and the specialized hardware and software to ensure agency information is kept secure and private. The initiatives are as follows:

- Certification and accreditation – The RRB is currently in the process of consolidating six (6) major application systems into three major applications and two general support systems that must undergo a National Institute of Standards and Technology (NIST)-defined certification and accreditation (C&A) process as defined in OMB Circular A-130. The agency will use contractor support to either accomplish or augment RRB staff for the C&A.
- Reporting software – The RRB will acquire a FISMA reporting solution to automate FISMA evaluation and reporting processes. The agency will take advantage of shared service center agencies and/or vendors participating in the Office of Management and Budget's Information Systems Security Line of Business initiative.
- Training – The agency will take advantage of shared service center agencies/vendors participating in the Presidential Information Systems Security Line of Business initiative to provide agency employees with security awareness training. We will also acquire a role-based, comprehensive, specialized, security training program for personnel with direct responsibilities for protecting IT systems as specified by the Presidential Information Systems Security Line of Business initiative.
- Specialized security hardware/software/services – Information security is a concern, and for this reason a data center must offer a secure environment which minimizes the chances of a security breach. We plan to add, upgrade and replace many of the agency's



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security related software and hardware and use contractors to assist the RRB in protecting sensitive data.

### **C. Continuity of Operations Improvements**

Federal Emergency Management Agency and Homeland Security Department directives (Federal Continuity Directives 1 and 2) require Federal agencies to create and maintain a Continuity of Operations Plan (COOP). The COOP ensures that the agency can carry on all essential functions in case of a natural or manmade disruption or disaster.

IT plays a key role in the continuation of the agency's operations by assisting in the quick recovery of critical and essential government operations during any major disruption to operations. For example, short-term disruption such as a power outage or failure can be quickly resolved by employing a backup capability for systems, personnel, processes and other needs. It can also be longer term, such as in the case of a major weather event, earthquake, or other natural or manmade disaster where services are impacted for several days or, in some cases, weeks. For this long-term disruption of services, the agency may require the ability to relocate and operate at an alternative facility. Investments in this capital item will ensure that the agency would be able to respond quickly with minimal interruption to services and resume normal operations no matter what the emergency or disruption.

The focus for the reporting period will be on availability of data in an emergency. A major initiative of this focus is on remote disk backup. The agency has many mission and time-critical applications that require immediate data restoration in the event of a manmade or natural disruption or disaster. This initiative will provide disk backup (data replication or data mirroring) to the agency's secondary backup center for critical information that needs to be continuously available. In addition to the backup of data, the capability of data availability and restoration via the employment of this application will assist in a speedier return to normal operations as well as provide secure storage.

The RRB will continue to focus on obtaining a variety of new and upgraded software and hardware systems to support the agency's continuity of operations. Risk reviews, testing, and expansion of telework are also critical elements of continuity of operations planning that may be considered.

### **D. Keeping Pace with Technology**

As recognized in the agency's strategic plan, we need to ensure that we use technology and automation effectively to achieve our mission. This will involve taking advantage of both existing and emerging technologies, as appropriate.

We recognize that new technology offers the best opportunity for enhancing effectiveness and efficiency while attempting to lower the costs of service delivery and mission fulfillment. As a result, we must balance the trade-offs between the need to take advantage of emerging technological advances to meet our business needs and the need to conserve our resources.



We intend to use all levels of our management structure to continually evaluate and assess our progress in this regard. This will include the CIO and the Bureau of Information Services staff, the Information Technology Steering Committee, and the Executive Committee. The agency's capital planning process is geared to focus on those areas with the greatest potential to pay dividends (either in cost savings or in improved customer service). The agency will also strive to invest in improving the skills of our staff, by ensuring that appropriate training is provided to support the implementation of new technology as deployed.

### **E. Application Development/Infrastructure Services Resources**

To accomplish its mission, the RRB needs an effective and efficient IT workforce, including application development and infrastructure resources. To ensure that the agency has an application development and infrastructure workforce that has the knowledge, skills, and abilities to operate effectively in today's rapidly changing environment, we must address two issues during this planning period. First, we need to upgrade the skills of the application development and infrastructure services staff. Second, we need to ensure that we have programs in place to hire and train replacements for our retiring workforce.

- Upgrading skills of current staff - Changing technology makes upgrading the skills of the application development and infrastructure staff a necessity. IT staff are being required to branch out into new methodologies and techniques to support the agency's ambitious business goals of improved customer service, better communications, and more efficient systems. For example, programmers who have become expert in COBOL, CICS, and other mainframe development tools are now faced with an array of new tools for use in developing Web-based application systems, real-time processing, etc. Training is planned to continue throughout the reporting period and later years. We will be assessing the skill level of the staff to determine their training needs, and will focus on providing training through the most cost-effective means available. This may include formal classroom sessions, on-the-job learning, computer- or web-based training courses, mentoring, or other techniques. This extensive retraining effort will require a significant and ongoing commitment and investment in training resources. The ongoing challenge will be to ensure that all employees receive the training support necessary to effectively use the new technology, thus making the most of our investments.
- Hiring replacement staff - Like much of the RRB's workforce, a large number of the systems development and infrastructure staff is nearing retirement age. Experience has taught us that it takes considerable time to develop the essential corporate knowledge needed to develop and maintain the RRB's systems. To ensure that we can provide adequate maintenance of the existing mainframe and infrastructure systems and support future automation initiatives, we have begun succession planning for the technical staff. The agency has begun hiring, in limited scale, expert and entry level technical staff. We will be closely monitoring the attrition of staff and take hiring actions accordingly.

In addition to the two strategies described above, the RRB will also consider supplementing its in-house application development and infrastructure staff with contractor assistance in situations



where this would be appropriate. Examples would include situations in which RRB staff lacks the technical expertise in a new technology/methodology or situations where the RRB has insufficient staff resources to complete a project within an acceptable timeframe. The option to pursue contractual assistance will be considered on a case-by-case basis.

## **IV. IRM GOALS AND OBJECTIVES**

### **A. Build Programmatic Systems Around the External Customer**

As stated in our IRM vision, we foresee a future in which the RRB's information architecture is integrated around our customers, rather than around systems or organizations. We are continuing with implementation of a portfolio of information system development initiatives. These initiatives focus on customer functions, from the initial customer contact, through the application for benefits, claims processing and payment, and finally, storage of the customer's information.

The primary customer-focused functions are:

#### **1. Expansion of customer contact choices**

This encompasses expansion of internet-based services for beneficiaries and employers, and taking full advantage of the agency's new nationwide toll-free telephone service to provide improved interactive voice response (IVR) information and improved access and "drop off" to RRB representatives through automated call distribution. To support the RRB staff in providing service, we will develop an integrated workstation that can use the newly installed Multi-protocol Label Switch (MPLS) system to provide customer data on-screen ("screen pops") to accompany incoming calls. Internet services will expand to include online filing of biweekly claims for sickness insurance benefits and increased capabilities for employers to file reports and transact business using the Employer Reporting System (ERS). The RRB also is actively using videoconferencing to process appeals.

#### **2. Annuity estimates and pre-retirement planning**

Over the years we have improved these customer functions with the development of enhanced annuity estimating programs, including the Retirement Estimated Annuity Program (REAP) and Retirement Planner. These programs support the ability to forecast benefits for pre-retirement planning purposes; coordinate estimates with other pension programs; and generate personal benefit statements, similar to those issued by SSA.

#### **3. Enhanced methods of evidence collection**

This function covers the development of improved methods for collecting, processing and storing the various types of proofs and other evidence needed for adjudicating claims. Proofs are currently stored in a centralized location so that users or automated systems can access them online, both at the time of initial adjudication as well as for later



reference, if necessary. We are currently evaluating the use of information maintained by the Social Security Administration as proof of age to streamline the adjudication of retirement and survivor claims. We are also considering the use of attestation (signature by proxy) in the application development process. This would eliminate the need for a “pen and ink” signature and result in more efficient processing and thereby better customer service.

#### **4. Integration of application processing**

This function would build improved customer service through initiatives for providing direct, real-time access to benefit information from various sources and processing transactions related to establishing initial benefit entitlement. Overall, this includes a variety of initiatives intended to contribute toward our goals to provide service at the point of contact and to provide a range of service delivery choices to our customers.

#### **5. Integration of program processing operations**

This function focuses on integrating the claim processing requirements of both the RUIA and RRA programs by creating improved system-to-system connections and coordination. Transactions of all types will be controlled from the point of initiation through a new work management system; benefit calculations will be performed through central, standardized programs; and, benefit information of all types will be passed from system to system as needed to allow for real-time, or just-in-time, processing, as appropriate. We will also enhance our systems-to-systems connection with SSA to automatically verify earnings information and evidential proofs, including proof of age and proof of death. Such connections will allow for real-time online calculation of benefits.

#### **6. Integration of database operations**

The RRB currently houses data in diverse databases and on a variety of platforms. Our challenge in this area is to ensure that accurate and timely information is provided to allow staff to perform their jobs effectively, and to support effective decision-making to foster the achievement of the agency’s goals. Continuing the data optimization initiative, streamlining and/or restructuring the remaining databases to reduce redundancy and improve efficiency will be a major component of this category of work.

#### **7. Simplification of system data modification**

This function includes the development of initiatives focused on providing a facility for data modification, through user-friendly formats and extensive online editing to ensure the accuracy of the modifications. The ultimate objective would be for the data modification facility to generate automated transactions, triggered by the content of the data being entered or revised.



Within the functional framework described above we have identified a series of technological improvements and software development projects to support customer service. The projects identified are designed to improve the efficiency of our operations while continuing to provide excellent customer service.

The completion of the entire framework indicated, if adopted, is anticipated to extend beyond the current strategic planning time frame. It will also be dependent on the development of the information technology architecture, which will be underway during the same period of time. All major initiatives will be assessed against various strategic and operational goals, including:

- reduced system maintenance costs,
- reduced manual intervention and processing,
- increased accuracy of benefit payments,
- improved timeliness of benefit payments, and
- increased customer satisfaction.

The degree of value-added return must be determined for each investment to establish its priority and placement in the developmental time line. With this type of in-depth analysis and planning, we fully expect to achieve the desired results, including returns on our investments.

## **B. Provide Administrative Systems and Support to the Internal Customer**

Similar to the programmatic systems discussed in the preceding section, future administrative systems development efforts will be directed toward enabling the agency's internal and administrative customers to conduct their business in the most convenient and effective manner possible. These customers include primarily RRB employees in headquarters and the field offices. They also include suppliers, vendors and contractors with whom we do business. Effective and efficient administrative systems will allow the RRB to better align its resources, lower its administrative costs, and concentrate a greater part of its resources on programmatic work, which directly serves the agency's primary external customers.

Principal administrative functions include:

- Financial management responsibilities, which are supported by customized, off-the-shelf software package from CGI's Federal Financial System (FFS). Payroll/personnel responsibilities are supported by General Services Administration's (GSA) Electronic Time and Attendance Management System (ETAMS) and Comprehensive Human Resources Integrated System (CHRIS), which are cross serviced. Travel responsibilities which are supported by a GSA approved E-Gov Travel Service that is commercially hosted.

In fiscal year 2010, we plan to contract for a requirements analysis to evaluate potential and/or actual performance gaps in FFS. The analysis will be used to provide the basis for



estimating the cost of any changes required, if any actual or potential performance gaps call for modernization. OMB's Financial Management Line of Business mandates that agencies which are seeking to upgrade to the next major release of its current core financial management system or modernize to a different core financial management system must either migrate to an approved Federal shared service provider (SSP) or qualified private sector provider, or be designated a SSP. Further, OMB anticipates that within 10 years of the recent guidance, agencies will have decided to migrate their technology hosting and application management to a SSP.

- Enterprise Human Resources Integration (EHRI) is one of the Presidential E-Government initiatives. EHRI is comprised of three major components; a central data repository for all Executive Branch employee records, an electronic employee record accessible to all Federal employees, and a set of analytical tools for reporting and data analysis.

A part of EHRI is related to OMB's mandate for agencies to implement an *electronic Official Personnel Folder (eOPF)* system. Currently, Official Personnel Folders are paper folders housed on-site by each Federal agency. Funds for this initiative would provide for the planning and implementation of an eOPF system for the RRB. The Office of Personnel Management's EHRI Project Office will provide the RRB technical support and administrative services related to eOPF.

Some benefits of EHRI include:

- Projected \$72 million annual savings government-wide by eliminating paper folders;
- Automated filing of SF-50 notices of personnel actions;
- Access to eOPF's with web-based, secure, and audited access;
- Ability of employees to access their OPF's from work or home; and
- Automated retrieval of eOPF's by agencies and the National Archives and Records Administration.

In fiscal year 2012 we propose obtaining two types of services to accomplish eOPF:

- 1.) planning services to assess requirements for, and planning of, implementation of the overall EHRI eOPF system at the RRB, including software, hardware, hosting, licenses, and paper file ("backfile") conversion, and
  - 2.) implementation services to acquire software and licenses, system configuration of the development and production environments, software development and configuration, installation and configuration of the eOPF system at the hosting facility, system testing at the development and production environment, transition to support, training, and backfile conversion.
- Electronic commerce provides the RRB and its business partners the ability to conduct business via online systems, email and electronic data interchange. The RRB staff can receive quotes, issue purchase orders, and pay invoices via an electronic data interchange. Our strategic priority as stated in the RRB's



Strategic Plan, is to ensure that the RRB uses electronic commerce, where practicable and/or cost-effective, to consistently support payment of the lowest price for products and services commensurate with quality, service, delivery, and reliability. In particular, the following electronic commerce best practices facilitate meeting that objective.

- The RRB posts over 80% of its eligible business opportunities on the government-wide Federal Business Opportunities (FBO) website ([www.fedbizopps.gov](http://www.fedbizopps.gov)), since its inception in 2001. This practice enables the RRB to post its solicitations on FBO, making business opportunities available to the American marketplace and especially to small businesses nationwide.
- The RRB procurement staff receives Contractor's offers for posted RRB procurements to a shared RRB mailbox to best manage and track the proposals, throughout the procurement process, in accordance with federal procurement law and regulation. The RRB also issues orders and contracts to the contractors via email immediately upon award.
- The RRB has over 80 designated employees authorized to use Fast Pay Credit Card for rapid micro-purchases or other simplified acquisitions providing just-in-time responsive support of the agency's daily operations at the point of need.
- Designated employees in all RRB organizations, acquire office supplies with next business day delivery under a competitively awarded Blanket Purchase Agreement with a commercial provider. Employing a user-friendly, web-based ordering system, employees can order and receive the office supplies that they need right from their workstations, generally within one business day.

RRB will continue to expand our use of electronic techniques to accomplish business transactions, including secure electronic mail or messaging, internet technology, purchase cards, electronic funds transfers, and electronic data interchange.

### C. New Development Projects Currently Underway

The RRB currently has several major system development projects underway, which we intend to complete in the relative near term of this planning period (i.e., during the next 2 to 3 fiscal years). In addition, a risk assessment of existing applications will be conducted to provide direction for future development projects. Of the projects currently underway, our highest priorities include the following initiatives:

**Application Express (APPLE) System:** This system allows applications for all recurring and one-payment-only retirement and survivor benefits to be taken online, in a paperless, folderless environment. Through interfaces with other existing systems, it also allows the field representative to terminate benefits, request wage record information, and submit the application for automated payment. Processing of the payment and award notice is performed



through automated batch operations. This system allows for the completion of the customer's transaction through a single customer contact, often with no additional manual handling other than that by the initial person taking the application.

This system is being developed in four phases. We have completed 3 ½ phases of the initiative with the second part of Phase 4, scheduled for completion in FY2010. This final phase will automate the payment process for all retirement applications through the Retirement Online Calculation system (ROC). Completion of this phase will allow for the elimination of an older legacy system and provide the foundation for accepting applications on the Internet.

**Medicare Part C and Part D Premium Withholding:** The Medicare Prescription Drug, Improvement and Modernization Act of 2003 allows beneficiaries to elect withholding of Part C and Part D plan premiums from monthly benefit payments. A workgroup comprised of representatives from the RRB and the Centers for Medicare & Medicaid Services (CMS) issued a report in January 2009, which outlined an approach and requirements for the data exchanges necessary for Part C and Part D premium withholding from RRB benefits.

The agency has begun work on new and revised programs to enable Part C/D premium withholding. To support this initiative, the agency will develop new database tables and display screens. The new database tables are considered a first step in developing comprehensive new database tables and display screens to support the agency's Medicare activities. Although final implementation must be coordinated with CMS, we are targeting implementation for late 2010, in time for the end-of-year Annual Enrollment Period.

**System to Process Excess Earnings Data (SPEED):** In the first phases of this initiative, we focused on the automation of temporary work deduction that result from excess earnings and work deductions. Currently earnings reports initiate automated adjustments, suspensions, and reinstatements of retirement and survivor annuities. Future enhancements focus on survivor permanent work deductions and retirement excess earning which represent the more complex recalculation of benefits due to multiple earning reports and employers.

Automation of many of the labor-intensive activities in this area is a high priority due to staff reductions. It also provides improved customer service. Long-term plans are for this application system to enable the customer to furnish personal earnings data to the agency via the Internet. The application will be built to operate in a multi-platform environment, consisting of legacy mainframe components and new LAN-based PC components.

**Sickness Insurance Claims:** We are currently working to provide the capability for RUIA beneficiaries to file biweekly claims for sickness insurance benefits online. We will automatically screen the claims to select those that can be forwarded to employers for prepayment verification without prior manual RRB adjudication.

**Employer Reporting System:** We are in the process of converting the current internet-based system to a software language which is compatible with existing software development



standards, and which will provide the foundation to add new functionality to the system. This system provides employers with electronic alternatives for exchanging information with us.

#### **D. Projects Planned for the Reporting Period**

In addition to the initiatives listed above which are currently underway, the RRB has identified the following potential projects to be pursued during the reporting period.

**Internet Transaction Services:** We have identified additional internet applications, which would improve our customer's access to information and enable them to conduct business transactions online. These services would assist us in meeting our strategic goals of improving and expanding customer service options. These services that have been identified are:

- Application for Annuity – We will develop a system that will allow individuals to file annuity applications online. This will begin with employee and spouse annuity applications. After gaining experience with these, we will evaluate survivor benefit applications as well.
- Beneficiary Profile – We will provide an online Beneficiary Profile screen that will permit individuals to view and update certain data maintained by the agency, such as address and direct deposit information.
- Secure E-mail – We will evaluate the potential of enhancements to our current secure e-mail capabilities to expand the ability of offices to receive and manage secure messages from our customers.
- Annual Reporting – We will provide rail employers with the ability to create and file Annual Report of Service and Compensation. This service will provide an alternative to several requests for information that are now processed by transferring or mailing files or forms.
- Automated Notifications – We will provide rail employers with notifications in situations such as:
  - Annuities are awarded to their employees.
  - A tax liability on sickness benefit payments is established.
  - An annuitant who was a former employee dies.

**Legislative and Regulatory Changes:** We will ensure that systems are modified to comply with all legislative changes affecting the benefit programs. Two areas of concern that may be addressed by legislation are:

- The Congressional Budget Office has projected that the Consumer Price Index will not rise sufficiently to trigger a cost-of-living adjustment in monthly benefit payments in December 2009. Because there is projected to be an increase in Medicare Supplemental Medical Insurance (Part B) premiums effective January 2010, a majority of beneficiaries



would begin paying non-standard variable rate premiums under the “hold-harmless” provisions of the Social Security Act if legislative action is not taken.

- In order to help prevent identify theft, legislation was considered in 2008 to require agencies to remove Social Security Numbers from Medicare cards. Substantial staff resources would be required to modify existing programs and systems if such legislation is enacted.

Availability of Real-Time Calculation Data: Real-time availability of calculation data is a requirement for our long-range vision of processing applications without manual intervention by utilizing enhanced systems-to-systems arrangements with SSA’s earnings database and an attestation (signature by proxy) process. In its final version, the integrated application system would:

- allow an individual to apply for retirement or survivor benefits (either through the Internet or with a field office),
- determine eligibility and entitlement,
- calculate an annuity rate and accrual, and
- notify the applicant immediately of how much he or she would receive and when to expect payment.

System-to-System Access (STSA): In the late 1990’s, the RRB and Social Security Administration (SSA) successfully implemented a direct, real-time communication link (Joint Agency Data Exchange) between the RRB’s Retirement Online Claims (ROC) system, the Survivor Payments System (SURPASS), the APPLE system and SSA’s mainframe, which houses the social security master benefit records. Data from SSA’s master benefit record (MBR) is obtained for every railroad retirement award action initiated in ROC, SURPASS and APPLE. The information is used to determine the social security benefit reduction required for calculation of the railroad retirement Tier 1. Both agencies are interested in pursuing further links, including links to SSA’s NUMIDENT database which provides evidential data, such as birth, death and relationship, and a link to SSA’s earnings database, which will lay the groundwork for obtaining real-time PIA calculations.

Government-wide Accounting (GWA): GWA is a project of the Department of the Treasury’s (Treasury) Financial Management Service (FMS). The project addresses the central accounting and reporting functions and processes associated with budget execution, accountability, and cash asset management. This includes the collection and dissemination of financial management and accounting information from and to Federal program agencies (FPAs). All FPAs are expected to be converted by FY 2012. GWA will eliminate the two-step classification process and outdated reporting, capture the Treasury Account Symbol (TAS) and Business Event Type Code (BETC) at the earliest possible time for agency payment, collection and intra-governmental transactions, and post directly to the fund balance with Treasury.

One of the most significant aspects of GWA affecting the RRB is the requirement that agencies capture and report TAS and BETC information with each disbursement and collection



transaction. Because a single payment under the Railroad Retirement Act (RRA) can be composed of amounts funded from a number of separate Treasury accounts, we anticipate a need for significant system and program changes in our RRA daily and monthly payment processes.

Payment Modernization (PAM): The PAM project is a Treasury effort to modernize their current mainframe-based software applications that are used to disburse Federal payments. The existing payment system is a configuration of numerous software applications that generate check, wire transfer, and Automated Clearing House (ACH) payments for FPAs, including the Railroad Retirement Board. Treasury's vision involves replacing over 30 COBOL and Assembler applications that have evolved over the last several decades, with a single standardized application. Because the basic functionality within all of the current applications is similar, a standardized system that is highly extensible and configurable is the desired end product. In addition to standardization, FMS is looking to modernize the technologies employed in the development of the system, using commercial off-the-shelf (COTS) products where feasible and incorporating new and enhanced functionality to support improvements in the payment process.

Treasury published a standard payment file format in late 2007. The format incorporates requirements of GWA to report TAS and BETC information for each payment. A timetable issued by Treasury shows a target date of September 2012 for converting the legacy programs used to process the RRB's daily and monthly payment files to the PAM application.

National New Hire Directory: The agency has investigated use of the National New Hire Directory in order to obtain information not available through our current matching programs with the States. Use of the National New Hire Directory has the potential to further reduce improper payments in the RUIA program. The RRB terminated efforts to obtain legal authority to access the Directory because the administrative costs of participating in the program were prohibitive. The agency may renew efforts to obtain access to the Directory if substantial cost relief could be provided.

Knowledge Database: The RRB's procedure manuals are organized by adjudication subject. As such, the procedures do not lend themselves easily to "how-to" instruction on various work flows frequently encountered by field service personnel. An automated system containing checklists, tips and processing reminders, links to applicable procedure and other "help" would be beneficial to field office personnel, and help improve accuracy and efficiency in handling customer inquiries and other types of work items,

Case Pending/Tracking and Tickler System: Field personnel currently use a manual system to pend and call up work that requires additional action at some later date. Because this system is limited to each location, we plan to develop a new system (Electronic List of Managed Objectives (ELMO)) with the capability to call up pended cases from any location. The system will be integrated into our existing work distribution system (Universal STAR), rather than operating as a stand-alone system.



**Systems Integration Menu:** Staff in our field offices and other locations would benefit from a single desktop menu screen containing links to most frequently accessed systems with space to add additional user selected icons and links. The integrated desktop would provide for simpler, quicker navigation to frequently accessed systems and reference sites.

**User-Built Data Retrieval:** The agency has developed a limited number of customized data views, referred to as Consolidated Information Screens (COINS). Additional customized views of customer and claims data, ready for retrieval by field staff as they work with customers, would enable quicker transactions.

## **E. Infrastructure Investments**

Over the last few years, the agency has taken significant strategic steps to improve computer processes and better position itself for the future. In conjunction with our System Modernization efforts and new system development, our next strategic steps involve upgrading our infrastructure to support these systems and the most effective cost to the agency. Included in this effort are the following initiatives:

### **Scheduled replacement of Infrastructure equipment**

An information technology (IT) infrastructure provides a critical foundation for the RRB's business. Desktops, notebooks, servers, printers, routers, scanners, and other IT equipment make up the agency's IT infrastructure. We know from our history that the cost of keeping the old technology and staff to support the older equipment, in addition to indirect, hidden costs such as lost end-user productivity and downtime, is higher than the costs associated with the replacement or upgrade of the IT components.

The agency's long-term strategic goal is to systematically replace those IT components according to industry standards in order to provide a stable technology environment for the agency. The infrastructure replacement is for headquarters and 54 remote offices are based on the RRB's *IT Equipment Replacement Policy*. Core IT infrastructure elements identified in the policy include:

- Notebook computers
- Monitors
- Personal desktop computers (not including monitors)
- Printers
- Routers/switches
- Peripheral equipment, e.g. card readers for personal identification verification cards and personal digital assistants (PDA's)
- Scanners
- Network Servers

### **Alternative to the mainframe platform**

We are currently processing approximately at 200 MIPS on the mainframe. The costs associated with upgrading the processing capabilities of the mainframe computer system to support our ever-increasing complex systems will be expensive. Many IT industry analysts believe that any business running on less than 700 MIPS (and the threshold grows every year)



can use an alternative processing platform. For example, mainframe re-hosting can lower cost and risk by migrating mainframe workloads to open systems. This would allow us to maintain existing applications with little source code modifications. Through re-hosting, applications are recompiled to run in new environments such as Microsoft Windows, Linux, or UNIX. Re-hosting would not eliminate COBOL code but transfer it to a lower cost platform. This would give us more time to prepare for the next generation of systems while reducing hardware and software costs. This would also give us additional time to train or hire personnel in new technologies to move to the new applications. While re-hosting offers an attractive alternative platform it will require analysis and a thorough plan before any decisions are made.

In addition, the success of the multi-phased System Modernization initiative will be one of the factors influencing any future upgrades of the mainframe. Other factors, such as faster performance, growth options for increased capacity, reduced energy requirements, or an ongoing ability to install new releases of operating system software as they are issued may also influence future mainframe replacement planning.

#### **Capacity planning, network analysis and performance monitoring tools**

We plan to expand our suite of tools to include tools with out-of-box capabilities for active monitoring, notification, and reporting of the IT infrastructure hardware, traffic and services. Such products will provide on-demand access to data to track, analyze, manage and predict problems, as well as improve capacity utilization and meet service quality commitments.



**RRB Strategic IRM Plan Projects Summary 2009-2013**

	RRB Strategic Goal	Project	How Service Delivery Is Improved	2009	2010	2011	2012	2013
IRM Environment Future Potential	2	Z9 Integrated Information Processor (zIIP)	Offloads some of the mainframe processing enabling the mainframe computer resources to focus on mission critical processes.					
	2	Virtualization of Servers	Increases availability of applications for business continuity; power and cooling savings.	<b>Appendix A</b>				
	1	'One Computer' model	Enables telecommuting and protects Personally Identifiable Information (PII).					
	2	Desktop Virtualization	Facilitates a common standard desktop across the organization.					
	1	Expand Document Imaging	Simplify workflow paths, streamline workflow in-boxes, reduce the number of scanning applications; thereby reducing the number of scanning errors, add more output files, and add bar codes to more documents to improve the readability of scanned documents.					
	1	Enhanced IVR system	Enhances the Interactive Voice Response (IVR) system to allow customers to select and modify their own <i>personal identifying numbers</i> (PINs).					
	1	Microsoft SharePoint adoption	Replaces current built Intranet application with the Microsoft SharePoint platform. SharePoint will allow agency employees to be more productive utilizing SharePoint's browser-based collaboration functions, process management modules, search modules and document management platform.					
Major Issues to be Addressed During the	2	System Modernization	Ultimately decreases the time and cost to develop and operate the systems to allow focus on new cost savings and efficiencies initiatives.					
	2	Adoption of Service Oriented Architecture	Breaks traditional applications into smaller component processes, ultimately facilitating plug and play software that can more easily change with business requirements					
	1	Use of Business Intelligence	Expanded use of Business Intelligence tools will enable the agency to 'drill down' further its corporate data.					

RRB Strategic Goal 1 – The RRB Will Provide Excellent Customer Service

RRB Strategic Goal 2 – Serve as Responsible Stewards for Our Customers' Trust Funds and Agency Resources



**RRB Strategic IRM Plan Projects Summary 2009-2013**

	RRB Strategic Goal	Project	How Service Delivery Is Improved	2009	2010	2011	2012	2013
	2	Risk Management and Privacy	Focus on adherence to the Federal Information Security Management Act (FISMA), security training, and specialized hardware and software to ensure agency information is kept secure and private.	Appendix A				
	2	Improvements for Continuity of Operations	Provides for disk backup to the agency's secondary backup center. Such backup ensures benefit payments will continue to be processed timely in the event of a manmade or natural disaster.					
IRM Goals and Objectives	1	Workstation Integrated with MPLS	An integrated workstation will utilize the newly installed multiple-protocol label switch (MPLS) system to provide customer data on-screen with accompany incoming calls for agency field office representatives to handle.					
	1	Expanded Internet Services	Enables claimants to file bi-weekly claims for sickness benefits through RRB.GOV.					
	2	Financial Management Line of Business	Provides for the upgrade to the next major release of the current core financial management system or modernize to a different core financial system					
	2	Electronic Official Personnel Folder (eOPF) system	Replaces paper-based Official Personnel Folders housed on-site with electronic eOPF based system. Funds for this initiative would provide for the planning and implementation.					
	1	Enhance Application Express System	Allows applications for recurring and one-time payment only retirement and survivor benefits to be taken on-line, in a paperless, folderless environment. We have completed 3 ½ phases of the initiative. The final phase will automate the payment process for all retirement applications, eliminate an older legacy system and provide the foundation for accepting applications through RRB.GOV.					
	1	Medicare Part C and Part D Premium Withholding	Allows for beneficiaries to elect withholding of Part C and Part D plan premiums from monthly RRB benefits.					
	1	Enhance System to Process Excess Earnings	Enables railroad employees to furnish earnings data through RRB.GOV. The initiative will automate complex calculations of survivor benefit payments due to multiple earnings reports and employers.					
	1	On-line Application for Annuity	Allows retirees to file annuity applications through RRB.GOV.					



**RRB Strategic IRM Plan Projects Summary 2009-2013**

	RRB Strategic Goal	Project	How Service Delivery Is Improved	2009	2010	2011	2012	2013
<b>IRM Goals and Objectives</b>	1	On-line Beneficiary Profile	Permits beneficiaries to view and update certain data maintained by the agency, such as address and direct deposit information.					
	1	Secure Email	Expands the ability of offices to receive and manage secure messages from our customers.	<b>Appendix A</b>				
	1	On-line Annual Reporting (ERS)	Provides rail employers with the ability to prepare and file annual reports of service and compensation through RRB.GOV. This service will provide an alternative to several information collections that are now processed by transferring and mailing files or forms.					
	1	Automated Notifications to Employers (ERS)	Provides rail employers with on-line notifications of annuities awarded to rail employees, reports of tax liability on sickness benefit payments, and reports of death of former employees.					
	1	Real-time calculation Data	Real time availability of calculation data is a requirement for our long range vision of processing applications without manual intervention.					
	1	System to System Access	Expands system to system links with Social Security Administration systems, e.g. SSA's NUMIDENT database which provides evidential data, including birth, death, and relationship data. Also allows access to earnings data which will lay the groundwork for real-time PIA calculations.					
	2	Government Wide Accounting	Eliminates the two-step classification process and outdated reporting, capture the Treasury Account Symbol (TAS) and Business Event Type Code (BETC) at the earliest possible time for agency payment, collection and intra-governmental transactions, and post directly to the fund balance with the US Treasury.					
	2	Payment Modernization (PAM)	The PAM project is a U.S. Treasury effort to modernize their mainframe-based software applications that are used with to disburse Federal payments, including RRA and RUIA benefit payments.					
	2	Scheduled Replacement of IT Equipment	Replaces or upgrades agency Information Technology equipment because the cost of keeping the old technology and staff to support the older equipment, in addition to indirect, hidden costs such as lost end-user productivity and downtime is higher than the costs for replacement.					
	2	Alternative to the Mainframe Platform	Faster performance, growth options for increased capacity, reduced energy requirements, will influence replacement of the mainframe in the future.					
	2	Monitoring tools	Provide on-demand access to data to track, analyze, manage and predict problems, as well as improve capacity utilization and meet service quality commitments.					