Strategic Information Resources Management (IRM) Plan

2000 - 2005

U.S. RAILROAD RETIREMENT BOARD

JUNE 2001

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FOREWORD

The purpose of this plan is to communicate clearly where we are today in terms of information resources management, where we want to go in the next several years, and how we intend to move from the present to the future. Following the direction specified in the agency's Strategic Plan, we intend to demonstrate the linkage between that plan and this one, through the information and strategies described in this document. This plan is designed to fit within the framework of the RRB's overall planning process, which not only includes its Strategic Plan, but also the Annual Performance Plan, Customer Service Plan, and budget. (See Figure 1 on page I-4.) This plan will serve as a tool to help us make informed management decisions and to assist in capital planning, investments, and budgeting.

Discussions among staff at all levels have contributed to this plan. Strategic IRM planning has been, and continues to be, a valuable learning and development process**.** This plan identifies a number of areas needing more work, investigation, exploration, analysis, and discussion. Such areas are identified throughout the plan as indicators of the work yet to do and as reminders that no plan is ever really final. Our purpose is for this plan to serve as a dynamic, flexible path, to help guide our way into the future, but with logical reevaluation and decision points along the route.

I. AGENCY AND IRM MISSION

A. Railroad Retirement Board (RRB) Mission

The RRB's mission is to administer retirement/survivor and unemployment/sickness insurance benefit programs for railroad workers and their families under the Railroad Retirement Act and the Railroad Unemployment Insurance Act. These programs provide income protection during old age and in the event of disability, death or temporary unemployment and sickness. The RRB 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 RRB will pay benefits to the right people, in the right amounts, in a timely manner, and safeguard our customers' trust funds. The RRB will treat every person who comes into contact with the agency with courtesy and concern, and respond to all inquiries promptly, accurately and clearly.

B. IRM Mission

The mission of the total IRM function, which includes the Bureau of Information Services (BIS) in partnership with the ADP Steering Committee and the entire user community, 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 possible.*

To carry out the IRM mission, we will provide system development services, Internet and microcomputer support services, network communications services, data center operations, data integrity support, and security and controls, principally by:

- Maintaining and protecting our investment in existing systems to continue to provide, *at a minimum*, the current level of ongoing service to our customers until such time as improved systems can be made available;
- Supporting a national data communication network for our field offices;
- Providing accurate, up-to-date and efficient access to the information resources of the agency, through secure and integrated systems;
- Reengineering and redesigning the underlying enterprise architecture, or systems framework, to allow for more efficient and effective system development and maintenance; and
- Developing new/enhanced systems to achieve improvements in customer service as well as to allow for lower cost operations.

C. IRM Vision

Our vision extends beyond the specific scope and time frame of this plan, to that point in the future when all programmatic 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.

At that future point, our systems will be closely integrated, without redundant data or processing. They will operate, and be developed, in an open environment that allows for interactive, real-time access to information by those who need it. This includes internal and external customers, with appropriate security safeguards in place to ensure that information is available only to those with the proper identification and legal authority to receive it. Systems will allow for fast, seamless electronic processing of benefit calculations, applications and claims, record changes, and payment adjustments. Beneficiaries will be able to access the RRB's systems to conduct a broad range of business transactions. RRB staff will be working from intelligent workstations conveniently located for the work at hand. Our systems and communications technology will support fast and accurate data to be provided at the point of contact with the customer, allowing the agency's "one and done" customer service objective to be achieved. Our internal business transactions will be handled electronically, rather than on paper, using the agency Intranet as a common means of accessing the right information at the right time.

D. RRB Strategic Plan Objectives

Recognizing that technology and automation are key elements of the agency's strategy and ability to move successfully into the future, Strategic Goal III of the RRB Strategic Plan states that we will

"Use technology and automation to foster fundamental changes that improve the way we do business."

In support of this strategic goal, the plan also established three strategic objectives and related performance measures (listed below) that focus on information technology and automation as a key strategy for helping the agency achieve its mission.

Strategic Objective III-A: *Develop a sound and integrated information technology architecture that will foster our long-term efforts to improve mission performance while operating with fewer resources.*

Performance Indicators:

- ⇒ *Establishment of a formal information technology architecture planning function*
- ⇒ *Development of an initial framework for information technology architecture*
- ⇒ *Establishment of processes to support and enforce the information technology architecture once it is developed to ensure uniform compliance throughout the agency*
- ⇒ *Use of the information technology architecture as a standard for evaluating and prioritizing all major automation initiatives and investments*

Strategic Objective III-B: Design and implement information technology initiatives that fundamentally improve our efficiency and effectiveness in achieving the agency's mission.

Performance Indicators:

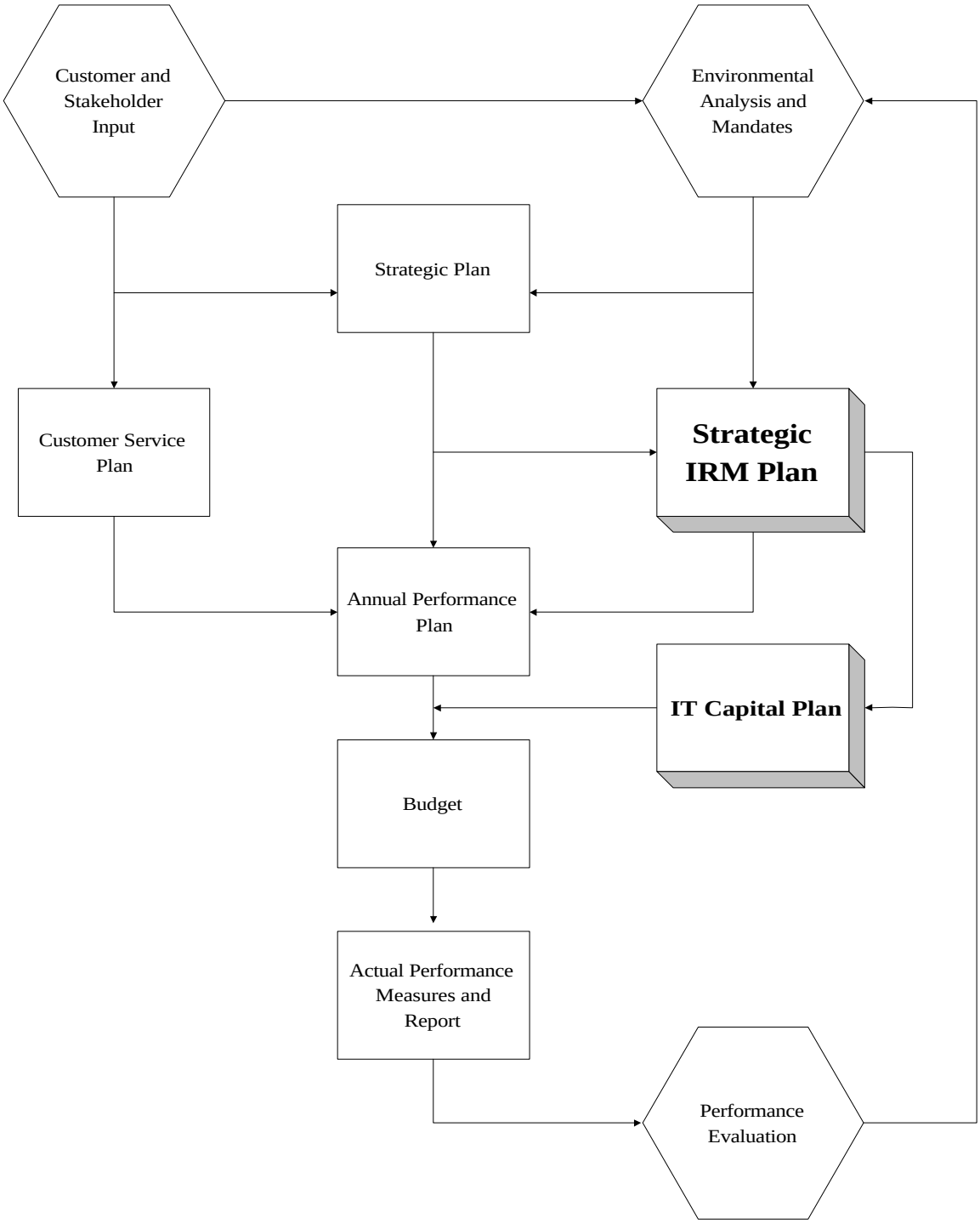
⇒ *Target dates to be established for each major IT initiative*
⇒ *Post-implementation reviews for major initiatives*

Strategic Objective III-C: Ensure effective and efficient management of information technology resources.

Performance Indicators:

⇒ Achieve schedules, deliverables, and costs for major projects as specified in project definition and requirements definition documents
⇒ Information technology operations and services satisfy requirements as specified in user service level agreements or otherwise published customer service standards.

Figure 1
RRB Planning Process



II. IRM ENVIRONMENT

A. Infrastructure

1. Data Center

The RRB's data center is located in the headquarters building and was built in 1985. It houses the mainframe computer, disk and tape storage devices, data communications equipment, some network servers, and other IT equipment.

The mainframe processor, an IBM Multiprise 2003-2C5, was procured in FY 1999. This processor uses CMOS (complimentary metal-oxide semiconductor) technology, which requires little floor space and energy to operate, resulting in lower utility and maintenance costs. The mainframe operating system currently in use is OS/390. This operating system not only ensured Y2K compliance for the mainframe, but also provided new potential for the mainframe to be used to support the agency's future automation plans, as described throughout this document. The mainframe processor is equipped with two OSA/2 FENET (Open Systems Adaptor 2 Fast Ethernet) cards which provide the capability of a direct connection of the mainframe processor to the Virtual Local Area Network (VLAN). Both OSA/2 cards will function as backups to one another. They will also be used to back up the agency's local area network servers centrally. Other new functions currently being implemented or explored include:

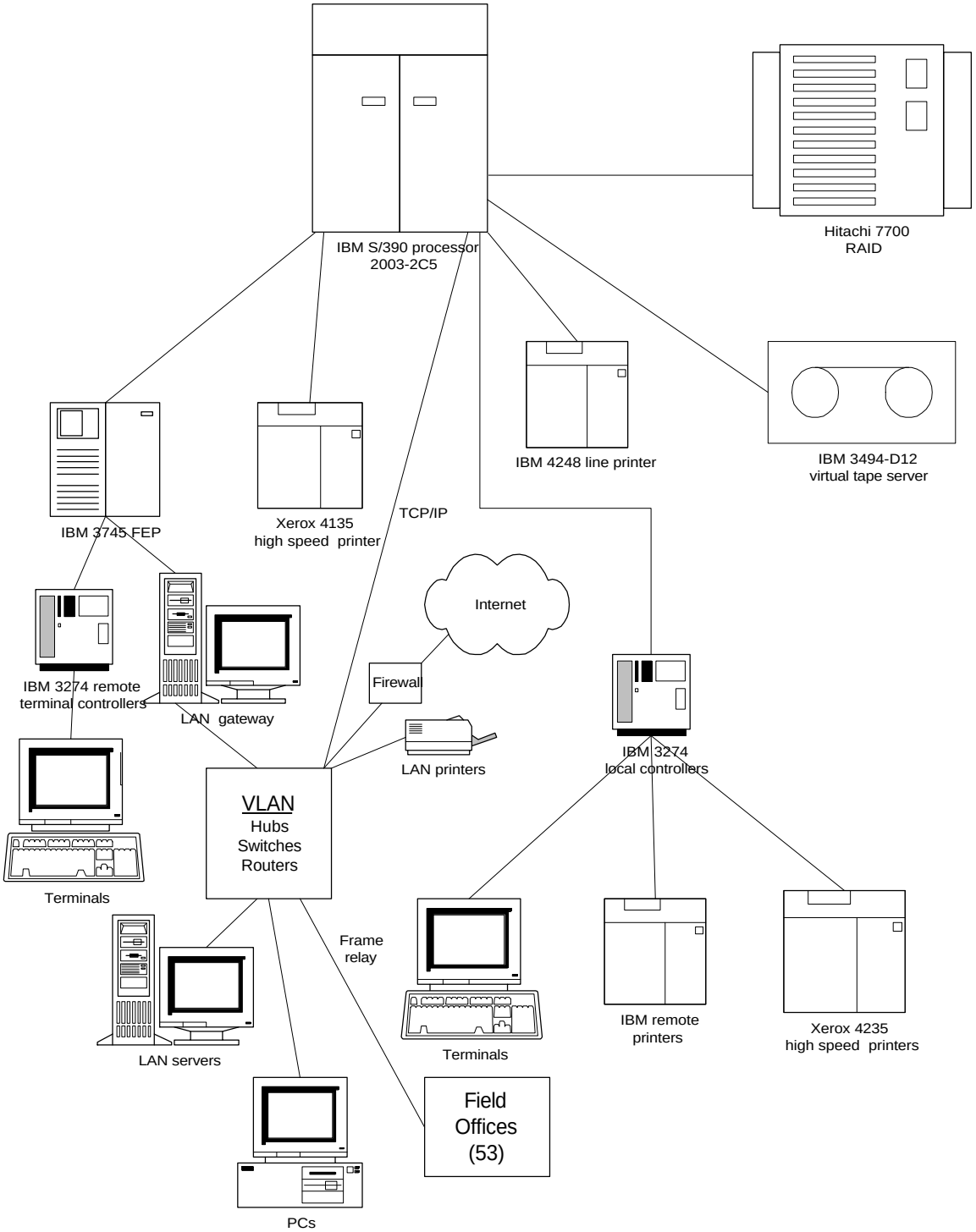
- use of TCP/IP (Transmission Control Protocol/Internet Protocol) for communications to the VLAN
- distributed file and print serving, and
- use of storage manager software to back up server data on the mainframe.

The RRB's data center also houses RAID (redundant arrays of independent disks) storage technology, which is used to store a wide variety of data. RAID is an operationally reliable and stable technology that provides improved support for agency initiatives, such as Interactive Voice Response (IVR), which require continuous operations. This hardware also saved data center floor space and resulted in lower utility and maintenance costs when it was installed in FY 1997.

In FY 1999, in accordance with the RRB's IT Capital Plan, the RRB invested in a major replacement of its aging tape storage and processing equipment. This was a strategically significant development in terms of introducing labor-saving technology to the data center. The new equipment, referred to as a "virtual tape server" (VTS), uses robotics and is capable of processing computer tapes more efficiently and effectively than the older tape drives. It uses a recording mechanism and compression to greatly reduce the number of tapes needed and floor space to house the data. This investment has resulted in improved performance and reliability of tape operations, enhanced technological viability over the long-term, and significant savings in staff operating costs. (See Figure 2 for the basic data center infrastructure.)

Figure 2

RRB Data Center Infrastructure



- Data Center Environment – Future Potential

During this planning period, we will be investigating additional technological upgrades for the data center, with the objective of introducing additional efficiencies and improvements. In the near term, we will be investigating various tools and technologies, including various database management systems and information storage methods.

The target configuration for the data center will include the continued use of RAID storage devices, with expansion of the current RAID capacity currently planned for FY 2001. This expansion will fully utilize the existing hardware. In the longer term, we recognize that an additional RAID device may be required to allow for further expansion of disk storage capacity. We are assessing new technologies that would also enhance our efficiency and flexibility in this area. This enhancement of RAID is currently included in the IT Capital Plan for FY 2003.

We will also be reassessing the physical plant for the data center during the coming years. As we move from a mainframe-dominated environment to a network server-based environment, it may be cost-effective to convert data center space to usable office space. An engineering survey in FY 1999 identified the need to update a number of physical aspects of the facility, including the power delivery system, heating, ventilation and cooling systems, fire suppression systems and security controls. A new fire suppression system was installed in April 2001. As part of the agency's annual budget process, we will be evaluating alternatives involving rebuilding or renovating the facility, and will consider not only the cost factors, but also the estimated time frames, potential for disruption, risks, and benefits.

2. Desktop Computing

During FY 1999, the RRB achieved its goal to provide at least a Pentium-level processor on every desktop. A standard configuration is used for all new desktop PCs, as referenced in the IT Capital Plan (Appendix 1). 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. Nevertheless, even within the standard user profiles, there are continual differences from desktop to desktop (in terms of processor speed, memory and software versions), due to the need to procure PCs and software for segments of users rather than upgrading everyone at once. Such discrepancies present challenges to be managed by our Help Desk staff and technical support staff, to ensure that each employee can have full functionality at the desktop. In addition to desktop computers, we also maintain an inventory of portable 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 surplused, removed from the inventory, and if appropriate, donated to schools, in accordance with Executive Order 12999.

Virtually all desktop computers now have access to the Internet, a standard e-mail package, and the RRB's mainframe computer, thus enabling a wide range of communication capabilities. A communications server provides a common platform for routing all Internet traffic through a firewall.

- Desktop Environment – Future Potential

The RRB's target desktop computing environment includes the following characteristics:

⇒ Standard desktop configurations within pre-defined categories of end-users (e.g., imaging users, itinerant service (mobile) users, power users, etc.);

- ⇒ Use of standard means to electronically distribute software throughout both headquarters and the field offices, as well as the ability to perform remote diagnostics and monitoring, to ensure that desktops are properly equipped and functioning;
- ⇒ Standard use of anti-virus protection with regular automated updates to the desktop;
- ⇒ Standardized user access to agency systems and resources through an agency Intranet.

3. Networks

The RRB currently has most of its local area networks (LANs) operating in a Windows NT environment, and a few operating under Novell NetWare. A virtual local area network (VLAN), installed in headquarters in FY 1997, provides for inter-connectivity between headquarters servers, improved environmental security, enhanced LAN reconfiguration capabilities, and scalable bandwidth to support imaging, an Intranet, and other future needs. The VLAN encompasses local and field office equipment and numerous servers running Windows NT and/or Novell NetWare. During FY 1999, we installed LANs in each of our field office locations, as an adjunct to the installation of frame relay technology for enhanced communications capabilities. As part of this effort, all field locations were converted to a Windows NT LAN environment. In addition, Microsoft's Systems Management Server has been installed on the field office networks to facilitate remote diagnostics and electronic distribution of software. It also promotes better controls and standardizes administration over decentralized network locations.

As mentioned above, during FY 1999, the RRB installed frame relay communication technology in its field offices, thus providing major new capabilities for connecting the field service's desktop computers to the mainframe and to the VLAN located in headquarters. Frame relay has replaced the agency's X.25 packet-switched network.

During FY 2000, the RRB engaged contractual services to perform a major upgrade to our core data communications infrastructure, including the installation of fiber optic cabling throughout the entire headquarters facility. The contract also included the replacement of all Ethernet hubs and switches. This project was initiated as a result of an assessment of the network infrastructure during mid-FY 2000, which identified several opportunities for improvement. It was completed during the first calendar quarter of 2001.

During FY 2001, the RRB is establishing a Virtual Private Network (VPN) to provide full access to the VLAN and to RRB internal systems from remote locations through a secure platform. This will enable RRB contact representatives to operate more efficiently and effectively while performing customer outreach (formerly referred to as itinerant service), which involves serving the public away from the district office.

The RRB maintains central controls and administration over most technical aspects of the end-user computing environment. Specifically, the Bureau of Information Services is responsible for the installation and maintenance of all network server hardware and software, local and wide area network communications equipment and software, and desktop computing hardware. Help Desk functions are also centralized in BIS' User Computer Services Division.

- Network Environment – Future Potential

The RRB has undergone two detailed reviews of its network computing environment within the past two years – one during 1999 in connection with the Y2K readiness of our servers in headquarters, and another during 2000 to provide an independent assessment of the agency's core network infrastructure. While many of the recommendations from those reviews have been implemented (including replacing non-Y2K-compliant servers and installing fiber optic cabling), other long-term recommendations are still being considered for the future. These include the potential of deploying SMS in headquarters, Internet traffic management, and network diagnostics and management. We are taking action during FY 2001 on a recommendation to migrate the remaining Novell servers to a Windows 2000 platform. We plan to do further feasibility studies to determine better estimates of the cost and impact of the remaining improvements.

4. Advanced Technologies

Image Processing and Document Workflow System

During FY 1999, the RRB implemented its plans for replacing an aging image processing system in the railroad unemployment and sickness insurance area. The new system provides the ability to image incoming documents, create electronic files, create automated workflows, and track transactions. It operates through the VLAN as the communications backbone. During FY1999, we initiated a multi-year project to expand image processing and document workflow technology into the railroad retirement benefit area as well. We are using commercial, off-the-shelf (COTS) software for this project (Eastman imaging and workflow software).

- Document Imaging and Workflow – Future Potential

The target for image processing at the RRB is a uniform system that is used throughout the RRA and RUIA program areas to provide ready, desktop access in both headquarters and the field service. The system will make use of electronic document workflow software for the purposes of improved controls and management of information.

At the target level, we expect our expanded use of image processing technology to:

- reduce, or possibly eliminate, the need for, and expense of, paper claim folders and materials;
- reduce contract costs for claim folder storage and retrieval; and
- improve service delivery at the point of contact with the customer, through immediate access to claim information.

The investment in imaging technology will enable RRB personnel to process a claim while viewing the associated documentation in image format, using either a desktop or portable microcomputer. This architectural strategy will minimize capital costs by avoiding duplicative equipment acquisitions and will improve personnel productivity. Our long-term target involves sharing imaged information and documents between the RRB and SSA. This is technically feasible because the Eastman software being installed at the RRB is also being used at SSA.

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 VLAN to accommodate future growth.

Interactive Voice Response (IVR)

The RRB has operated an IVR system since March 1996 in order to improve customer service and personnel productivity. The IVR service, known as the RRB Help-Line, initially allowed railroad unemployment and sickness insurance claimants to obtain automated claim and benefit payment information by calling a toll-free 800 number. In November 1997, the service was expanded to provide customers the option of receiving replacement Medicare cards, rate verification letters, and letters showing their railroad service and compensation. In addition, callers can also obtain the address and telephone number of their servicing field office. 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.

In FY 1998, the average monthly volume was approximately 32,800 calls with an average cost of 20.6 cents per call. In FY 1999, the average monthly volume had increased to about 38,000, with an average cost of 18.4 cents per call. Monthly call volumes in FY 2000 averaged approximately 37,000, with an average cost of 21.6 cents per call.

- IVR – Future Potential

During FY 2001, we are continuing to work on a system that will allow our customers to select and modify their own personal identifying numbers (PINs). This system is a prerequisite to expanding the customer service options offered through IVR. During FY 2002, we will evaluate opportunities to expand the types of information and services offered through the RRB Help Line.

Internet and World Wide Web

The RRB maintains a Website (www.rrb.gov) to provide our customers 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, Genuity, which provides advanced capabilities and dedicated servers. The RRB also maintains a site license to a commercial Internet provider service (currently AT&T Worldnet) which provides standard access to the Internet for most employees.

- Internet Environment – Future Potential

The RRB Website offers a great potential for on-line interactive transactions with our customers in the future, as the Internet becomes more widely available and measures are established to ensure the security of the information being processed. The Government Paperwork Elimination Act (GPEA) of 1998 generally requires Federal agencies to provide for optional maintenance, submission, and disclosure of information through electronic means, where practicable, by October 2003. It also requires agencies to use electronic authentication (electronic signatures) to verify the identity of the sender and the integrity of the content. Another GPEA requirement is that employers (railroads and rail unions) store

and file electronic information about their employees. Federal guidelines concerning the use and acceptance of electronic signatures were established by the Office of Management and Budget (OMB) and the RRB issued its preliminary plan to OMB in October 2000, as required. Finally, we are currently working on bringing the RRB Website into compliance with the IT accessibility standards contained in recent amendments to Section 508 of the Rehabilitation Act of 1973.

Intranet

The RRB maintains an Intranet ("RRBNet"), 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.

- Intranet Environment – Future Potential

The RRB continues to further expand and enhance the Intranet. The target configuration will allow for a standard user interface to all application systems, as well as to documents, reports, forms, internal communications, and procedures. During FY 1999, the ADP Steering Committee established an interbureau team to plan and coordinate the replacement of the agency's TextBOOK (on-line procedures and manuals) system to a more user-friendly and flexible format using the Intranet as the platform. The TextBOOK replacement project is now scheduled for FY 2001. It is also expected to provide a foundation for the Customer Care Support System, a new initiative planned for development beginning in FY 2002 that will provide on-line support to RRB contact representatives responding to customer queries.

During FY 2001, we are also initiating a series of Intranet initiatives that focus on improvements in administrative activities, including new interactive functions that can be accessed and used by all agency employees. These will include an interactive employee directory, job postings, seminar/training registration, electronic bulletin boards and newsletters.

Middleware

During FY 1999, the RRB procured an off-the-shelf middleware product that allows for rapid development of a user-friendly, PC-based, front-end to established mainframe, legacy systems. The procurement included a 25-user license and a Windows-NT server for the express purpose of developing a pilot middleware application system. The selected application involved ordering medical examinations in disability cases and processing invoices for these examinations. Based on success with the pilot project, additional systems are currently under development using the middleware product, and procurement of additional licenses is planned.

- Middleware – Future Potential

The RRB views middleware as a tool that can help to bridge the gap between new, more user-friendly, PC-based functions and older, mainframe systems which are difficult and time-consuming to revise. We are expanding the use of middleware applications to help stretch our investment in the existing legacy systems in the near and mid-term. At the same time, we will be researching longer-term solutions involving the possible replacement of the legacy systems as we consider the need for a flexible, stable and integrated information technology architecture.

Mobile Communications

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 portable microcomputers 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 analog lines, which are only available to travelers at certain customer outreach program locations.

- Mobile Communications – Future Potential
The RRB has determined that using a virtual private network (VPN) will be the most cost-effective way to provide services to employees at remote locations. The FTS 2001 vendor will provide VPN services. The VPN will allow RRB employees to connect to all systems from any location, using a portable computer.

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 areas (subschemas) within the overall Railroad Retirement Automated Processing Integrated Database (RRAPID) structure (schema), allowing for connectivity and interoperability between the databases and the application programs which access and update them. The database management system (DBMS) used for RRAPID is IDMS.

Navigation among the various RRAPID databases is facilitated by the use of the HOTKEY feature which enables users to "jump" to and from the RRAPID menu while using various application systems, without rekeying the identifying case information for each new database accessed.

Some mainframe databases and applications remain outside of the RRAPID environment for various specific technical reasons. For example, the Employment Data Maintenance (EDM) database is located outside of the RRAPID schema due to its unusually large size, although it can be accessed through the RRAPID menu on-line, and does not appear different to the end users. Other databases, which operate under a CICS (Customer Information Control System) database communications environment, rather than under IDMS/DC, are also part of a separate structure. The most significant of these is the Federal Financial System (FFS), which uses commercial off-the-shelf (COTS) software.

All of these legacy mainframe databases are accessed using a dated IBM 3270 terminal technology, developed in the 1970's. Also, because of their non-relational design, the IDMS databases, in particular, cannot be readily accessed by Web-based processes. Overcoming this difficulty represents a prime objective for us during FY 2001, at least as an interim strategy on the path to achieving our target architecture. (See also page Appendix

1-8 for further discussion about tools that may be needed to connect between IDMS data and server-based applications.)

In addition to the mainframe databases supporting the legacy systems, the RRB also has developed numerous PC databases to support a wide variety of PC application systems. These include databases developed using Access, Paradox, dBase, and most recently, Microsoft SQL. The new Eastman imaging and workflow software discussed above uses Microsoft SQLServer databases. SQL is also being used as the principal database platform for a number of PC applications currently under design and development, including various Internet initiatives.

C. Applications

The RRB application architecture currently includes over 160 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 since the 1960's 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, although interfaces have been built to accommodate the growing demands of desktop computing.

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

- the retirement and survivor daily and monthly checkwriting system,
- the claims processing systems for retirement and survivor claims,
- the unemployment and sickness insurance claims systems,
- the retirement taxation system,
- 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 numerous related application systems to perform a wide variety of other functions. These include suspensions and terminations, changes of address, enrollments in direct deposit, automated folder control, on-line referral messaging, various database corrections, specialized correspondence, and others.

The RRB also maintains financial and administrative systems to support its mission. These include two major COTS packages used for financial functions such as budget and accounting, and for payroll/personnel functions. These are the Federal Financial System (FFS), and the Tesseract system, respectively.

System development functions related to mainframe applications are centralized in the System Development Divisions of the Bureau of Information Services (BIS); development functions related to end-user computing application systems are decentralized, with most located in the Office of Programs, Systems and Technology Development section or in BIS. The RRB's Administrative Circular IRM-10, *End User Computing,* fully documents the organizational responsibilities in this area.

D. Management Structure

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 is a requirement of the Clinger-Cohen Act and, by reference, the Paperwork Reduction Act. Under these laws, the CIO's major duties include the following:

- 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.

Automated Data Processing Steering Committee (ADPSC): This committee is composed of senior executives representing major program and administrative organizations within the agency. The committee is chaired by the CIO. It functions as an independent board which evaluates spending and resources to be used in the IRM area, including system development projects and capital expenditures. The committee is responsible for approval of the Strategic IRM Plan, the IT Capital Plan, and individual major project plans.

Office of Enterprise Architecture: Newly established in FY 2001, the RRB's Office of Enterprise Architecture 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 will focus on achieving effective and efficient enterprise architecture for the RRB. It will be 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 ADP Standards and Procedures Manual, the ADP 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
- Maintenance of data integrity
- Database administration
- 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
- Maintenance, data integrity and overall coordination for the PREH database (and, later in FY2001, the EDM database)
- Records retention and disposition
- Coordination and facilitation of software training for the agency

Office of Enterprise Architecture

- Provide project direction for the development of the enterprise architecture for the agency.
- Coordinate stakeholder involvement during the architecture project, leading to the establishment of standards and policies and design of architecture structures and processes.

Office of Programs (OP)
OP/Policy and Systems (P&S)

- User analysis, requirements specifications, acceptance testing, and preparation of user system procedures (for OP systems)
- Microcomputer application development

OP/Assessment and Training (A&T)

- Coordination of training on PC and mainframe software
- System review and support

Other Bureaus and Offices

- User analysis, requirements specifications, acceptance testing, preparation of user system procedures and training (for their own systems)
- Microcomputer application development

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. Information Technology Architecture

As we focus on the new business functions and systems that will be needed in the coming years, we are also aware of the need to develop and maintain a more formal and structured information technology architecture (ITA). The architecture will provide standards and principles to ensure that our automation efforts are consistent, cost-effective, and efficient. The agency has taken the first steps in this process by establishing a new Office of Enterprise Architecture and appointing a Chief Architect to oversee and manage this important effort.

New technologies and concepts need to be fully explored to determine how they can be exploited to our advantage. Frank assessments will be required as to whether the current physical infrastructure and architecture can support our business objectives well into the future. If not, strategies for converting to a new environment must be developed, while balancing the need to provide uninterrupted services to the public. Transition strategies will need to consider the human factor (impact of retraining staff) as well as the technology factor.

To assist in this effort, the new Office of Enterprise Architecture has engaged contractual assistance beginning in January 2001. The results of the architecture planning efforts, which will be maintained and updated on an ongoing basis, will be used to support long-term automation planning in the future, and will provide input for future updates to this Strategic IRM Plan.

B. 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 his staff (the Bureau of Information Services), the ADP Steering Committee, the Executive Committee, and the Chief Architect and his staff. The agency's capital planning process will be 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 necessary.

C. Computer Security

With the rapid expansion of e-Government opportunities, the need for continual improvements in computer security has become critical. Even areas that have been traditionally considered to be secure (such as mainframe databases) now may be at risk as users become more able to access that data from remote locations, or through the Internet. The RRB's plans to offer electronic services and to comply with the Government Paperwork Elimination Act (GPEA) will require us to carefully analyze any privacy and security risks associated with any new applications or uses of electronic data prior to implementation. In addition, the new Government Information Security Reform Act, passed in October 2000, requires annual program status reviews and formal reports on security to the Office of Management and Budget.

During fiscal year 2000, the RRB received an assessment of its information security by the National Security Agency (NSA). This assessment resulted in a comprehensive report including several recommendations concerning security improvements. The principal recommendation was to establish a formal computer security program, supported by upper management, with a full-time security officer to serve as the focal point for all information security issues from an agencywide perspective. The Bureau of Information Services has begun work on this recommendation, and obtained Board approval of a new security officer position in May 2001, to be filled as soon as possible. In addition to numerous ongoing computer security functions, such as updating computer security plans and documents, the new security officer will be responsible for monitoring actions on other recommendations made by the NSA, including documenting audit policies and ensuring compliance, and implementing formal security training and awareness programs for employees. Close coordination will be necessary between the security officer and the chief enterprise architect, to ensure that appropriate consideration is given to computer security throughout all aspects of the enterprise architecture, as it is developed.

D. Application Development Resources

To accomplish its mission, the RRB needs an effective and efficient IT workforce, including application development resources. To ensure that the agency has an application development 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 staff. Second, we need to begin a program of hiring and training replacements for this aging workforce.

- *Upgrading skills of current staff:* Changing technology makes upgrading the skills of the application development 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. Programmers who have become expert in COBOL, ADS, and other

mainframe development tools are now faced with an array of new tools for use in developing Web-based application systems, middleware solutions, real-time processing, etc. Training in these areas began on a limited scale during FY 2000, and is planned to continue throughout FY 2001 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 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 application systems. To ensure that we can provide adequate maintenance of the existing mainframe systems and support future automation initiatives, we must begin succession planning for the systems development staff. The Federal CIO Council has identified the impending shortage of skilled IT workers as one of the most critical issues to be addressed at this time. The RRB's situation is consistent with that in many other Federal agencies, and we will be closely monitoring the actions and recommendations of the CIO Council pertaining to this issue. During fiscal year 2001, we will be developing a staffing plan that will consider various approaches, including the possibility of recruiting qualified, skilled staff from external sources as well as the use of training programs to develop qualified staff from internal and/or external sources.

In addition to the two strategies described above, the RRB will also consider supplementing its in-house application development 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 the customers**,** rather than around the systems or organizations. We have plans for a portfolio of information system development initiatives to be developed over the next few years. These initiatives focus on customer functions, from the initial customer contact, through the application for benefits, claim processing, and finally, storage of the customer's information.

The primary customer-focused functions are:

1. Expansion of customer contact choices

This encompasses expansion of interactive voice response (IVR) services, including "drop off" service to allow for direct contact with an RRB representative; development of an integrated representative workstation system (Customer Care Support System); exploration of videoconferencing options; and expansion of our Website to provide for electronic commerce transactions with the public.

2. Annuity estimates and pre-retirement planning

These customer functions include the development of improved estimating systems; ability to forecast benefits for pre-retirement planning purposes; coordination of estimates with other pension programs; and, possible issuance of personal benefit statements, similar to those issued by SSA.

3. Enhanced methods of evidence collection

This phase covers the development of improved methods for collecting, processing and storing the various types of proofs and other evidence needed for adjudicating claims. Proofs need to be stored centrally where users or automated systems can access them on-line, both at the time of initial adjudication as well as for later reference, if necessary.

4. Integration of application processing

Geared toward one-stop shopping for benefit applications, 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 phase includes a variety of initiatives intended to contribute toward the "one and done" service goal of the agency (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.

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. Streamlining and/or restructuring of the various databases to reduce redundancy and improve efficiency will be a major component of this category of work.

7. Simplification of system data modification

This phase includes the development of initiatives focused on providing a facility for data modification, through user-friendly formats and extensive on-line 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, the RRB's Office of Programs has 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
- greater customer satisfaction

The degree of value-added return must be determined for each investment to establish its order of 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 and payroll/personnel responsibilities*, which are supported by customized, off-the-shelf software packages: American Management Systems' Federal Financial System (FFS) and Tesseract's Human Resources Management System, respectively.

  Tesseract recently announced that in September 2003, it will drop support for the IDMS database platform of its Human Resources Management System. We are exploring three options for replacing the IDMS platform: (1) continue to use the Tesseract package and migrate to its DB2 platform, (2) continue to use the Tesseract package and migrate to its VSAM platform, and (3) outsource our payroll/personnel functions. In deciding our future direction, we will consider the costs and benefits of the various alternatives, as well as how well they address our strategic priorities, such as

  - ❖ eliminating manual and/or paper-based functions;
  - ❖ developing more user-friendly systems;
  - ❖ giving RRB employees on-line access to individual information to eliminate the need to produce and distribute it in paper format; and,
  - ❖ providing agency employees the means to maintain certain personal information (e.g., home address, emergency contacts, benefits enrollment).

  We are exploring user-friendly front-end access to FFS by linking it to the RRB Intranet with contractor assistance in FY 2001. We also plan to expand our usage of the FFS software by adding a client/server, multi-user application that supports the financial information requirements of managers and end-users. To meet this need, a package called "Decision Analyzer" was procured in February 2001 to facilitate the generation of ad-hoc reporting and queries and downloading of selected data for end-users of the financial system.

- *Benefit Component Accounting.* One long-standing objective in the area of financial management is to establish actual benefit component accounting for the Dual Benefits Payment Account and the Railroad Retirement Account. An initiative to establish actual benefit component accounting will be defined and prioritized in conjunction with other initiatives to be started in that time frame. From a financial management perspective, this project should involve modifications to the retirement benefit adjudication and payment systems to capture actual benefit components as payments are determined and paid. Full implementation of this objective would include financial information on benefit payments from all four retirement benefit accounts (Railroad Retirement Account, Social Security Equivalent Benefit Account,

Railroad Retirement Supplemental Account, and the Dual Benefit Payments Account).

Because this project appears to require major changes to the benefit payment systems and databases, and because those systems are also the target of other major automation initiatives, significant coordination will be essential in determining scheduling and resources for this project. As we review the overall information technology architecture, and determine the extent to which the legacy benefit payment systems or databases will be redesigned or reengineered, we may be able to incorporate these financial accounting needs into the standard business requirements for all new, or rewritten, benefit payment systems.

- *Actuarial projections and financial interchange calculations.* Strategic priorities in this area will focus on:

  - ❖ increasing the efficiency and effectiveness of systems to reduce system development and maintenance costs;
  - ❖ improving the accuracy and timeliness of calculations;
  - ❖ reducing the amount of staff time required for calculations by automating additional functions; and
  - ❖ reducing reliance on paper documents.

- *Electronic commerce*, which involves the ability to receive quotes, issue purchase orders, and pay invoices via an electronic data interchange. Our strategic priority in this area is to ensure that the RRB shall use electronic commerce whenever practicable or cost-effective to consistently support payment of the lowest price for products and services commensurate with quality, service, delivery, and reliability. This is one of the objectives highlighted in the RRB's Strategic Plan.

  In particular, the following electronic commerce initiatives should be noted:

  - ❖ The RRB enrolled with GSA in February 2001 to post business opportunities on the new Federal (Government-wide) Business Opportunities (www.fedbizopps.gov) Website. This new site will enable the RRB to post actual solicitations on the GSA Website in addition to the required and optional procurement notices currently posted to the electronic CBD site.

  - ❖ The RRB has over 80 designated employees authorized to use Fast Pay Credit Card for rapid micro-purchases or other simplified acquisitions.

  - ❖ Empowered designated employees acquire office supplies with next business day delivery under a competitively awarded Blanket Purchase Agreement with Boise Cascade Office Products. Employing a user-friendly, web-based ordering system, employees can order and receive the office supplies that they need right from their workstations.

- ❖ The RRB awarded a contract for medical claim/case examination and consultation in August 2000. This contract provides for both physical case file transmission to its business partner as well as an option to exchange the claim files through the imaging and workflow system currently in place at the RRB. The agency anticipates the electronic document exchange to begin in FY 2003 or sooner.

We will continue to expand our use of electronic techniques for accomplishing business transactions, including electronic mail or messaging, World Wide Web technology, purchase cards, electronic funds transfers, and electronic data interchange.

- *Providing management information.* Data from the PREH database and other sources can be analyzed and developed into practical, meaningful management information. With the addition of new statistical data analysis tools during FY 1999, we have improved our analysts' capability to provide better management decision support, while imposing less of a burden on the system development staff. We plan to expand the number of client licenses for the statistical data analysis tools in FY 2003, or earlier if funding is available.

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 2-3 fiscal years). Of these, our highest priorities include the following initiatives:

- Image Processing: The RRB is actively involved in a multi-year, multi-phase, initiative to procure and implement a document imaging and workflow management system. Primary benefits include alleviating the costs and labor-intensive efforts related to handling paper claim folders. The system is also expected to improve customer service by providing more timely access to various documents and by accelerating the processing for certain types of claims transactions.

  The new imaging system replaced an aging, obsolete system used for the unemployment and sickness insurance program. It was implemented in 1999 in two phases. Phase I duplicated the existing system and converted existing documents. Phase II accepted additional documents, thus expanding the system to become a folderless environment. Future enhancements to convert existing mainframe and PC outputs directly into the imaging system and to include Field Service unemployment record keeping will be pursued after significant progress is made on expanding imaging into the retirement and survivor benefit program. In this area, we are beginning with processes related to initial claims for benefits in the Retirement, Survivor, Medicare, and SSA areas. Current plans call for the completion of the initial claims processes in early FY 2002. This approach allows us to stop creating paper claim folders for new benefits and to eliminate significant paper handling at an early stage of the project. After that, we will focus on transactions related to post-entitlement processes in these areas. Target dates for additional categories

of work will be developed as we define and prioritize them.

In 2000, we procured a new software product called WebConnector, which provides access to image viewing and workflow through a Microsoft Internet Explorer browser. Using this product eliminated the need to purchase access licenses for the Field Service and accelerated the schedule for access to the images by the Field Service staff by two years.

In the future, a fax server will become available for field offices to fax certain documents directly into the imaging system for storage or processing.

- Application Express (APPLE) System: This initiative will produce a system which allows applications for all recurring and one-payment-only retirement and survivor benefits to be taken on-line, in a paperless, folderless environment. Through interfaces with other existing systems, it will also allow the field representative to terminate benefits, request wage record information, and submit the application for automated payment. Processing of the payment and award notice will be performed through automated batch operations. This initiative demonstrates significant progress toward the agency's strategic "one and done" objective, as it will allow 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. It also provides the foundation for an Integrated Application Processing System (see IT Capital Plan.)

- This project consists of four phases. The first, which became operational in February 1997, automates the payment of spouse-to-widow cases, the largest single category of survivor benefits. The second, completed in February 2000, automated the lump-sum application and payment process. The third phase, implemented in May 2001, automated the remaining categories of initial recurring survivor benefits. Phase 4, scheduled for completion in FY 2002, will automate the application and payment process for all retirement benefits. Phase 4 will allow for the elimination of two older legacy systems and provide the foundation for accepting applications on the Internet.

- Customer/Event-Initiated Transactions: This multi-phase initiative will develop methods of identifying and capturing events that trigger retirement and survivor annuity adjustments, and use this information to automatically initiate such adjustments using the existing on-line calculation and award systems. Four post-entitlement areas are to be pursued within this initiative, in the following order:

    - ❖ Adjustments due to excess earnings (work deductions)
    - ❖ Adjustments due to attainment events (e.g. age)
    - ❖ Adjustments due to changes in service and compensation
    - ❖ Adjustments requiring reinstatement of benefits

- Earlier initiatives, such as the APPLE system and the MARS (Mechanical Adjustment of Retirement and Social Security) system, established the validity of this concept and demonstrated the efficiency to be gained by reducing the manual handling involved in routine transactions. The first three began in fiscal year 2000 and are described below:

- System to Process Excess Earnings Data (SPEED): In this initiative, the focus will be on automating the post-entitlement annuity adjustments that result from excess earnings and work deductions. Current and future earnings reports would initiate automated adjustments, suspensions, and reinstatements of retirement and survivor annuities. Automation of many of the labor-intensive activities in this area is a high priority due to recent staff reductions. It also provides improved customer service. The first and second phases of this project, scheduled for August and September 2001, respectively, will automate temporary work deductions. The third phase, not yet scheduled, will adjust for permanent work deductions. In the long term, the goal for this application system is 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, integrated through the use of middleware (CA-OPAL).

- System to Process Attainment Recerts (SPARC): Various events may occur during the course of an annuitant's life which affect the monthly payment amount, such as attaining a certain age, the end of a waiting period, or an annuitant no longer being entitled as a member of the family group. This project will recognize these triggering events and automatically adjust the annuity rate or suspend/terminate benefits, as appropriate. This project is scheduled to be completed in the fall of 2001.

- Recalculate for Service and Compensation Updates to EDM (RESCUE): Throughout the year, the agency receives changes in service and compensation information from railroads for employees who are receiving an annuity. These changes may be for recent activity, such as vacation pay posted after the employee retired or adjustments for prior years. Most changes have an effect on the employee's monthly rate. This system will run annually and will automatically adjust the employee's rate if any changes to service and compensation are received during the year. We expect to implement the first phase of this project in the first quarter of fiscal year 2002.

- Mass Adjustment of Legal Process Cases: Cases involving legal process adjustments (e.g., garnishment of a portion of an annuitant's benefit) require manual processing and are currently referred out of the automated mass adjustment operation. In order to stem the increasing workload this fallout represents, we are revising the mass adjustment system to include automated processing for these cases. This project is being completed in stages, beginning with the first phase, which was implemented in December 2000, and continuing through December 2001.

- Internet Services Transaction Plan: The RRB is implementing comprehensive new Internet services to expand our customers' access to information and to enable them to conduct business transactions on-line with appropriate privacy and security safeguards. Not only does this plan further our strategic goals of improving and expanding customer service options, it also serves to meet the requirements of the Government Paperwork Elimination Act (GPEA) of 1998, which requires all Federal agencies to provide for the optional use

and acceptance of electronic documents and signatures, and electronic record keeping, where practicable, by October 2003.

- Beginning in November 2000, we began offering Internet services that provide individual customers the opportunity to make on-line requests for the following documents or information to be mailed to the address of record:

  - **Rate Verification Letters**
  - **Duplicate Tax Statements**
  - **Replacement Medicare Cards**
  - **Request for Compensation and Service Records**

  We are now working on the next phase of the Internet Services Project that will provide for an on-line interactive session between the customer and the RRB. The schedule calls for future phases of this project to include the following new functions:

  - **Retirement Planner –** We will provide a retirement benefit calculator for on-line completion by the public, using a system currently in use in RRB field offices, Retirement Estimated Annuity Program (REAP). This will provide our customers with the ability to calculate annuity estimates on-line with direct links to individual compensation and service records.
  - **Application for Annuity –** We will develop a system for filing annuity applications on-line through the Internet. This will begin with employee and spouse annuity applications. After gaining experience with these, it will include survivor benefit applications as well.
  - **Application for Unemployment and Sickness Insurance Benefits –** We will develop a system for filing unemployment and sickness applications and claims through the Internet. We will coordinate this effort, as much as feasible, with the on-line unemployment application project currently being conducted by the Department of Labor for State unemployment offices.
  - **Employer Reporting On-line –** We will begin a series of enhancements to employer reporting services, and will work with SSA to determine the feasibility of single reporting to reduce the reporting burden on railroad employers.
  - **Electronic Award Notification –** As part of the effort to provide the ability to file applications over the Internet, we will develop the ability to provide notifications of award activities (including post-award adjustments such as cost of living increases) to the beneficiary's e-mail address.
  - **Beneficiary Profile –** We will provide an On-line Beneficiary Profile Screen, using middleware development tools, that will permit individuals to view their Master Benefit Record, including such items as the address of record, direct deposit information, tax withholding data, benefit tier components, Medicare premiums, etc.
  - **Status of Application/Claim –** In conjunction with the introduction of document imaging, the RRB will use Web-Connector features to permit applicants to view the status of their applications/claims over the Internet.

- Intranet Development: The RRB Intranet has continued to enhance and streamline communications throughout the agency. Recent additions include a technical manual for procedure and system analysts, and a comprehensive site for the Office of Enterprise architecture. We have plans for numerous new functions, including a retirement estimator for agency employees, a wide variety of newsletters and notices, job postings and applications, and other administrative functions. Currently under development is an application to consolidate the Telephone Directory and the Field Office Listing (Form T-83). Organizational charts will be incorporated in a later phase that will allow for automated updates whenever information is revised in the source database. An overall redesign of the Intranet is also under development. This redesign is intended to streamline the navigation and incorporate many suggestions that have been received since the Intranet was introduced.

- Consolidated Information Screens (COINS): The COINS system will provide an array of user-friendly screens that will consolidate information from multiple mainframe source systems. The first phase of COINS will consist of informational screens summarizing payment history, accrual history, deduction history, and general beneficiary data. This phase will be ready to pilot in the summer of 2001. The second phase will provide transaction-based screens to process various on-line transactions from one system. This portion will be ready to pilot in early 2002.

- Automate RUIA Reconciliation Process: The Bureau of Fiscal Operations conducts an annual reconciliation of RUIA compensation reported to the agency on Form DC-1, Employer's Quarterly Report of Contributions under the Railroad Unemployment Insurance Act (RUIA), with compensation reported on Form BA-3a, Annual Report of Creditable Compensation. This reconciliation is done manually using paper copies of Form DC-1, information contained in the Employer Contribution and Collection System (ECCS) and information in the Employment Data Maintenance (EDM) System. During this planning period, we will replace and enhance the current ECCS. The new system will ensure greater accuracy and require less manual intervention, including automation of the RUIA reconciliation process. The replacement system will be implemented in phases. The first phase, which is scheduled to be completed during 2001, will primarily target the unemployment, or quarterly, component. Later phases of the project will target a correspondence system, an accounts receivable system, and direct entry of electronic payments without manual keying. Consideration will also be given to delivery of DC-1 data via the Internet in a future phase.

D. Other Near-Term Priorities

In addition to the initiatives listed above which are currently underway, the RRB has identified the following priorities to be pursued within the next two fiscal years:

- Legislative and Regulatory Changes: We will ensure that systems are modified to comply with all legislative changes affecting the benefit programs. We are currently preparing an implementation plan for the Consumer Price Index (CPI) adjustment, which was included in PL 106-554. This retroactive mass adjustment operation is necessary to correct the cost-of-living rate used in the

January 2000 COLA, which was based on an incorrectly calculated CPI. The agency's plan for this adjustment will be coordinated with the Social Security Administration and cleared by the Office of Management and Budget.

- Availability of Real-Time Calculation Data: Real-time availability of calculation data is a requirement for our long-range vision of "one and done" processing. In its final version, the Integrated Application System referenced in the previous section would:

  - ❖ allow someone 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 they would receive and when to expect it.

- The Customer/Event-Initiated Transaction System (described earlier) would recognize a trigger such as an earnings report or attainment event and immediately recalculate and adjust the annuity payment. To accomplish this, all pertinent calculation information such as primary insurance amounts (PIAs) must be immediately accessible to compute the adjusted annuity rates. The logic for calculation components already occurs in three different existing application programs, but is not immediately available in its present forms. At present, we are proceeding with both the Integrated Application System and the Customer/Event-Initiated Transaction System in phases, while investigating the methods and technologies that will best serve us in extracting the data from the existing programs in the future.

- System-to-System Access (STSA): In FY 1998, the RRB and SSA successfully implemented a direct, real-time communication link between the RRB's Retirement On-line Claims (ROC) System and Survivor Payments System (SURPASS) 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 or SURPASS. 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, and are currently considering which accesses will provide the most value.

- Archiving for the PREH database: The PREH database has collected and stored historical information concerning RRA benefit entitlement and payments since mid-1995. Since that time, we have monitored the growth rate and processing efficiency of the database, and now have sufficient information available to develop an effective and efficient archiving system. Archived data would continue to be available, although not as quickly as active data. This project is necessary to reduce updating time, particularly during large mass adjustments, such as the annual cost-of-living operation. The Employment Data Maintenance (EDM) database will also be analyzed to determine whether additional efficiency could be achieved through archiving.

E. Infrastructure Investments

As we endeavor to accomplish the full scope of work outlined in the sections above, we must ensure that our underlying infrastructure is sound, stable, and maintainable. In addition, it must be able to support the target configurations determined to enable the agency to best achieve its overall goals of open communications, interoperability, and flexible, convenient customer service delivery. The RRB information technology infrastructure encompasses the entire data center, microcomputing and telecommunications environment. This includes the mainframe, local area networks, servers, operating systems, e-mail systems, Intranet, middleware tools, and related aspects. As described in Chapter II, there are significant aspects of the RRB's infrastructure (including hardware/software to support the data center, the desktop computing environment, and communications) to be replaced or upgraded in order to continue to provide continuous operational support, as well as to enhance current service levels. One such major infrastructure improvement project was undertaken in late FY 2000 and was completed during February 2001. This project involved the upgrade and replacement of routers and switches that control the overall network operating environment in the agency, as well as the installation of fiber optic cabling throughout the headquarters facility.