

**Exhibit 300: Part I: Capital Asset Plan and Business Case (All Assets)**

Date of this Submission: August, 2003  
 Agency: U.S. Railroad Retirement Board  
 Bureau: U.S. Railroad Retirement Board  
 Location in the Budget:  
 Account Title:  
 Account Identification Code:  
 Program Activity:  
 Name of Investment: Metadata Repository  
 Unique Project (Investment) Identifier: 446-00-02-02-01-0052-00-112-081  
*(For IT investment only, see section 53. For all other, use agency ID system.) UPI should be created the same for all investments.*  
 Investment Initiation Date: 2005  
 Investment Planned Completion Date: 2007  
 This Investment is: Initial Concept \_\_\_ Planning X Full Acquisition \_\_\_ Steady State \_\_\_ Mixed Life Cycle \_\_\_

Investment/useful segment is funded: Incrementally \_\_\_ Fully X

Was this investment approved by OMB for previous Year Budget Cycle? Yes \_\_\_ No X

Did the Executive/Investment Review Committee approve funding for this investment this year? Yes X No \_\_\_

Did the CFO review the cost goal? Yes X No \_\_\_

Did the Procurement Executive review the acquisition strategy? Yes X No \_\_\_

Did the Project (Investment) Manager identified in section 1.1) review this? Yes X No \_\_\_

Is this investment included in your agency's annual performance plan or multiple-agency annual performance plans? Yes \_\_\_ No X  
 NOTE: In the future, this investment will be noted in the agency's annual performance plan.

Does this investment support homeland security? Yes \_\_\_ No X

If this investment supports homeland security, indicate by corresponding number which homeland security mission area(s) this investment supports?  
 1- Intelligence and Warning;  
 2 - Border and Transportation Security;  
 3 - Defending Against Catastrophic Threats;  
 4 - Protecting Critical Infrastructure and Key Assets;  
 5 - Emergency Preparedness and Response; or  
 6 - Other \_\_\_\_\_

Is this investment information technology? (see section 53 for definition) Yes X No \_\_\_

**For information technology investments only:**  
 a. Is this project (investment) a financial management system? (see section 53.2 for definition) Yes \_\_\_ No X

If so, does this project (investment) address a FFMIA compliance area? Yes \_\_\_ No \_\_\_

If yes, which compliance area? \_\_\_\_\_

- b. Does this investment implement electronic transaction or record keeping that is covered by the Government Paperwork Elimination Act (GPEA)? Yes  No
- If so, is it included in your GPEA plan (and does not yet provide an electronic option)? Yes  No
- Does the investment already provide an electronic option? Yes  No
- c. If the investment administers information in identifiable form about members of the public, was a privacy impact assessment submitted via PIA@omb.eop.gov with a unique project (investment) identifier? Yes  No
- d. Was this investment reviewed as part of the FY 2003 Federal Information Security Management Act review process? Yes  No
- d.1 If yes, were any weaknesses found? Yes  No
- d.2 Have the weaknesses been incorporated into the agency's corrective action plans? Yes  No
- e. Has this investment been identified as a national critical operation or asset by a Project Matrix review or other agency determination? Yes  No
- e.1 If no, is this an agency mission critical or essential service, system, operation, or asset (such as those documented in the agency's COOP Plan), other than those identified as above as national critical infrastructures? Yes  No
- f. Was this investment included in a Performance Assessment Rating Tool (PART) Review? Yes  No
- f.1. Does this investment address a weakness found during the PART Review? Yes  No

**SUMMARY OF SPENDING FOR PROJECT STAGES**  
(In Millions)  
(Estimates for BY+1 and beyond are for planning purposes only  
and do not represent budget decisions)

	PY-1 and Earlier	PY 2003	CY 2004	BY 2005	BY+1 2006	BY+2 2007	BY+3 2008	BY+4& Beyond	Total
Planning:									
Budgetary Resources									
Outlays									
Acquisition :									
Budgetary Resources				\$ .555	\$ .370	\$ .385			\$1.310
Outlays									
Total, sum of stages:									
Budgetary Resources				\$ .555	\$ .370	\$ .385			\$1.310
Outlays									
Maintenance:									
Budgetary Resources									
Outlays									
Total, All Stages:									
Budgetary Resources				\$ .555	\$ .370	\$ .385			\$1.310
Outlays									
Government FTE Costs				\$ .411	\$ .651	\$ .651			\$1.713

*Note:* Government FTE costs shall include government personnel considered direct and indirect labor in support of this investment. This includes the investment management IPT and any other government effort (e.g., programming effort for part of the overall investment, development effort) that contributes to the success of the investment. The costs include the salaries plus the fringe benefit rate of 32.8%. Agencies should reflect estimates of the costs of internal FTE supporting an IT investment, and should at a minimum include in FTE estimates of anyone spending more than 50% of their time supporting this investment. Persons working on more than one investment, whose contributions over all investments would exceed 50% of their overall time, should have their specific time allocated to each investment.

**I. A. Investment Description**

- 1. Provide a brief description of this investment and its status through your capital planning and investment control (CPIC) or capital programming "control" review for the current cycle.**

This initiative is a key component of the RRB's Enterprise Architecture (EA) and associated EA Capital Asset Plan. The purpose of the RRB's Enterprise Architecture is to develop and implement an evolutionary, high-performance information technology architecture aligned with program/business goals that enables enterprise-wide data integration. It will enable the agency to provide a source of consistent, reliable, accurate, useful, and secure information. It will also support the effective delivery of services and benefits, and enable effective decision-making by agency personnel. The Enterprise Architecture supports RRB's overall strategic goals, agency's performance goals and the President's Management Agenda reforms.

This project funds the development of a preliminary metadata repository within the RRB, as identified in the RRB's Enterprise Architecture Strategic Plan. The RRB is charged with integrating data from varied sources and mediums. Data sources include: railroad employers and employees; annuitants and beneficiaries; state agencies; and other Federal government agencies including the Social Security Administration, the Centers for Medicare and Medicaid Services, and the Department of the Treasury, specifically the Internal Revenue Service and the Financial Management Service. This initiative facilitates management of RRB data at an enterprise level. It will allow the RRB to increase data integrity, accuracy and quality, and provide the ability to associate data within and across business processes and from both internal and external organizational boundaries

This initiative comprises the core requirements needed to achieve the target Enterprise Architecture Metadata Repository strategy and will provide fundamental support in meeting the RRB's strategic objectives.

Using various tools, integration broker suites, transformation engines and business process management, the RRB will create a new repository to hold previously un-automated integration metadata. The creation of a metadata repository will improve the agency's ability to share information more quickly and conveniently between the federal, state and local government agencies.

During fiscal year 2005, a Metadata Repository will be built to house descriptive data about the data housed in the Payment Rate and Entitlement History (PREH) database. This file was chosen due to its extensive documentation and the overall importance of the file as an agency data resource. From this effort, the Data Management Group will develop standards and protocols for metadata collection and recording. After analysis of the results of the PREH Metadata Repository development effort, teams will be assembled with contractual assistance to include other RRB data in the repository. Metadata normalization and reconciliation of apparent redundancies will take place during the metadata development effort.

The RRB will follow a strategy that calls for creating one core repository to hold previously un-automated integration metadata for the major agency data stores and then relying on references to any in-place, dispersed metadata stores for the remaining details. This will result in little metadata duplication because only the dispersed implementation-specific tools (e.g., applications) hold detailed metadata for the message schemas, syntax, transformation maps and validation rules for the transactional information that is transmitted.

Metadata is one of the most critical success factors to the development of inter-governmental and internal data-sharing services. Metadata also is one of the biggest critical success factors to storing and maintaining information effectively.

The development of our metadata repository will be in full conformance with the Data Architecture described in the E-Gov Enterprise Architecture Guidance (Common Reference Model). All of the data interoperability principles that are described will be met. The specifics may differ by the time we implement this project, since this is a rapidly changing field, but we will continually monitor the recommended data architecture to ensure compliance.

#### **Status of investment in RRB's Capital Planning and Investment Control(CPIC) Review Process**

This investment will be proceeding from the select to the control phase of our Capital Planning and Investment Control process. The control reviews will ensure timely oversight, quality control and executive review and that the initiative is conducted in a disciplined well-managed and consistent manner. We will monitor established performance goals and quantifiable performance measures periodically reviewing and requiring updates to costs, schedule, benefits, risks, security and architectural compliance.

#### **I. A. 2. What assumptions are made about this investment and why?**

The assumptions made for this investment are as follows:

1. The enterprise data will be managed through a dedicated data administration that will help in data standardization, maintaining data integrity and unintended redundancy of data.
2. The quality assurance for the data will be the function of the data administration.
3. All data will have an identified owner that will be accountable for the data and responsible for coordinating change management. This will promote one set of validation rules while maintaining accuracy, consistency and appropriate use of the data.
4. Data design will be integrated in the appropriate phases of the systems development life cycle to ensure that proper database design principles are followed, which will promote better implementation planning.
5. Training on metadata guidelines, standards and procedures will need to be done to promote consistent documentation for the data.
6. Key resources will be committed to the project.
7. Resources with multiple assignments will be trained and utilized when appropriate during each phase of this investment.
8. Personnel will be properly trained on the tools and techniques needed to support this investment.
9. Authentication, security and privacy issues will be fully addressed.
10. Management attention will be provided due to project's importance to the agency's mission, high development costs, potential for exceptional return on investment and the significant role in the administration of RRB's programs.

### **I. A. 3. Provide any other supporting information derived from research, interviews, and other documentation.**

This investment was derived as a result of an agency-wide collaboration utilizing the architecture development effort that provided us with the rationale and strategy. The following documents were also utilized, Common Requirements Vision, Conceptual Architectural Principles, Domain Architectures and the Gap Analysis Results.

With extensive collaboration of decision-makers throughout the RRB, research into industry (Gartner, Meta) best practices and adherence to the RRB's IT objectives and architectural principles, the metadata repository initiative will provide the RRB IT staff with the means and support needed to develop and implement the Target Architecture.

The centerpiece of any attempt to integrate varied applications, on varied platforms, is to model the data to be exchanged between independently developed application systems. Integration metadata — data about data — contains information about the communication content, the identities of the senders and receivers and the interaction process mechanics and business implications. Systematic integration strategies require integration metadata.

In order to develop inter-governmental and internal data-sharing services, we must integrate applications and focus on an effective metadata management strategy. This must be based on creating a relatively small repository of integration metadata not already held by individual repositories, and on the incremental development of an exchange information model of metadata. Any metadata integration repository project should be scaled to provide a positive return on investment by reducing data duplication, conflicts and errors. An added need and benefit of this effort will be to capture institutional, yet undocumented, knowledge on the data from experienced staff that may be within a few years of retirement.

However, although the benefits of integration metadata are clear, how best to collect and manage this metadata is not clear. XML has become a significant factor in the collection and depositing of metadata. The power of XML and metadata can be found only if communities of interest are using the same XML vocabularies. These vocabularies, when placed in a metadata registry, become available to all interested parties. There are a number of metadata specifications, some emerging and some well established. However, an emerging XML metadata registry specification is being developed by the Organization for the Advancement of Structured Information Standards (OASIS) that RRB's Data Architecture Domain Team needs to monitor for possible adoption.

#### **Metadata Repository Strategy:**

- The Information Resources Management Center – Data Management Group will be responsible for the development and management of the metadata repository and determining the tools and structure necessary for its creation.
- The RRB will follow a strategy that calls for creating one core repository to hold previously un-automated integration metadata for major agency data stores and then relying on references to any in-place, dispersed metadata stores for the remaining details. This will result in little metadata duplication because only the dispersed implementation-specific tools (e.g., applications) hold detailed metadata for the message schemas, syntax, transformation maps and validation rules for the information that is transmitted.
- Key to this strategy is having a group dedicated to facilitating the use and integration of metadata. The E-Government Services Center - Customer Services Group will select, manage and operate the integration-relevant software — e.g., integration broker suites, transformation engines and business process management tools. This ensures that the detailed metadata in the facilities created by the Data Management Group is widely available to all development groups and logically uniform, even if physically stored in disparate tools.
- Metadata management can easily become overwhelmingly complicated if the scope is not aggressively restricted. Therefore, the RRB's effort will move opportunistically, incrementally expanding the variety of external metadata sources encompassed by the virtual repository. The range of attributes or properties that are managed will also be expanded slowly.

**I.B. Justification (All Assets)**

In order for IT investments to successfully address support of the President's Management Agenda and justification of the investment, the investment should be collaborative and include industry, multiple agencies, State, local, or tribal governments, use e-business technologies and be governed by citizen needs. If the investment is a steady state investment, then an E-Gov strategy review is underway and includes all the necessary elements. If appropriate, this investment is fully aligned with one or more of the President's E-Gov initiatives.

**I.B.1. How does this investment support your agency's mission and strategic goals and objectives?**

In the Railroad Retirement Board Strategic Plan 2003 – 2008, Strategic objective II-C is to “Ensure effectiveness and efficiency, and security of operations.” The metadata repository will make for more efficient use of agency data. It will allow us to develop inter-governmental and internal data-sharing services.

**I.B.2. How does it support the strategic goals from the President's Management Agenda?**

The RRB is committed to a number of management strategies that will guide our efforts to accomplish this initiative. These strategies can be categorized along the lines of the President’s Management Agenda, which is designed to promote management improvement throughout the Federal government in five key areas.

Metadata Repository Initiative directly supports three of the five key areas, Expanded E-Government, Strategic Management of Human Capital and Competitive Sourcing.

The planned improvement in IT operations accomplished by this initiative will enable us to develop inter-governmental and internal data-sharing services. It will facilitate implementing E-Government initiatives within the framework of our information technology architecture. Our focus will remain on simplifying the delivery of services and making it possible for our customers, businesses and government agencies to easily obtain information and service from the RRB. This initiative will help us to achieve these goals.

In the area of Strategic Management of Human Capital, this initiative supports reshaping and realigning of our workforce and promotes knowledge transfer and succession planning.

This initiative will also involve significant acquisitions and contractual services. The RRB’s acquisition strategy supports the Competitive Sourcing guidelines of the President’s Management Agenda. The agency is committed to meeting the Federal goals and objectives for competitive sourcing. Procurements related to this initiative will use competitive sourcing for acquisitions and services using “firm fixed price.”

**I.B.3. Are there any alternative sources in the public or private sectors that could perform this function?**

No, there are no alternative sources in the public or private sector that can provide the entire function for this initiative. Knowledge of RRB’s business, customers, data and systems is needed for this function, but we do plan to use COTS software and contractor assistance to create the Metadata Repository.

**I.B.4. If so, explain why your agency did not select one of these alternatives.**

Not applicable, based on response to previous question.

**I.B.5. Who are the customers for this investment?**

The customers for this investment are the RRB annuitants and unemployment and sickness claimants, covered railroad and rail labor employers, Board employees, and other agencies. The improvements in infrastructure and information security will give us an environment which supports more efficient and effective IT services and more protection of our customers’ transactions with the RRB.

**I.B.6. Who are the stakeholders of this investment?**

The stakeholders in this investment are RRB’s staff, rail labor and rail management, and other agencies.

**I.B.7. If this is a multi-agency initiative, identify the agencies and organizations affected by this initiative.**

Not applicable

**I.B.7(A) If this is a multi-agency initiative, discuss the partnering strategies you are implementing with the participating agencies and organizations.**

Not applicable

**I.B.8 How will this investment reduce costs or improve efficiencies?**

This will capture and document the information about the enterprise including data business rules, relationships between the data, sources and current uses of data. This is essential given RRB's declining human capital knowledge base.

**I.B.9. List all other assets that interface with this asset. Have these assets been reengineered as part of this investment? Yes/No**

No, this investment is for the management of data. We are also requesting additional initiatives that will reengineer software, our IDMS database, system development environment, e-government services and foundational modifications to our infrastructure. These investments are all dependent upon the funding of this request.

**I.C. Performance Goals and Measures (All Assets)**

In order to successfully address this area of the business case, performance goals must be provided for the agency and be linked to the annual performance plan. The investment must discuss the agency's mission and strategic goals, and performance measures must be provided. These goals need to map to the gap in the agency's strategic goals and objectives that this investment is designed to fill. They are the internal and external performance benefits this investment is expected to deliver to the agency (e.g., improve efficiency by 60%, increase citizen participation by 300% a year to achieve an overall citizen participation rate of 75% by FY 2xxx, etc.). The goals must be clearly measurable investment outcomes, and if applicable, investment outputs. They do not include the completion date of the module or investment, or general goals, such as, significant, better, improved that do not have a quantitative or qualitative measure.

Agencies must use Table 1 below for reporting performance goals and measures for existing investments that were initiated prior to FY 2005. The table can be extended to include measures for years beyond FY 2004.

<b>Fiscal Year</b>	<b>Strategic Goal(s) Supported</b>	<b>Existing Baseline</b>	<b>Planned Performance Improvement Goal</b>	<b>Actual Performance Improvement Results</b>	<b>Planned Performance Metric</b>	<b>Actual Performance Metric Results</b>
2005	Strategic objective II-C: Ensure effectiveness and efficiency of operations	Specialized dictionary associated with IDMS database which contains data for all the data fields used by the IDMS database	Design Metadata repository for the Payment, Rate and Entitlement History Database		Extract, transform, and load data for PREH database	

Table 1						
Fiscal Year	Strategic Goal(s) Supported	Existing Baseline	Planned Performance Improvement Goal	Actual Performance Improvement Results	Planned Performance Metric	Actual Performance Metric Results
2005	Strategic objective II-C: Ensure effectiveness and efficiency of operations	Currently we have no metadata repository tools	Purchase metadata repository tools		100% implementation	
2005	Strategic objective II-C: Ensure effectiveness and efficiency of operations	No training has been done on metadata repository tools	Tool training for 1/3 of the business analysts and developers		100% implementation	
2006	Strategic objective II-C: Ensure effectiveness and efficiency of operations	Specialized dictionary associated with IDMS database which contains data for all the data fields used by the IDMS database	Expand Metadata repository		Extract, transform, and load data	
2006	Strategic objective II-C: Ensure effectiveness and efficiency of operations	No training has been done on metadata repository tools	Tool training for 1/3 of the business analysts and developers		100% implementation	
2007	Strategic objective II-C: Ensure effectiveness and efficiency of operations	Specialized dictionary associated with IDMS database which contains data for all the data fields used by the IDMS database	Expand Metadata repository		Extract, transform, and load data	
2007	Strategic objective II-C: Ensure effectiveness and efficiency of operations	No training has been done on metadata repository tools	Tool training for 1/3 of the business analysts and developers		100% implementation	

All new IT investments that are development, modernization, or enhancement (DME) for 2005 and beyond must use Table 2 and are required to use the FEA Performance Reference Model. The PRM Version 1.0, available at [www.feapmo.gov](http://www.feapmo.gov), includes detailed guidance about how to incorporate PRM Indicators into the performance goals and measures table below. Please use the Table 2 and the PRM to identify the performance information that pertains to the major IT Investment. Ensure there is a complete tie-in to the strategic goals and objectives described in section I.B.1.

The PRM has not been released as of the date this Exhibit 300 was completed.. The FEAPMO website state that *The Performance Reference Model (PRM) is scheduled to be released later this year.*

Once the PRM has been released, we will use it to identify the performance information pertaining to this initiative.

Table 2						
Fiscal Year	Measurement Area	Measurement Category	Measurement Indicator	Baseline	Planned Improvements to the Baseline	Actual Results
2005						
2005						
2006						
2006						

**I.D. Project Management (Investment Management) [All Assets]**

The OMB Circular A-11, Part 7, Capital Programming Guide, and the OPM Project Management Guidance "Interpretive Guidance for Project Manager Positions, discuss project management structures, responsibilities, and qualifications that contribute to successful achievement of cost, schedule, and performance goals.

**I.D.1. Is there a project (investment) manager assigned to the investment?**

Yes  No

If so, what is his/her name?

Patricia Henaghan

**I.D.1(A) Identify the members, roles, qualifications, ad contact information of the in-house and contract project (investment) managers for this project (investment).**

Name	Role	Qualification	Contact info
Patricia Henaghan floor	Project Manager	BS degree  Supervisory Data Manager Over 25 years experience in system research, analysis, and design	844 N. Rush 3rd  Chicago, IL 60611 312-751-4780 henagpa@rrb.gov
Steven Gehrke floor	Technical Manager	BA in Education  Master of Public Administration Data Administrator Over 25 years experience in system analysis, design, and programming.	844 N. Rush 3rd  Chicago, IL 60611 312-751-4571 gehrksw@rrb.gov

**I.D.2. Is there a contracting officer assigned to the project (investment)?**

Yes  No

If so, what is his/her name?

Henry Valiulis,  
Director of Administration

**I.D.3 . Is there an Integrated Project Team?**

Yes  No

**I.D.3(A) If so, list the skill set represented.**

Project Management, Technology Management, Enterprise Architecture, Business Processes, Database Administration, Data Administration, Information Security, Infrastructure Services, Records Management, Contracting , and Data Management.

**I.D.4. Is there a sponsor/owner for this investment?**

Yes  X  No

**I.D.4(A) If so, identify the sponsor/process owner by name and title and provide contact information.**

**Kenneth J. Zoll**

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**I.E. Alternatives Analysis [All Assets]**

In order to successfully address this area of the business case, you must include three viable alternatives that were compared consistently, identify the alternative chosen, and provide benefits and reasons for your choice. Agency must identify all viable alternatives and then select and report details on the top three viable alternatives. Use OMB Circular A-94 for all investments and the Clinger Cohen Act for IT investments for the criteria to be used for Benefit/Cost Analysis. Agency must include the minimum criteria to be applied in considering whether to undertake a particular investment, including criteria related to the quantitatively expressed projected net, risk-adjusted return on investment, and specific quantitative and qualitative criteria for comparing and prioritizing alternative investments. For IT investments, agencies should use the Federal Enterprise Architecture (FEA) to identify potential alternatives for partnering or joint solutions that may be used to close the identified performance gap.

**I.E.1 Describe the alternative solutions you considered for accomplishing the agency strategic goals or for closing the performance gap that this investment was expected to address. Describe the results of the feasibility/performance/benefits analysis. Provide comparisons of the returns (financial and other) for each alternative.**

The RRB considered three approaches as we evaluated the data and information flows within our organization. Our overall goal was to ensure that we have the capability to capture information flows across platforms, reduce redundancies, and utilize automated capabilities to manage data corporately while adhering to appropriate security, confidentiality and privacy principles as well as pertinent architecture principles including of reuse consistency. An additional requirement, given the declining human capital knowledge base, was to capture and document the information about the enterprise, including data business rules, relationships between the data, sources and current uses of the data.

The following criteria was used to evaluate each of the proposed solutions. The solutions should:

- Provide assistance in enforcing and maintaining guidelines for the use of data within and across enterprise boundaries.
- Facilitate the integration of data requirements and analysis within the systems development life cycle.
- Serve as a communication tool to management, users, developers, and data administrators.
- Provide an automated facility aligning with our current and target infrastructure environment to document, critical information about our data, its relationships, its uses and its sources and is able to be used to:
  - Assist in maintaining data reliability, maintaining accuracy, consistency and appropriate use of the data
  - Provides capabilities to enforce compliance with standard enterprise security and data architecture principles and procedures

- ☞ Allows for documentation and governance of validation rules, and associations with business processes for coordinating change management
- ☞ Maintains consistency of the information, data content and business rules
- ☞ Provides opportunity to edit data as it is stored, and eliminate unintentional redundancy
- ☞ Have the capability to apply and enforce rules and criteria across platforms

**Alternative 1: Maintain current practices.**

Current practices include the maintenance of a specialized dictionary associated with the IDMS database which contains limited atomic data for all the data fields used by the IDMS database. The atomic data usually consists of size and formatting information. Reports indicating all IDMS records that use the field can be obtained. The RRB also utilizes Online Help in 20% of its IDMS applications. This facility allows detailed information regarding a field to be stored and retrieved when utilizing the application in an interactive mode. Identical information about a data field can be made available to users using different applications.

The initial approach considered was to maintain our current practice as described above. This approach met the least amount of our criteria, matching about 10% of our requirements. It provides the least support for governance of the information and data requirements. It provides no capability to eliminate redundancy other than through manual efforts. It lacks capability to associate the data with business requirements and provides only the most rudimentary capabilities to capture information about our data. This solution proves one dimensional in that it is only capable of maintaining minimal information about our data on a single platform and fails to provide editing or automated management capabilities. A key deterrent to maintaining the status quo is that it lacks the capability to provide assistance in enforcing security and data related architecture compliance for the RRB's data. It is not an adequate solution to documenting or maintaining an electronic medium of our information knowledge base.

The current core data repository and tools are all dependent upon our current IDMS database environment which is limited in interoperability and has had a declining user base for the last ten years. Given our declining knowledge base and lack of controls, the integrity of our data may be seriously compromised without automated tools, skilled data administrators and an approved and corporate approach to managing data. The only alternative is to devote significant manual resources to managing the data manually using our current resources.

**Alternative 2: Build all inclusive Corporate Metadata Repository**

This alternative would be designed and structured to meet all of our stated requirements. It includes the acquisition of a metadata repository and assigning a dedicated data administrative staff who will oversee the capture, cleansing and management of all enterprise data. All corporate data and information be captured in the centralized repository. The repository would become the authoritative source, allowing corporate management of data, promoting consistency, improving data reusability and automating data management and controls enabling the governance of security and data architecture principles.

This alternative is the most complex solution of the three evaluated, primarily because of the broad all inclusive approach of building a comprehensive metadata repository. It has the greatest risk of failure of the three alternatives because all applications, developers and users will be impacted simultaneously. A corporate effort would be required from planning to implementation, all issues would need to be resolved, and interrelationships identified in initial stages of the development effort. Training requirements will be extensive.

**Alternative 3: Build cores Metadata Repository in stages, slowly integrating into our environment, targeting core functions/programs of the RRB.**

The RRB's selected alternative is to follow a strategy that calls for creating one core repository to hold previously un-automated integration metadata for major agency data stores and then relying on references to any in-place, dispersed metadata stores for the remaining details. This will result in little metadata duplication because only the dispersed implementation-specific tools (e.g., applications) hold detailed metadata for the message schemas, syntax, transformation maps and validation rules for the information that is transmitted.

As in alternative two, this alternative would be designed and structured to meet all of our stated requirements. This option includes the acquisition of a metadata repository and assigning a dedicated data administrative staff who will oversee the capture, cleansing and management of a subset of enterprise data, integrating it with current repositories as much as possible and expanding the repository over time.

The selected repository will be chosen with the capability to be expanded as additional data and information is added. It will be used manage data related to core functions and to identify and document the location of data currently located in other repositories. It will serve as the initial and controlling repository. The repository will fit into our current and target architecture, provide automated capabilities to manage data across platforms, reduce duplication, facilitate governance, change management.

Research from Gartner and MetaGroup on data design and the institution of metadata repositories cite developing and implementing using a staggered approach as the most successful.

**I.E.1(A) Discuss the market research that was conducted to identify innovative solutions for this investment (e.g., used an RFI to obtain four different solutions to evaluate, held open meetings with contractors to discuss investment scope, etc.). Also describe what data was used to make estimates such as, past or current contract prices for similar work, contractor provided estimates from RFIs or meetings, general market publications, etc.**

Alternative	Description
Alternative 1	Studied Gartner and MetaGroup research on pros and cons of approaches to managing information and data including cost analysis. Also reviewed trade magazines on data including Data Review. Reviewed industry best practices. Several data analysts attended seminars on building a corporate metadata repository as well as several meetings with DAMA. Two data analysts participated in meta data training sessions at the DAMA International Symposium and Wilshire Meta Data Conference. Held an in-house introductory class on data modeling for twelve participants. Performed Data Architecture tasks to identify current state and future state. Performed Analysis phase of our Enterprise Architecture and derived a data strategy that, once adopted, would transition the RRB to our target data architecture.
Alternative 2	Studied Gartner and MetaGroup research on pros and cons of approaches to managing information and data including cost analysis. Also reviewed trade magazines on data including Data Review. Reviewed industry best practices. Several data analysts attended seminars on building a corporate metadata repository as well as several meetings with DAMA. Two data analysts participated in meta data training sessions at the DAMA International Symposium and Wilshire Meta Data Conference. Held an in-house introductory class on data modeling for twelve participants. Performed Data Architecture tasks to identify current state and future state. Performed Analysis phase of our Enterprise Architecture and derived a data strategy that, once adopted, would transition the RRB to our target data architecture.
Alternative 3	Studied Gartner and MetaGroup research on pros and cons of approaches to managing information and data including cost analysis. Also reviewed trade magazines on data including Data Review. Reviewed industry best practices. Several data analysts attended seminars on building a corporate metadata repository as well as several meetings with DAMA. Two data analysts participated in meta data training sessions at the DAMA International Symposium and Wilshire Meta Data Conference. Held an in-house introductory class on data modeling for twelve participants. Performed Data Architecture tasks to identify current state and future state. Performed Analysis phase of our Enterprise Architecture and derived a data strategy that, once adopted, would transition the RRB to our target data architecture.

**I.E. 2. Summarize the results of your life-cycle cost analysis performed for each investment and the underlying assumptions.**

In the first alternative, the current core data repository and tools are all dependent upon our current IDMS database environment which is limited in interoperability and has had a declining user base for the last ten years. Given our declining knowledge base and lack of controls, the integrity of our data may be seriously compromised without automated tools, skilled data administrators and an approved and corporate approach to managing data. The only alternative is to devote significant manual resources to managing the data manually using our current resources. This approach would require three to four full time FTE's and would be error prone and significantly less efficient than an automated approach.

In the second alternative is the most complex solution of the three evaluated, primarily because of the broad all inclusive approach of building a comprehensive metadata repository. It has the greatest risk of failure of the three alternatives because all applications, developers and users will be impacted simultaneously. A corporate effort would be required from planning to implementation, all issues would need to be resolved and interrelationships identified in initial stages of the development effort. Training requirements will be extensive.

<b>Cost Elements</b>	<b>Alternative 1</b>	<b>Alternative 2</b>	<b>Alternative 3</b>
Planning & System Development	\$0.00	\$ 1.5	\$0.55
System Implementation and Acquisition	\$0.00	\$1.0	\$0.37
Operation and Maintenance	\$0.01	\$0.5	\$0.38
<b>Total</b>	\$0.01	\$3.0	\$1.30

Note: Costs are shown in millions.

**I.E. 3. Which alternative was chosen and why?**

The third alternative, the Metadata Repository initiative was chosen because it facilitates the management of RRB data at an enterprise level. It will allow us to increase data integrity, accuracy, and quality, and provide the ability to associate data within and across business processes and from both internal and external organizational boundaries. This initiative comprises the core requirements needed to achieve the target Enterprise Architecture Metadata Repository strategy and will provide fundamental support in meeting the RRB’s strategic objectives. It provides for a staggered approach to building the Metadata Repository, slowly integrating information into the tool, targeting the information and data for core functions and programs. Research shows that large wholesale metadata efforts rarely succeed and cost overruns are significant. This initiative is also a critical support element needed to successfully achieve our modernization effort also derived from our target architecture strategy. It provides consistency, and assists in knowledge transfer.

The Modernization effort proposes tangible solutions that will play a paramount role in knowledge transfer and reducing the dependency on technologies with a limited, shrinking experience base. It will also enable us to create a development environment that facilitates reuse, adaptability, and componentization. This will enable the RRB to more easily and consistently, transfer institutional knowledge to electronic forms. In addition, this initiative provides for the assessment of our information technology systems to identify cost effective solutions, as well as opportunities for inter- and extra-agency collaboration. This results in the identification of future efforts that will play a pivotal role in our target architecture effort.

**I.E.3(A) Are there any quantitative benefits that will be achieved through this investment (e.g., systems savings, cost avoidance, stakeholder benefits, etc)? Define the Return on Investment (ROI).**

The adoption of this initiative will allow us to increase data integrity, accuracy, and quality, and provide the ability to associate data within and across business processes and from both internal and external organizational boundaries.

- This initiative will facilitate interoperability, data sharing, reuse, collaborative efforts, and cross-platform solutions
- It facilitates collaborative efforts.
- It adheres to our architecture principles and industry best practices.
- This initiative will allow the RRB to manage data from an enterprise perspective that will assist in data standardization, maintaining data integrity and eliminate intended redundancy of data.
- It will establish centralized responsibility for oversight and assurance of the quality of the data. This initiative will promote one set of validation rules while maintaining accuracy, consistency and appropriate use of the data.

- Authentication, security and privacy issues will be fully addressed and statutory and regulatory changes will be made where necessary to prevent unauthorized release of data.
- Anticipate avoidance of overpayments and reduction of errors which should result net reduction in dollars and operational costs due to correction of errors.

**I.E.3(B) For the alternative selected, provide a financial summary, including Net Present Value by Year and Payback Period Calculations:**

YEAR =	FY05	FY06	FY07	Total Life-Cycle
<b>Savings/ Cost Avoidances</b>	\$ .92	\$ .92	\$ .92	\$2.76
<b>Investment Cost (Risk-Adjusted)</b>	\$ .55	\$ .37	\$ .38	\$1.30
<b>Net Present Value (NPV)</b>	\$ .37	\$ .55	\$ .54	\$1.46
<b>Return on Investment (ROI) (for lifecycle not by year)</b>				2.12
<b>Payback Period</b>				2 years

Note: Costs are shown in millions.

**I.E.4. What is the date of your cost benefit analysis?**

September 2003

**I.F. Risk Inventory and Assessment (All Assets)**

In order to successfully address this issue on the business case and capital asset plan, you must have performed a risk assessment at the initial concept, included mandatory risk elements defined below and demonstrate active management of the risk throughout the life-cycle of the investment.

For all investments, both IT and non-IT, you must discuss each of the following risks and present your plans to eliminate, mitigate, or manage risk, with milestones and completion dates. If there is no risk to the investment achieving its goals from a risk category, indicate so. If there are other risks identified, include them. Risk assessments should include risk information from all stakeholders and should be performed at the initial concept stage and then monitored and controlled throughout the life-cycle of the investment. Risk assessments for all investments must include: 1) schedule; 2) initial costs; 3) life-cycle costs; 4) technical obsolescence; 5) feasibility; 6) reliability of systems; 7) dependencies and interoperability between this investment and others; 8) surety (asset protection) considerations; 9) risk of creating a monopoly for future procurements; 10) capability of agency to manage the investment; and 11) overall risk of investment failure.

In addition, for IT investments, risk must be discussed in the following categories 12) organizational and change management; 13) business; 14) data/info; 15) technology; 16) strategic; 17) security; 18) privacy; and 19) project resources. For security risks, identify under the Description column the level of risk as high, medium, or basic. What aspect of security determines the level of risk, i.e., the need for confidentiality of information, availability of information or the system, reliability of the information or system? Under the Current Status column, list the milestones remaining to mitigate the risk.

Date Identified	Area of Risk	Description	Probability of Occurrence	Strategy for Mitigation	Current Status
August 2003	Schedule	Ability to obtain required funding and resources will affect schedule	High	-Endorsement by Executive Committee - Prepare and tightly manage to schedule	In process. FY 05 budget documents being prepared

<b>Date Identified</b>	<b>Area of Risk</b>	<b>Description</b>	<b>Probability of Occurrence</b>	<b>Strategy for Mitigation</b>	<b>Current Status</b>
August 2003	Initial costs	Accuracy of initial costs	Low	-Thorough analysis of cost estimates -Coordination with procurement. -Use of industry benchmarks	Study of cost and resource requirements completed, reviewed and approved.
August 2003	Life-cycle costs	Funding is on a yearly basis. May not receive sufficient funds to complete	Medium	-Work with agency executives and OMB to maintain project funding levels -Carefully scope project -Closely monitor project and budget	Ongoing. Project management and oversight in place
August 2003	Technical obsolescence	Ensure currency of technology solution	Low	-Maintain and update the RRB Enterprise Architecture	Ongoing. RRB EA and Capital Plan approved and processes in place
August 2003	Feasibility	Make certain of feasibility from technical and management perspective	Low	-Conduct industry baseline studies -Maintain a robust CPIC process and updated EA	Ongoing. CPIC and EA in place and operational. Studies will be made as needed
August 2003	Reliability of systems	Failure and system interruption is unacceptable for the processes supported	Medium	-Provide adequate system recovery, backup and alternate processing capability	Ongoing. Processes in place. Review of adequacy on annual basis
August 2003	Dependencies and interoperability between this investment and others	Maintain interoperability of investments and systems	Low	-Maintain a robust CPIC process and updated EA	Ongoing. RRB EA and Capital Plan approved and processes in place
August 2003	Surety (asset protection) considerations	RRB systems may be compromised	Low	-Evaluate and adopt security controls in plans	Planned. This will be part of the project planning and development phases
August 2003	Risk of creating a monopoly for future procurements	Risk if more than slight modification of COTS	Low	-Use of open architecture components. - Work within the agency and government community	Ongoing. Enterprise Architecture in use. Active participation with agencies
August 2003	Capability of agency to manage the investment	Commitment from Executive Committee required to effectively manage the investment	Low	-Actively engaged IT steering committee that will act as a governing body -Viable capital planning process is also being used	Ongoing. Executive Committee meets every week. Senior agency staff will be actively involved with the RRB Modernization

<b>Date Identified</b>	<b>Area of Risk</b>	<b>Description</b>	<b>Probability of Occurrence</b>	<b>Strategy for Mitigation</b>	<b>Current Status</b>
August 2003	Overall risk of investment failure	Must continually manage from an Enterprise Architecture perspective	Low	-Maintain Executive Committee involvement -Obtain and maintain stakeholder and customer buy-in	Ongoing. Executive Committee meets every week. Senior agency staff will be actively involved with the RRB Modernization
August 2003	Organizational and change management	Changes in mission and organization can threaten investment	Low	-Maintain Executive Committee involvement	Ongoing. Executive Committee meets every week. Senior agency staff will be actively involved with the RRB Modernization
August 2003	Business	Ability to identify and streamline business processes	Medium	-Established, approved and vetted concepts that drive the BPR and requirements gathering activities	Planned. This activity will primarily occur during the applications redesign phases
August 2003	Data/info	Must have agreement on content and structure of the data	Medium	-Utilize RRB Enterprise Architecture with active program participation	Ongoing. Communications/outreach in process. Enterprise Architecture in use
August 2003	Technology	Technology must be kept current and meet the requirements of agency	Low	-Utilize RRB Enterprise Architecture with active program participation	Ongoing. Communications/outreach in process. Enterprise Architecture in use
August 2003	Strategic	Timing of implementation of capabilities could affect ability to maintain momentum and support	Low	-A staged implementation of the modules will be completed at the earliest possible date -Use of flexible development to facilitate minimum impact due to changes based on delays external to the scope of control	Ongoing. Project planned from EA perspective. CPIC control process will ensure proper execution of project phases
August 2003	Security	Dependent upon well defined system level security requirements and security specifications	Low	-System security plan completed, updated and utilized that links to site security plan	Ongoing. Site Security plan completed. Initial security plans scheduled
August 2003	Privacy	Privacy aspects of claimants must be assured	Low	-Employ up-to-date techniques for protection of sensitive information and protect against disclosure	Scheduled. This will be part of the overall project planning

Date Identified	Area of Risk	Description	Probability of Occurrence	Strategy for Mitigation	Current Status
August 2003	Project resources	Project success requires individuals with the right skill mix and involvement of all affected organizations	Medium	-Maintain Executive Committee involvement	Ongoing. Executive Committee meets every week. Senior agency staff will be actively involved with the RRB Modernization

**I.F.1. What is the date of your risk management plan?**

We plan to complete the plan by August 2004.

**I.G. Acquisition Strategy**

In order to adequately address this area of the business case and capital asset plan you must employ a strong acquisition strategy that mitigates risk to the Federal government, accommodate Section 508 as needed, and use performance based contracts and (SOWs). If you are not using performance based fixed price contracts, your acquisition strategy should clearly define the risks that prompted the use of other than performance based contracts and SOWS. Finally, your implementation of the Acquisition Strategy must be clearly defined.

**I.G.1. Will you use a single contract or several contracts to accomplish this investment?**

Single

**I.G.1(A) What is the type of contract/task order if a single contract is used?**

Firm fixed price

**I.G.1(B) If multiple contract/task orders will be used, discuss the type, how they relate to each other to reach the investment outcomes, and how much each contributes to the achievement of the investment cost, schedule and performance goals. Also discuss the contract/task order solicitation or contract provisions that allow the contractor to provide innovative and transformational solutions.**

Not applicable

**I.G.2. For other than firm-fixed price, performance-based contracts, define the risk not sufficiently mitigated in the risk mitigation plan, for that contract/task order, that requires the Government to assume the risk of contract achievement of cost, schedule and performance goals. Explain the amount of risk the government will assume.**

Acquisition is done by competitive sourcing using schedule buys, GWACS or firm fixed price.

**I.G.3. Will you use financial incentives to motivate contractor performance (e.g. incentive fee, award fee)?**

Typically incentive contracts are not employed. Negotiated firm fixed price contracts and competitive procurements from schedules and multi-agency contracts are used.

**I.G.4. Discuss the competition process used for each contract/task order, including the use of RFP's, schedules or other multiple agency contracts, etc?**

Acquisition is done by competitive sourcing using schedule buys, GWACS or firm fixed price.

**I.G.5. Will you use commercially available or COTS products for this investment?**

Yes, COTS and commercially available hardware and software will be used.

**I.G.5(A) To what extent will these items be modified to meet the unique requirements of this investment?**

COTS, hardware and software packages are not modified. Only configuration is performed to optimize the performance in the RRB environment.

**I.G.5(B) What prevented the use of COTS without modification?**

COTS are not modified.

**I.G.6. What is the date of your acquisition plan?**

Initial acquisition planning has begun. We will solidify the acquisition plan once the budget is approved.

**I.G.7. How will you ensure Section 508 compliance?**

The solicitation specifies the 508 certificates that the vendor must meet. Vendors provide the required certification for any hardware, software or programming requested as part of the procurement proposal. This is verified by the COTR through the testing and acceptance process in the RRB.

**I.G.8. Acquisition Costs:**

**I.G.8(A) For budget year, what percentage of the total investment is for hardware acquisition?**

Hardware acquisition is 0% of the total investment for the budget year.

**I.G.8(B) For budget year, what percentage of the total investment is for software acquisition?**

Software acquisition is 20% of the total investment for the budget year.

**8.C. For budget year, what percentage of the total investment is for services acquisition?**

Services acquisition is 80% of the total investment for the budget year.

**I.H. Project (Investment) and Funding Plan**

In order to successfully address this section of the business case, you must demonstrate use of an Earned Value Management System (EVMS) that meets ANSIIEIA Standard 748, for both government and contractor costs, for those parts of the total investment that require development efforts (e.g., prototypes and testing in the planning phase and development efforts in the acquisition phase) and show how close the investment is to meeting the approved cost, schedule and performance goals. Information on EVMS is available at <http://www.acq.osd.mil/pm>. For those investments in the operations/steady state phase, you must perform an operational analysis as defined in the Capital Programming Guide to demonstrate how close the investment is to achieving the expected cost, schedule and performance goals for this phase. Program status information in this section must include both the contractor's part of the investments overall costs and milestone requirements as well as the government's costs and milestone requirements to successfully complete the investment phase, segment or module being reported.

**I.H.1. Description of performance-based management system (PBMS)**

Explain the methodology used by the agency to analyze and use the earned value performance data to manage performance. Describe the process you will use or used to verify that the contractor's project management system follows the ANSIIEIA Standard 748-A. If the investment is operational (steady state), define the operational analysis system that will be used. If this is a mixed life-cycle investment with both operational and development/modernization/enhancement (DME) system improvement aspects, EVMS must be used on the system improvement aspects of the investment and operational analysis on the operations aspects. Using information consistent with the work breakdown structure (WBS), provide the information requested in all parts of this section.

The RRB has initiated steps to require an earned value analysis as a crucial element for project management. We have incorporated it as a requirement within our Capital Planning and Investment Control process. MS Project will be used to track and manage actual cost, schedule and performance against the OMB-approved baseline.

**I.H.2. Original baseline (OMB-approved at investment outset)**

What are the cost and schedule goals for this phase or segment/module of the investment (e.g., what are the major investment milestones or events; when will each occur; and what is the estimated cost to accomplish each one)? Also identify the funding agency for each milestone or event if this is a multi-agency investment. For operational or steady state projects, complete one line on the chart for each year of this phase. If the project is mixed life-cycle there will be two parts to the chart; one for the O&M portion and one for the developmental portion using EVMS. If this is a multi-agency investment or one of the President's E-Gov initiatives, use the detailed investment plan with milestones on the critical path, to identify agency funding for each module or milestone. (This baseline must be included in all subsequent reports, even when there are OMB-approved baseline changes shown in I.H.3).

Cost and Schedule Goals: Original Baseline for a Phase/Segment/Module of Project (Investment)					
Description of Milestone	Schedule			Planned Cost	Funding Agency
	Start Date	End Date	Duration (in days)		
1. Repository Tools (purchase)	10-1-04	1-31-05	81	\$135,000	RRB
2. Tool training	2-01-05	9-30-05	170	\$20,000	RRB
3. Design Metadata repository for Payment Rate and Entitlement History, extract, transform and load data	10-1-04	9-30-05	251	\$400,000	RRB
4. Repository Tools (maintenance)	10-1-05	9-30-06	250	\$30,000	RRB
5. Tool training	10-1-05	9-30-06	250	\$20,000	RRB
6. Expand Metadata repository	10-1-05	9-30-06	250	\$320,000	RRB
7. Repository Tools (maintenance)	10-1-06	9-30-07	250	\$30,000	RRB
8. Tool training	10-1-06	9-30-07	250	\$20,000	RRB
9. Expand Metadata repository	10-1-06	9-30-07	250	\$335,000	RRB
Completion date: 9-30-07				Total cost estimate at completion: \$1,310,000	

**I.H.3. Proposed baseline/current baseline (applicable only if OMB-approved the changes)**

Identify in this section a proposed change to the original or current baseline or an OMB-approved baseline change. What are the new cost and schedule goals for the phase or segment/module (e.g., what are the major investment milestones or events; when will each occur; and what is the estimated cost to accomplish each one)? Also identify the funding agency for each milestone or event if this is a multi-agency investment. If this is a new investment in the FY 2005 budget year, this section will be blank for your initial submission.

*Not applicable*

Cost and Schedule Goals: Proposed or Current (OMB-Approved) Baseline for a Phase/Segment/Module of Project (Investment)					
Description of Milestone	Section 1.01 Schedule			Planned Cost	Funding Agency
	Start Date	End Date	Duration (in days)		
1.					
2.					
3.					
Completion date:				Total cost estimate at completion:	

**I.H.4 Actual performance and variance from OMB-approved baseline (original or current) Not Applicable**

A. This section is always filled in to reflect current status of the investment. It compares the OMB approved baseline and actual results for this phase, segment, or module of the investment. Show for each major investment milestones or events you planned (scheduled) to accomplish and the cost and what work was actually done and the cost. If the project is in the operational or steady state phase complete one line on the chart for each year. For these projects complete paragraphs C, D, F and G as appropriate. If this is a new investment in the FY 2005 budget year, this will be blank for your initial submission. OMB may ask for latest information during the budget review process.

*Not applicable*

Comparison of OMB-Approved Baseline and Actual Outcome for Phase/Segment/Module of a Project (Investment)									
Description of Milestone	OMB-Approved Baseline					Actual Outcome			
	Schedule			Planned Cost	Funding Agency	Schedule		Percent Complete	Actual Cost
	Start Date	End Date	Duration (in days)			Start Date	End Date		
1.									
2.									
3.									
Completion date: OMB-approved baseline:						Estimated completion date:			
Total cost: OMB-approved baseline:						Estimate at completion:			

**I.H.4(B) Provide the following investment summary information from your EVMS data (as of date):**

**I.H.4(B1) Show the budgeted (planned) cost of work scheduled (BCWS):** \$

**I.H.4(B2) Show budgeted (planned) cost of work actually performed (BCWP):** \$

**I.H.4(B3) Show the actual cost of work performed (ACWP):** \$

**I.H.4(B4) Provide a performance curve graph plotting BCWS, BCWP and ACWP on a monthly basis from inception of this phase or segment/module through the latest report. In addition, plot the ACWP curve to the estimated cost at completion (EAC) value, and provide the following EVMS variance analysis.**

Project (Investment) Summary (Cumulative)	Value
Cost Variance = (BCWP-ACWP) =	
Cost Variance % = (CV/BCWP) x 100%	
Cost Performance Index (CPI) = (BCWP/ACWP)	
Schedule Variance = (BCWP-BCWS) =	
Schedule Variance % = (SV/BCWS) x 100%	
Schedule Performance Index (SPI) = (BCWP/BCWS)	
Two independent Estimates at Completion (EAC) = ACWPcum + (Performance Factor (PF) X (BAC minus BCWPcum)), where PF1 = 1/CPI, and PF2 = 1/(CPI X SPI).	
Variance at Completion (VAC) = (BAC minus EAC) for both EACs above =	
Variance at Completion % = (VAC/BAC) x 100% for both EACs above =	
Estimated Cost to Complete (ETC) =	
Expected Completion Date =	

**Definitions for Earned Value Management System:**

- ACWP - Actual Cost of Work Performed - What you paid.
- BAC - Budget At Completion - The baseline (planned) budget for the investment.
- BCWP - Budgeted Cost for Work Performed - The earned value.
- BOWS - Budgeted Cost for Work Scheduled - The planned costs.
- CPI - Cost Performance Index - The ratio of the budgeted to actual cost of work performed.
- CV - Cost Variance - The difference between planned and actual cost of work performed.

EAC - Estimate At Completion - The latest estimated cost at completion.  
ETC - Estimate to Completion - Funds needed to complete the investment.  
PF - Performance Factor - The cost to earn a dollar of value, or ACWPIBCWP, or I/CPI.  
SPI - Schedule Performance Index - The percent of the investment that has been completed.  
SV - Schedule Variance - The variance between the actual and planned schedules.  
VAC - Variance at Completion - The variance between the baseline and actual budget at completion.

**I.H.4(C) If cost and/or schedule variance are a negative 10 percent or more at the time of this report or EAC is projected to be 10 percent or more, explain the reason(s) for the variance(s).**

**I.H.4(D) Provide performance variance. Explain based on work accomplished to date, whether or not you still expect to achieve your performance goals. If not, explain the reasons for the variance. For steady state projects, in addition to a discussion on whether or not the system is meeting the program objectives, discuss whether the needs of the owners and users are still being met.**

**I.H.4(E) For investments using EVMS, discuss the contractor, government, and at least the two EAC index formulas in I.H.4.B, current estimates at completion. Explain the differences and the IPT's selected EAC for budgeting purposes. This paragraph is not applicable to operations/steady state investments.**

**I.H.4(F) Discuss the corrective actions that will be taken to correct the variances, the risk associated with the actions, and how close the planned actions will bring the investment to the original baseline. Define proposed baseline changes, if necessary.**

**I.H.4(G) If the investment cost, schedule or performance variances are 10% or greater, has the Agency Head concurred in the need to continue the program at the new baseline?**

Yes \_\_\_\_\_ No \_\_\_\_\_

## Exhibit 300: Part II: Additional Business Case Criteria for Information Technology

### II. A. Enterprise Architecture

In order to successfully address this area of the business case and capital asset plan you must ensure that the investment is included in the agency's EA and CPIC process, and is mapped to and supports the Federal Enterprise Architecture. You must also ensure that the business case demonstrates the relationship between the investment and the business, data, application, and technology layers of the EA.

#### II.A.1 Business

##### II.A.1(A) Is this investment identified in your agency's enterprise architecture? If not, why?

Yes, the RRB's Enterprise Architecture Strategic Plan proposed several initiatives, including this one, to assist in achieving its Target Architecture. The RRB's Target Architecture is an information environment that ultimately can support 1) the interoperability of all electronic operations, 2) effective internal and external communications, and 3) an adaptive and flexible infrastructure that is proactive in addressing business needs and challenges, all with appropriate levels of security. Through a gap analysis, structural initiatives to address technology deficiencies in RRB's existing information technology environment and functional initiatives to address deficiencies of current business processes were identified. To successfully close the identified gaps, this investment is an essential foundation with which the RRB will build upon to achieve its Target Architecture.

##### II.A.1(A1) Will this investment be consistent with your agency's "to be" modernization blueprint?

Yes, the RRB's metadata repository initiative is primarily to achieve enterprise management of data, reduce redundancy improve efficiency, and providing a vehicle for electronic knowledge sharing. It is a significant component of our target architecture.

##### II.A.1(B) Was this investment approved through the EA Review committee at your agency?

Yes, the creation of a metadata repository is one of several initiatives identified in the agency's Enterprise Architecture Strategic Plan. Our Architecture Review Board has supported the plan since its inception.

##### II.A.1(C) What are the major process simplification/reengineering/design projects that are required as part of this IT investment?

One of the advantages of this initiative is that it will integrate data from a myriad of sources and mediums. Currently, the RRB data sources include railroad employers and employees, annuitants and beneficiaries, state agencies, and other Federal government agencies including the Social Security Administration, the Centers for Medicare and Medicaid Services, and the Department of the Treasury, specifically the Internal Revenue Service and the Financial Management Service. This initiative facilitates management of RRB data at an enterprise level. It will allow us to increase data integrity, accuracy, and quality, and provide the ability to associate data within and across business processes and from both internal and external organizational boundaries.

**II.A.1(D)What are the major organization restructuring, training, and change management projects that are required?**

This initiative will not require organizational restructuring, however significant training will be required for data administrators, developers and user analyst. We anticipate that the metadata repository will become the authoritative source for the source, uses and users of data within the organization. Detailed change management procedures, training requirements and a training schedule will be developed within the scope of this project.

**II.A.1(E)Please list all the Lines of Business and Sub-Functions from the FEA Business Reference Model that this IT investment supports. The primary BRM mapping for this initiative should have been identified with the last six digits of the unique project (investment) identifier in section 53.8. For a list of the BRM Lines of Business and Sub-Functions, as well as guidance on mapping to the BRM, please see www.omb.gov. (Note: The Services for Citizens area and the Mode of Delivery area should be thought of collectively. If you identified your primary line of business/sub-function in section 53.8 as a Service for Citizen or a Mode of Delivery, at a minimum you should identify the corresponding Mode of Delivery/Service for Citizen that applies in this section).**

Line of Business	Sub-function
Mode of Delivery	
Knowledge Creation and Management	Research and Development General Purpose Data and Statistics
Public Goods Creation and Management	Information Infrastructure Management
Support Delivery of Services	
Controls and Oversight	Program Monitoring Program Evaluation
Planning and Resource Allocation	Budget Formulation Capital Planning Enterprise Architecture Strategic Planning Management Improvement
Internal Risk Management and Mitigation	Contingency Planning Continuity of Operations
Regulatory Development	Policy and Guidance Development
Management of Government Resources	
Supply Chain Management	Goods Acquisition Services Acquisition
Information and Technology Management	Lifecycle/Change Management Information Management

**II.A.2. Data**

**II.A.2(A)What types of data will be used in this investment? Examples of data types are health data, geospatial data, natural resource data, etc.**

Demographic

**II.A.2(B)Does the data needed for this investment already exist at the Federal, State, or Local level? If so, what are your plans to gain access to that data?**

All required data already exists with the RRB. No additional data from outside the RRB is needed.

**II.A.2(C) Are there legal reasons why this data cannot be transferred? If so, what are they and did you address them in the barriers and risk sections above?**

This data will be housed in RRB files and its usage will remain internal to the RRB.

**II.A.2(D) If this initiative processes spatial data, identify planned investments for spatial data and demonstrate how the agency ensures compliance with the Federal Geographic Data Committee standards required by OMB Circular A-16.**

Not applicable

**II.A.2(E) If this activity involves the acquisition, handling or storage of information that will be disseminated to the public or used to support information that will be disseminated to the public, explain how it will comply with your agency's Information Quality guidelines (section 515 requirements)?**

Not applicable

**II.A.2(F) Managing business information means maintaining its authenticity, reliability, integrity, and usability and providing for its appropriate disposition. Address how the system will manage the business information (records) that it will contain throughout the information life cycle.**

Metadata will secure and appropriately make available business information previously stored in disparate methods. Metadata management requires attention to the stored data at all phases of its lifecycle and will include analysis and reporting tools to assist in its management.

### **II.A.3 Applications, Components, and Technology**

**II.A.3(A) Discuss this major investment in relationship to the Service Component Reference Model Section of the FEA. Include a discussion of the components included in this major IT investment (e.g., knowledge management, content management, customer relationship management, etc). For detailed guidance regarding components, please refer to <http://www.feapmo.gov> and the SRM Release Document.**

The Metadata Repository Initiative has a direct relationship to the Support Services and Digital Asset Service components of the Services Component Reference Model. This initiative's primary goal is integrating data from varied sources and mediums to facilitate management of RRB data at an enterprise level. Applicable specific domains within the FEA Service Component Reference Models (SRM) and relationships follow:

Back Office Services Domain \ Data Management \ Metadata Management Component  
Back Office Services Domain \ Data Management \ Data Exchange Component  
Digital Asset Services Domain \ Knowledge Management \ Information Mapping \ Taxonomy Component  
Business Analytical Services Domain \ Business Intelligence \ Data Mining Component

**II.A.3(B) Are all of the hardware, applications, components, and web technology requirements for this investment included in the Agency EA Technical Reference Model? If not, please explain.**

Yes, all the hardware, applications and component requirements for the Metadata Repository Initiative are included in the RRB's Enterprise Portfolio of Products and Standards.

**II.A.3(C) Discuss this major IT investment in relationship to the Technical Reference Model section of the FEA. Identify each Service Area, Service Category, Service Standard, and Service Specification that collectively describes the technology supporting the major IT investment. For detailed guidance regarding the FEA TRM, please refer to <http://www.feapmo.gov>.**

The Metadata Repository Initiative has a direct relationship with the Service Interface and Integration Service Area of the FEA Technical Reference Model (TRM). This initiative will correspond to the Interoperability Category by establishing a standard for the Data Format / Classification of the data used at the RRB.

**II.A.3(D) Will the application leverage existing components and/or applications across the Government (i.e., FirstGov, Pay.Gov, etc). If so, please describe.**

Not applicable

**II.A.3(E) Financial Management Systems and Projects, as indicated in Part One, must be mapped to the agency's financial management system inventory provided annually to OMB. Please identify the system name(s) and system acronym(s) as reported in the most recent systems inventory update required by Circular A-11 section 52.4.**

Not applicable

## **II. B. Security and Privacy**

In order to successfully address this area of the business case, each question below must be answered at the investment (system/application) level, not at a program or agency level. Simply referring to security plans or other documents is not an acceptable response. For IT investments under development, security planning must proceed in parallel with the development of the system to ensure that IT security requirements and costs for the lifecycle of the investment are identified and validated. All IT investments must have up-to-date security plans and be fully certified and accredited prior to becoming operational. Anything short of a full certification and accreditation indicates that identified IT security weaknesses remain and need to be remedied and is therefore not adequate to ensure funding for the investment. Additionally, to ensure that requests for increased IT security funding are appropriately addressed and prioritized, the agency must identify: 1) current costs; 2) current IT security performance gaps; and 3) how the funding request will close the performance gaps. This information must be provided to OMB through the agencies' plan of action and milestone developed for the system and tied to the IT business case through the unique project (investment) identifier.

In addition, agencies must demonstrate that they have fully considered privacy in the context of this investment. Agencies must comply with Section 208 of the E-government Act and forthcoming OMB implementing guidance and, in appropriate circumstances, conduct a privacy impact assessment that evaluates the privacy risks, alternatives and protective measures implemented at each stage of the information life cycle. Agencies should utilize the guidance provided in OMB Memoranda in conducting the PIA and submit a copy, using the unique project (investment) identifier, to OMB at [PIAkomb.eop.gov](mailto:PIAkomb.eop.gov).

**II.B.1. How is security provided and funded for this investment (e.g., by program office or by the CIO through the general support system/network)?**

This project if approved, would be funded by the CIO.

**II.B.1(A) What is the total dollar amount allocated to IT security for this investment in FY 2005? Please indicate whether an increase in IT security funding is requested to remediate IT security weaknesses, specifying the amount and a general description of the weakness.**

Funding for IT security has not been determined at this phase of the investment. A portion of the total dollar amount of \$65,000 for security training and \$50,000 for risk management plans will be used for this investment. An IT security weakness does not exist for this investment.

**II.B.2 Please describe how the investment (system/application) meets the following security requirements of the Federal Information Security Management Act, OMB policy, and NIST guidelines:**

**II.B.2(A) Does the investment (system/application) have an up-to-date security plan that meets the requirements of OMB policy and NIST guidelines? What is the date of the plan?**

A security plan will be developed according to OMB policy requirements and NIST guidelines during the systems development life cycle for this investment. The impact on other system security plans needs to be considered and coordinated.

**II.B.2(B) Has the investment been certified and accredited (C&A)?**

*Note: Certification and accreditation refers to a full C&A and does not mean interim authority to operate. Additionally, specify the C&A methodology used (e.g., NIST guidelines) and the date of the last review.*

Not applicable at this time. The appropriate application of the certification and accreditation methodology for this investment needs to be determined during the initial phase.

**II.B.2(C) Have the management, operational, and technical security controls been tested for effectiveness? When were most recent tests performed?**

Not applicable at this time. However, the effectiveness of security controls will be tested and documented during the appropriate phase of the development life cycle for this investment prior to implementation.

**II.B.2(D) Have all system users been appropriately trained in the past year, including rules of behavior and consequences for violating the rules?**

Not applicable at this time. Training will be provided on the use of the repository, rules of behavior and consequences of violation of those rules will be covered in the training.

**II.B.2(E) How has incident handling capability been incorporated into the system or investment, including intrusion detection monitoring and audit log reviews? Are incidents reported to DHS' FedCIRC?**

Not applicable at this time. The agency is developing the computer security incidence response plan that covers systems supported by this investment. This plan will be in place prior to the implementation of this investment. Reporting of incidents to DHS' FedCIRC has been incorporated in the procedures of the current draft of this plan.

**II.B.2(F) Is the system operated by contractors either on-site or at a contractor facility? If yes, does any such contract include specific security requirements required by law and policy? How are contractor security procedures monitored, verified, and validated by the agency?**

Not applicable

**II.B.3 How does the agency ensure the effective use of security controls and authentication tools to protect privacy for those systems that promote or permit public access?**

Not applicable at this time. However, testing of security controls or authentication tools used to protect privacy of systems that promote or permit public access will be considered and incorporated in the project plans for this investment.

**II.B.4 How does the agency ensure that the handling of personal information is consistent with relevant government-wide and agency policies?**

Annual security awareness training is provided, periodic audits, reviews and evaluations of IT systems are conducted.

**II.B.5** If this is a new or significantly altered investment involving information in identifiable form collected from or about members of the public, has a Privacy Impact Assessment (PIA) for this investment been provided to OMB at [PIAgomb.eop.gov](http://PIAgomb.eop.gov) with the investment's unique project (investment) identifier?

This investment does not affect information subject to the Privacy Act.

**II.C. Government Paperwork Elimination Act (GPEA)**

**II.C.1** If this investment supports electronic transactions or record-keeping that is covered by GPEA, briefly describe the transaction or record-keeping functions and how this investment relates to your agency's GPEA plan.

This investment is not directly affected by GPEA; nor does it directly affect the RRB's GPEA initiatives.

**II.C.2** What is the date of electronic conversion from your GPEA plan?

Not applicable, based on previous answer.

**II.C.3** Identify any OMB Paperwork Reduction Act (PRA) control numbers from information collections that are tied to this investment.

Not applicable, based on II.C.1 answer.

**Exhibit 300: Part I: Capital Asset Plan and Business Case (All Assets)**

Date of this Submission: August, 2003  
 Agency: U.S. Railroad Retirement Board  
 Bureau: U.S. Railroad Retirement Board  
 Location in the Budget:  
 Account Title:  
 Account Identification Code:  
 Program Activity:  
 Name of Investment: E-Government Service Delivery  
 Unique Project (Investment) Identifier: 446-00-01-02-01-0053-00-112-081  
*(For IT investment only, see section 53. For all other, use agency ID system.) UPI should be created the same for all investments.*  
 Investment Initiation Date: 2005  
 Investment Planned Completion Date: 2007  
 This Investment is: Initial Concept \_\_\_ Planning X Full Acquisition \_\_\_ Steady State \_\_\_ Mixed Life Cycle \_\_\_

Investment/useful segment is funded: Incrementally \_\_\_ Fully X

Was this investment approved by OMB for previous Year Budget Cycle? Yes \_\_\_ No X

Did the Executive/Investment Review Committee approve funding for this investment this year? Yes X No \_\_\_

Did the CFO review the cost goal? Yes X No \_\_\_

Did the Procurement Executive review the acquisition strategy? Yes X No \_\_\_

Did the Project (Investment) Manager identified in section 1.1) review this? Yes X No \_\_\_

Is this investment included in your agency's annual performance plan or multiple-agency annual performance plans? Yes X No \_\_\_

Does this investment support homeland security? Yes \_\_\_ No X

If this investment supports homeland security, indicate by corresponding number which homeland security mission area(s) this investment supports?  
 1- Intelligence and Warning;  
 2 - Border and Transportation Security;  
 3 - Defending Against Catastrophic Threats;  
 4 - Protecting Critical Infrastructure and Key Assets;  
 5 - Emergency Preparedness and Response; or  
 6 - Other \_\_\_\_\_

Is this investment information technology? (see section 53 for definition) Yes X No \_\_\_

**For information technology investments only:**  
 a. Is this project (investment) a financial management system? (see section 53.2 for definition) Yes \_\_\_ No X

If so, does this project (investment) address a FFMIA compliance area? Yes \_\_\_ No \_\_\_

If yes, which compliance area? \_\_\_\_\_

- b. Does this investment implement electronic transaction or record keeping that is covered by the Government Paperwork Elimination Act (GPEA)? Yes  X  No  \_\_\_\_\_
- If so, is it included in your GPEA plan (and does not yet provide an electronic option)? Yes  X  No  \_\_\_\_\_
- Does the investment already provide an electronic option? Yes  \_\_\_\_\_  No  X
- c. If the investment administers information in identifiable form about members of the public, was a privacy impact assessment submitted via PIA@omb.eop.gov with a unique project (investment) identifier? Yes  \_\_\_\_\_  No  \_\_\_\_\_
- d. Was this investment reviewed as part of the FY 2003 Federal Information Security Management Act review process? Yes  \_\_\_\_\_  No  X
- d.1 If yes, were any weaknesses found? Yes  \_\_\_\_\_  No  \_\_\_\_\_
- d.2 Have the weaknesses been incorporated into the agency's corrective action plans? Yes  \_\_\_\_\_  No  \_\_\_\_\_
- e. Has this investment been identified as a national critical operation or asset by a Project Matrix review or other agency determination? Yes  \_\_\_\_\_  No  X
- e.1 If no, is this an agency mission critical or essential service, system, operation, or asset (such as those documented in the agency's COOP Plan), other than those identified as above as national critical infrastructures? Yes  X  No  \_\_\_\_\_
- f. Was this investment included in a Performance Assessment Rating Tool (PART) Review? Yes  \_\_\_\_\_  No  X
- f.1. Does this investment address a weakness found during the PART Review? Yes  \_\_\_\_\_  No  \_\_\_\_\_

SUMMARY OF SPENDING FOR PROJECT STAGES									
(In Millions)									
(Estimates for BY+1 and beyond are for planning purposes only and do not represent budget decisions)									
	PY-1 and Earlier	PY 2003	CY 2004	BY 2005	BY+1 2006	BY+2 2007	BY+3 2008	BY+4& Beyond	Total
Planning:									
Budgetary Resources									
Outlays									
Acquisition :									
Budgetary Resources				\$ .96	\$ .66	\$ .59			\$ 2.21
Outlays									
Total, sum of stages:									
Budgetary Resources									
Outlays									
Maintenance:									
Budgetary Resources									
Outlays									
Total, All Stages:				\$ .96	\$ .66	\$ .59			\$ 2.21
Budgetary Resources									
Outlays									
Government FTE Costs				\$ 1.39	\$ 1.30	\$ 1.30			\$ 3.99

*Note:* Government FTE costs shall include government personnel considered direct and indirect labor in support of this investment. This includes the investment management IPT and any other government effort (e.g., programming effort for part of the overall investment, development effort) that contributes to the success of the investment. The costs include the salaries plus the fringe benefit rate of 32.8%. Agencies should reflect estimates of the costs of internal FTE supporting an IT investment, and should at a minimum include in FTE estimates of anyone spending more than 50% of their time supporting this investment. Persons working on more than one investment, whose contributions over all investments would exceed 50% of their overall time, should have their specific time allocated to each investment.

**I. A. Investment Description**

**I.A.1. Provide a brief description of this investment and its status through your capital planning and investment control (CPIC) or capital programming "control" review for the current cycle.**

This initiative is a key component of the RRB’s Enterprise Architecture (EA) and associated EA Capital Asset Plan. The purpose of the RRB’s Enterprise Architecture is to develop and implement an evolutionary, high-performance information technology architecture aligned with program and business goals that enable enterprise-wide data integration. It will enable the agency to provide a source of consistent, reliable, accurate, useful, and secure information. It will also support the effective delivery of services and benefits, and enable effective decision-making by agency personnel. The Enterprise Architecture supports RRB’s overall strategic and performance goals as well as the President’s Management Agenda reforms.

The RRB is committed to meeting the President’s Management Agenda concerning expanded use of the Internet for services to citizens. This agenda item matches our goal to address our customer’s needs and expectations, providing them with a range of choices for conducting business, including more Internet options that are private and secure.

This project funds the RRB initiative to expand electronic services to the public via the RRB Internet website. As the Railroad Retirement Act and Railroad Unemployment Insurance Act systems are redesigned as part of the “Modernization Blueprint” initiative, these Internet services will be implemented, adding online functionality along with appropriate privacy/security safeguards.

In addition, this initiative funds continued expansion of the RRB’s Employer Reporting System (ERS). This system is being developed to meet the requirements of the Government Paperwork Elimination Act (GPEA) which are to develop procedures to permit private employers to store and file electronically with executive agencies forms containing

information pertaining to employees. The ERS will enable the RRB to efficiently and effectively process compensation and service reports submitted on various media in a variety of methods from railroad employers. It will expand services to railroad employers by providing online completion and transmission of all employer paper forms, providing an acknowledgement of receipt, filing status information, complete and timely information on processing results, testing capabilities and additional customer support. The goal of the effort is to reduce the reporting burden on businesses by taking advantage of commercial electronic transaction protocols.

During fiscal year 2005, we plan to complete development of systems that allows railroad employees and spouses to file applications for retirement annuities on-line. We also plan to complete development of interactive applications involving on-line entry of direct deposit and change of address information. Work will continue on the Employer Reporting System.

During fiscal years 2006 and 2007, our plans are to develop interactive applications that provide the option of filing on-line applications for recurring survivor annuities. Finally, we also plan to provide the option of submitting certain supporting statements or questionnaires via these interactive applications. Work is estimated to be completed on the employer reporting system in the later part of fiscal year 2007.

### **Status of investment in RRB's Capital Planning and Investment Control(CPIC) Review Process**

This investment will be proceeding from the select to the control phase of our Capital Planning and Investment Control process. The control reviews will ensure timely oversight, quality control and executive review and that the initiative is conducted in a disciplined well-managed and consistent manner. We will monitor established performance goals and quantifiable performance measures periodically reviewing and requiring updates to costs, schedule, benefits, risks, security and architectural compliance.

#### **I.A.2. What assumptions are made about this investment and why?**

The assumptions made for this investment are as follows:

1. As the use of the Internet increases, management of web content will become increasingly complex and time-consuming and therefore will require specific roles or organization to effectively manage our Internet and Intranet sites.
2. This project will be conducted with RRB resources from a matrix organization structure. This will increase the complexity of project planning, execution and control.
3. Key resources will be committed to the project.
4. Resources will be trained and utilized when appropriate during each phase of this investment.
5. Authentication, security and privacy issues will be fully addressed.
6. Management attention will be provided due to project's importance to the agency's mission.
7. The degree of success of this initiative is dependent on the modernization of the agency's infrastructure, databases, legacy assets and re-design efforts.

#### **I.A.3. Provide any other supporting information derived from research, interviews, and other documentation.**

The E-Government Services Initiative was developed with extensive collaboration of decision-makers throughout the RRB, research into industry (Gartner, Meta) best practices and adherence to the RRB's IT objectives and architectural principles.

We began by assessing the requests for e-government applications, as defined in the agency's Government Paperwork Elimination Act (GPEA) report relative to our current or "as is" environment. Our application environment is largely comprised of 20+ year old mainframe applications. Consequently, we determined, that for the next three to five years it would be prudent to take advantage of these installed legacy applications. However, the integration of these substantial legacy assets into an e-Government environment is challenging and must be addressed in an efficient and effective manner. The application paradigm of the past is very different from today's approach. The problem is not the platform on which the applications runs, but the methodology used to implement the applications.

In the past, the RRB application development environment focused on performance and volume. Consequently, applications have been constructed in a way that maximizes performance and minimizes evolution. The slow degradation of the application code over time, the decline of standards, and the increased intertwining of the presentation, logic and data layers conflict with today's application development environments.

We need to treat application development as an evolving process. Improving the application development process, learning new application development paradigms, extending legacy applications and skill training all represent the application development challenges of the next three to five years. Looking beyond simple and cosmetic legacy extension alternatives requires code understanding. Modifications may include simply changing “presentation” from 3270 to Active Server Page (ASP) applications, and then interfacing these programs with new applications. It may be an evolution of legacy programs to a more component-like form so that they can be used by the old (3270 presentation) and the new (Internet or intranet) without creating duplicate maintenance efforts. This level of change requires strong program understanding, code-slicing tools and a new implementation environment. Although the perception of objects vs. components is often debated, the underlying direction is the same — increasing the level of reuse and, therefore, of application assembly.

Consequently, we determined that the RRB must develop coherent plans to evolve our technology bases to support the IT demands of new business initiatives. Our objective is to preserve and protect useful software investments while incorporating and integrating investments in newer technologies, specifically suited for interactive mediums, such as the internet.

## **I.B. Justification (All Assets)**

In order for IT investments to successfully address support of the President's Management Agenda and justification of the investment, the investment should be collaborative and include industry, multiple agencies, State, local, or tribal governments, use e-business technologies and be governed by citizen needs. If the investment is a steady state investment, then an E-Gov strategy review is underway and includes all the necessary elements. If appropriate, this investment is fully aligned with one or more of the President's E-Gov initiatives.

### **I.B.1. How does this investment support your agency's mission and strategic goals and objectives?**

This initiative is part of the overall Enterprise Architecture Strategy for modernizing the IT service and delivery to the RRB mission areas. When completed it will deliver an evolutionary, high-performance information technology architecture aligned with the RRB program/business goals that enables enterprise-wide data integration. The EA strategy will provide a source for consistent, reliable, accurate, useful, and secure information. It will also support the effective delivery of services and benefits, and enable effective decision-making by agency personnel. The Enterprise Architecture supports RRB's overall strategic goals.

RRB Strategic Objective I-C is “Provide a range of choices in service delivery methods.” We plan to provide our customers with information as well as the ability to apply for benefits over the Internet.

RRB Strategic Objective I-D is “Ensure efficient and effective business interactions with covered employers”. RRB intends to continue to deliver a system whereby the employer can conduct daily business transactions and file required reports over a secure website. This project continues development on the Employer Reporting System.

### **I.B.2. How does it support the strategic goals from the President's Management Agenda?**

The RRB is committed to a number of management strategies that will guide our efforts to accomplish this initiative. These strategies can be categorized along the lines of the President's Management Agenda, which is designed to promote management improvement throughout the Federal government in five key areas.

RRB's E-Government Service Delivery Initiative directly supports three of the five key areas, Expanded E-Gov, Strategic Management of Human Capital and Competitive Sourcing.

The planned improvement in IT operations accomplished by this initiative will enable us to respond rapidly to changing business requirements, such as legislative changes and technological advances. It will facilitate our priorities in the coming years which include implementing a variety of E-Government initiatives within the framework of our overall information technology architecture, in a secure and stable electronic environment. Our focus will remain on simplifying the delivery of services and making it possible for our customers, businesses and government agencies to easily obtain information and service from the RRB. The outcomes of this initiative will help us to achieve these goals.

The Employer Reporting System will allow for the sharing of information between the agency and various railroads and rail labor employers to be accomplished more quickly and conveniently through a web interface. It will reduce the

effective reporting burden on railroad employers by providing them with a more efficient method of fulfilling their reporting requirements. Data submitted by the employers will be validated at the source of entry, thereby reducing the amount of erroneous data submitted to the RRB and the cost to the agency of correcting it.

In the area of Strategic Management of Human Capital, this initiative supports reshaping and realigning of our workforce and promotes knowledge transfer and succession planning.

This initiative will also involve significant acquisitions and contractual services. The RRB's acquisition strategy supports the Competitive Sourcing guidelines of the President's Management Agenda. The agency is committed to meeting the Federal goals and objectives for competitive sourcing. Procurements related to this initiative will use competitive sourcing for acquisitions and services using GSA schedule buys, GWACS or firm fixed price.

**I.B.3. Are there any alternative sources in the public or private sectors that could perform this function?**

No, there are no alternatives sources in the public or private sector that can provide the entire function for this initiative. Knowledge of RRB's business, applications, systems and their interdependencies is needed for this function, but we do plan to use COTS software and contractor assistance to create the new and expanded and internet applications.

**I.B.4. If so, explain why your agency did not select one of these alternatives.**

Not applicable, based on response to previous question.

**I.B.5. Who are the customers for this investment?**

The customers for this investment are the RRB annuitants and unemployment and sickness claimants, covered railroad and rail labor employers, Board employees, and other agencies. The services provided by this Initiative support alternative ways of conducting business with the RRB.

**I.B.6. Who are the stakeholders of this investment?**

The stakeholders in this investment include RRB's staff, rail labor and rail management and other agencies.

**I.B.7. If this is a multi-agency initiative, identify the agencies and organizations affected by this initiative.**

Not applicable

**I.B.7a. If this is a multi-agency initiative, discuss the partnering strategies you are implementing with the participating agencies and organizations.**

Not applicable

**I.B.8. How will this investment reduce costs or improve efficiencies?**

E-Government services will reduce the costs of RRB staff contacts. Information is developed more efficiently and cost-effectively since it is input directly by the information source (i.e., railroad employer, railroad employee or applicant for an annuity).

**I.B.9. List all other assets that interface with this asset. Have these assets been reengineered as part of this investment? Yes/No**

The infrastructure, data management and modernization blueprint initiatives all interface with this investment. These assets will require reengineering. Funding for the reengineering of the infrastructure, metadata and modernization blueprint initiatives are being requested separately.

**I.C. Performance Goals and Measures (All Assets)**

In order to successfully address this area of the business case, performance goals must be provided for the agency and be linked to the annual performance plan. The investment must discuss the agency's mission and strategic goals, and performance measures must be provided. These goals need to map to the gap in the agency's strategic goals and objectives that this investment is designed to fill. They are the internal and external performance benefits this investment is expected to deliver to the agency (e.g., improve efficiency by 60%, increase citizen participation by 300% a year to achieve an overall citizen participation rate of 75% by FY 2xxx, etc.). The goals must be clearly measurable investment outcomes, and if applicable, investment outputs. They do not include the completion date of the module or investment, or general goals, such as, significant, better, improved that do not have a quantitative or qualitative measure.

Agencies must use Table 1 below for reporting performance goals and measures for existing investments that were initiated prior to FY 2005. The table can be extended to include measures for years beyond FY 2004.

<b>Table 1</b>						
<b>Fiscal Year</b>	<b>Strategic Goal(s) Supported</b>	<b>Existing Baseline</b>	<b>Planned Performance Improvement Goal</b>	<b>Actual Performance Improvement Results</b>	<b>Planned Performance Metric</b>	<b>Actual Performance Metric Results</b>
2005	I-C Provide a range of choices in service delivery methods	Retirement applications are completed on a mainframe system by the district offices	Complete development of systems that allow railroad employees and spouses to file applications for a retirement annuities on-line		Implementation of online retirement applications	
2005	I-D Ensure efficient and effective business transactions with covered railroad employers	Five forms are already in the Employer Reporting System	Expand the employer reporting system		Complete requirements for 19 forms and complete development of at least 2 forms begun in 2004	
2006	I-C Provide a range of choices in service delivery methods	Survivor applications are completed on a mainframe system by the district offices	Begin development of systems that allow survivors of railroad employees to file applications for a survivor annuities on-line		Complete LSDP application.	
2006	I-D Ensure efficient and effective business transactions with covered railroad employers	Five forms are already in the Employer Reporting System	Expand the employer reporting system		Complete requirements for 22 forms and complete development of at least 11 forms	

Table 1						
Fiscal Year	Strategic Goal(s) Supported	Existing Baseline	Planned Performance Improvement Goal	Actual Performance Improvement Results	Planned Performance Metric	Actual Performance Metric Results
2007	I-C Provide a range of choices in service delivery methods	Survivor applications are completed on a mainframe system by the district offices.	Complete development of systems that allow survivors of railroad employees to file applications for a survivor annuities on-line		Implementation of recurring online survivor applications	
2007	I-D Ensure efficient and effective business transactions with covered railroad employers	Five forms are already in the Employer Reporting System	Expand the employer reporting system		Complete requirements for 18 forms and complete development of at least 24 and up to 48 forms	

**All new IT investments that are development, modernization, or enhancement (DME) for 2005 and beyond must use Table 2 and are required to use the FEA Performance Reference Model. The PRM Version 1.0, available at [www.feapmo.gov](http://www.feapmo.gov), includes detailed guidance about how to incorporate PRM Indicators into the performance goals and measures table below. Please use the Table 2 and the PRM to identify the performance information that pertains to the major IT Investment. Ensure there is a complete tie-in to the strategic goals and objectives described in section I.B.1.**

The PRM has not been released as of the date this Exhibit 300 was completed.. The FEAPMO website state that *The Performance Reference Model (PRM) is scheduled to be released later this year.*

Once the PRM has been released, we will use it to identify the performance information pertaining to this initiative.

Table 2						
Fiscal Year	Measurement Area	Measurement Category	Measurement Indicator	Baseline	Planned Improvements to the Baseline	Actual Results
2005						
2005						
2006						
2006						

**I.D. Project Management (Investment Management) [All Assets]**

The OMB Circular A-11, Part 7, Capital Programming Guide, and the OPM Project Management Guidance "Interpretive Guidance for Project Manager Positions, discuss project management structures, responsibilities, and qualifications that contribute to successful achievement of cost, schedule, and performance goals.

**I.D.1 Is there a project (investment) manager assigned to the investment?** Yes X No

**If so, what is his/her name?** Scott Palmer & Elayne Schempp



**I.D.3(A) If so, list the skill set represented.**

Project Manager  
- Business manager  
- Technical manager

Information Technology Supervisor

Business Team  
- Lead Business Analyst  
- Business Analyst  
- End Users

Development Team  
- Supervisory Web Developer  
- Senior Software/Web Developer  
- Software/Web Developer

Advisors  
- Data Administrator  
- DBA Contact  
- Security Contact  
- Infrastructure Contacts  
- Records Management Contact  
- Architecture Contact  
- Procurement Contacts  
Contracting Officer  
Contracts Specialist

**I.D.4. Is there a sponsor/owner for this investment?** Yes  X No

**I.D.4(A) If so, identify the sponsor/process owner by name and title and provide contact information.**

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### **I.E. Alternatives Analysis [All Assets]**

In order to successfully address this area of the business case, you must include three viable alternatives that were compared consistently, identify the alternative chosen, and provide benefits and reasons for your choice. Agency must identify all viable alternatives and then select and report details on the top three viable alternatives. Use OMB Circular A-94 for all investments and the Clinger Cohen Act for IT investments for the criteria to be used for Benefit/Cost Analysis. Agency must include the minimum criteria to be applied in considering whether to undertake a particular investment, including criteria related to the quantitatively expressed projected net, risk-adjusted return on investment, and specific quantitative and qualitative criteria for comparing and prioritizing alternative investments. For IT investments, agencies should use the Federal Enterprise Architecture (FEA) to identify potential alternatives for partnering or joint solutions that may be used to close the identified performance gap.

**I.E.1 Describe the alternative solutions you considered for accomplishing the agency strategic goals or for closing the performance gap that this investment was expected to address. Describe the results of the feasibility/performance/benefits analysis. Provide comparisons of the returns (financial and other) for each alternative.**

The RRB considered only two approaches as we evaluated the e-government services within our organization. The outcome of this initiative is a priority within the agency's strategic plan, therefore, we will either continue slowly developing the efforts or expedite the process enabled through increased funding. Our overall goal is to provide our customers with the capability to perform all core functions via the Internet. The completion of this initiative will aid us in furthering our goal to achieve the target Enterprise Architecture Application Development and Legacy Asset strategies. This initiative will provide support in meeting the RRB's strategic objectives.

The RRB is committed to meeting the President's Management Agenda concerning expanded use of the Internet for services to citizens. This agenda item matches our internal goal to address our customer's needs and expectations, providing them with a range of choices for conducting business, including more Internet options that are private and secure.

The following criteria was used to evaluate each of the proposed solutions.

The solutions should:

- Further our goal to achieve the target Enterprise Architecture Application Development and Legacy Asset strategies.
- Provide support in meeting the RRB's strategic objectives.
- Expand the RRB's Employer Reporting System. It was initially developed as a pilot and is currently scheduled to be enhanced in phased to meet the requirements of the Government Paperwork Elimination Act to develop procedures to permit private employers to store and file electronically with executive agencies forms containing information pertaining to employees.
- Allow our customers the option of choosing to use the Internet for all our major services.
- Improve customer service by giving the customer more independent control over his/her own business transactions.
- Allow our customers to conduct major railroad retirement functions at any time and from any location where the customer has an Internet connection.
- Provide a framework within which Federal agencies will be able to collaborate and align their efforts to provide standard customer service features, to eliminate redundancy, and to take advantage of economies of scale in the development of new applications.
- Capitalize on interoperability, collaboration, and consolidation opportunities, and expanded integration of applications afforded by the IDMS conversion effort.
- Reduce time to production and overall return on investment by
  - decreasing amount of required personnel by utilizing skilled talents, and
  - increasing efficiency of development effort by capitalizing on efficiencies of application development environment including componentization, separation of layers, net environment and the metadata repository.

**Alternative 1:** Maintain current Environment.

The RRB currently has several E-government services available for our customers, and plans to expand the range of services. The agency is currently limited in the scope, speed and capability of e-government development efforts. Limitations are due to our current infrastructure, database, application development environment and limited in-house skill sets.

**Alternative 2: E-Government Service Delivery Initiative**

This initiative is an integral part of our on-going effort to provide our customers with the capability to perform all core functions via the Internet. The completion of this initiative will aid us in furthering our goal to achieve the target Enterprise Architecture Application Development and Legacy Asset strategies. This initiative will provide support in meeting the RRB’s strategic objectives. The degree of success of this initiative is dependent on the modernization of the agency’s infrastructure, databases, legacy assets and re-design efforts.

This project funds the RRB initiative to expand electronic services to the public via the RRB Internet website. As the Railroad Retirement Act and Railroad Unemployment Insurance Act systems are redesigned as part of the “Modernization Blueprint” initiative, these Internet services will be implemented, adding online functionality along with appropriate privacy/security safeguards.

In addition, this initiative funds continued expansion of a system being developed to meet the requirements of the Government Paperwork Elimination Act to develop procedures to permit private employers to store and file electronically with executive agencies forms containing information pertaining to employees. The RRB’s Employer Reporting System will enable the RRB to efficiently and effectively process compensation and service reports submitted on various media in a variety of methods from employers. It will expand services to employers by providing online completion or transmission of all employer paper forms, providing an acknowledgement of receipt, filing status information, complete and timely information on processing results, testing capabilities and additional customer support. The goal of the effort is to reduce the reporting burden on businesses by taking advantage of commercial electronic transaction protocols.

Additional work will also be done on the employer reporting system whereby an employer covered under the RRA and RUIA can conduct all business with the RRB electronically, including filing required reports over a secure web site. Key features of this system are integration and consolidation of related functions; immediate feedback and a correction process for reported data that is not acceptable; and real time retrieval of information.

This initiative continues the implementation of the RRB’s Government Paperwork Elimination Act (GPEA) strategy.

**I.E.1(A) Discuss the market research that was conducted to identify innovative solutions for this investment (e.g., used an RFI to obtain four different solutions to evaluate, held open meetings with contractors to discuss investment scope, etc.). Also describe what data was used to make estimates such as, past or current contract prices for similar work, contractor provided estimates from RFIs or meetings, general market publications, etc.**

<b>Alternative</b>	<b>Description</b>
Alternative 1	Performed the agency’s Enterprise Architecture. Performed the Gap Analysis which identified our current state and future state. Identified trends, patterns and limitations. Evaluated our agency Strategic Plan, our Enterprise Architecture Strategic Initiatives and based on our business requirements, the agency derived this initiative.
Alternative 2	Performed the agency’s Enterprise Architecture. Performed the Gap Analysis which identified our current state and future state. Identified trends, patterns and limitations. Evaluated our agency Strategic Plan, our Enterprise Architecture Strategic Initiatives and based on our business requirements, the agency derived this initiative.

**I.E.2 Summarize the results of your life-cycle cost analysis performed for each investment and the underlying assumptions.**

This life-cycle cost analysis covers a compact life cycle of three years. The three year analysis covers FY 2005 through FY 2007. OMB Circular A-94, Guidelines and Discount Rates for Benefit-Cost Analysis of Federal Programs was used. Accordingly, costs provided are present value dollars. Consequently, this allows the comparison of alternatives based on same year dollars, avoiding inconsistencies created by inflation or deflation of the dollars. This is done by discounting future year dollars by a discount factor, which is released by OMB. The discounts rates released in Appendix C of the A-94 circular, revised January 2003 were used.

The first alternative, Maintain status quo, is limiting because collaboration efforts among applications are difficult and time consuming due to the incompatible database types, which include a hierarchical database that does not adhere to our target architecture environment that promotes interoperability and collaborative efforts. Another risk is the lack of skilled staff in middleware and the lack of GUI interface tools compatible with our mainframe database. This approach will require approximately triple the time period to achieve the same outcome as alternative two due to limitations cited above.

The second alternative, E-Government Service Delivery Initiative, will provide the most efficient and fastest solution to our on-going effort to provide our customers with the capability to perform all core functions via the Internet. It will enhance customer services in a timely manner, provide a framework within which the RRB will have the ability to collaborate and align their efforts with other Federal agencies to provide standard customer service features. This initiative will also speed our efforts to reduce the reporting burden on railroad employers allowing them to store and file forms electronically with the RRB.

<b>Cost Elements</b>	<b>Alternative 1</b>	<b>Alternative 2</b>
Planning & System Development	\$.06	\$ 2.2
System Implementation and Acquisition	\$.03	\$0.0
Operation and Maintenance	\$.09	\$0.0
Total	\$.18	\$2.2

Note: Costs are shown in millions.

**I.E.3 Which alternative was chosen and why?**

The second alternative, the E-Government Service Delivery initiative, was chosen. This initiative will provide support in meeting the RRB's strategic objective of providing our customers with the capability to perform all core functions via the Internet. The completion of this initiative will aid us in furthering our goal to achieve the target Enterprise Architecture Application Development and Legacy Asset strategies. This initiative will provide the fastest, most efficient solution.

This solution will allow for the expedient expansion of the RRB's Employer Reporting System (ERS), critical in our efforts to meet the requirements of the Government Paperwork Elimination Act to develop procedures to permit private employers to store and file electronically with executive agencies forms containing information pertaining to employees. The ERS has been well received and its expansion is awaited with anticipation by railroad employers.

**I.E.3(A) Are there any quantitative benefits that will be achieved through this investment (e.g., systems savings, cost avoidance, stakeholder benefits, etc)? Define the Return on Investment (ROI).**

- The adoption of this initiative will expedite the RRB’s strategic goal to enhance customer service and the achievement of our target architecture.
- It will improve customer service by giving the customer more independent control over his/her own business transactions.
- It will allow our customers to conduct major railroad retirement functions at any time and from any location where the customer has an Internet connection.
- It provides a framework within which Federal agencies will be able to collaborate and align their efforts to provide standard customer service features, to eliminate redundancy, and to take advantage of economies of scale in the development of new applications.
- It capitalizes on interoperability, collaboration, and consolidation opportunities, and expanded integration of applications afforded by the IDMS conversion effort.
- It reduces time to production and overall return on investment by utilizing skilled talents.
- It provides a service to railroad employers allowing them to store and file electronically with the RRB forms containing information pertaining to employees.

**I.E.3(B) For the alternative selected, provide a financial summary, including Net Present Value by Year and Payback Period Calculations:**

Present Value by Year and Payback Period Calculations:

YEAR =	FY05	FY06	FY07	Total Life-Cycle
<b>Savings/ Cost Avoidances</b>	\$1.40	\$1.50	\$1.60	\$4.5
<b>Investment Cost (Risk- Adjusted)</b>	\$0.95	\$0.66	\$0.59	\$2.2
<b>Net Present Value (NPV)</b>	\$0.45	\$0.84	\$1.01	\$2.3
<b>Return on Investment (ROI) (for lifecycle not by year)</b>				2.0
<b>Payback Period</b>				2 years

Note: Costs are shown in millions.

**I.E.4.What is the date of your cost benefit analysis?**

September, 2003

**I. F. Risk Inventory and Assessment (All Assets)**

In order to successfully address this issue on the business case and capital asset plan, you must have performed a risk assessment at the initial concept, included mandatory risk elements defined below and demonstrate active management of the risk throughout the life-cycle of the investment.

For all investments, both IT and non-IT, you must discuss each of the following risks and present your plans to eliminate, mitigate, or manage risk, with milestones and completion dates. If there is no risk to the investment achieving its goals from a risk category, indicate so. If there are other risks identified, include them. Risk assessments should include risk information from all stakeholders and should be performed at the initial concept stage and then monitored and controlled throughout the life-cycle of the investment. Risk assessments for all investments must include: 1) schedule; 2) initial costs; 3) life-cycle costs; 4) technical obsolescence; 5) feasibility; 6) reliability of systems; 7) dependencies and interoperability

between this investment and others; 8) surety (asset protection) considerations; 9) risk of creating a monopoly for future procurements; 10) capability of agency to manage the investment; and 11) overall risk of investment failure.

In addition, for IT investments, risk must be discussed in the following categories 12) organizational and change management; 13) business; 14) data/info; 15) technology; 16) strategic; 17) security; 18) privacy; and 19) project resources. For security risks, identify under the Description column the level of risk as high, medium, or basic. What aspect of security determines the level of risk, i.e., the need for confidentiality of information, availability of information or the system, reliability of the information or system? Under the Current Status column, list the milestones remaining to mitigate the risk.

Date Identified	Area of Risk	Description	Probability of Occurrence	Strategy for Mitigation	Current Status
August 2003	Schedule	Ability to obtain required funding and resources will affect schedule	High	-Endorsement by Executive Committee - Prepare and tightly manage to schedule	In process, FY 05 budget documents being prepared
August 2003	Initial costs	Accuracy of initial costs	Low	-Thorough analysis of cost estimates -Coordination with procurement -Use of industry benchmarks	Study of cost and resource requirements completed reviewed and approved
August 2003	Life-cycle costs	Funding is on a yearly basis, May not receive sufficient funds to complete	Medium	-Work with agency executives and OMB to maintain project funding levels -Carefully scope project -Closely monitor project and budget	Ongoing, Project management and oversight in place
August 2003	Technical obsolescence	Ensure currency of technology solution	Low	-Maintain and update the RRB Enterprise Architecture	Ongoing, RRB EA and Capital Plan approved and processes in place
August 2003	Feasibility	Make certain of feasibility from technical and management perspective	Low	-Conduct industry baseline studies -Maintain a robust CPIC process and updated EA	Ongoing, CPIC and EA in place and operational, Studies will be made as needed
August 2003	Reliability of systems	Failure and system interruption is unacceptable for the processes supported	Medium	-Provide adequate system recovery, backup and alternate processing capability	Ongoing, Processes in place, Review of adequacy on annual basis
August 2003	Dependencies and interoperability between this investment and others	Maintain interoperability of investments and systems	Low	-Maintain a robust CPIC process and updated EA	Ongoing, RRB EA and Capital Plan approved and processes in place
August 2003	Surety (asset protection) considerations	RRB systems may be compromised	Low	-Evaluate and adopt security controls in plans	Planned, This will be part of the project planning and development phases

Date Identified	Area of Risk	Description	Probability of Occurrence	Strategy for Mitigation	Current Status
August 2003	Risk of creating a monopoly for future procurements	Risk if more than slight modification of COTS	Low	-Use of open architecture components - Work within the agency and government community	Ongoing, Enterprise Architecture in use, Active participation with agencies
August 2003	Capability of agency to manage the investment	Commitment from Executive Committee required to effectively managing the investment	Low	-Actively engaged executive steering committee that will act as a governing body -Viable capital planning process is also being used	Ongoing, Executive Committee meets every week, Senior agency staff will be actively involved with the RRB Modernization
August 2003	Overall risk of investment failure	Must continually manage from an Enterprise Architecture perspective	Low	-Maintain Executive Committee involvement -Obtain and maintain stakeholder and customer buy-in	Ongoing, Executive Committee meets every week, Senior agency staff will be actively involved with the RRB Modernization
August 2003	Organizational and change management	Changes in mission and organization can threaten investment	Low	-Maintain Executive Committee involvement	Ongoing, Executive Committee meets every week, Senior agency staff will be actively involved with the RRB Modernization
August 2003	Business	Ability to identify and streamline business processes	Medium	-Established, approved and vetted concepts that drive the BPR and requirements gathering activities	Planned, This activity will primarily occur during the applications redesign phases
August 2003	Data/info	Must have agreement on content and structure of the data	Medium	-Utilize RRB Enterprise Architecture with active program participation	Ongoing, Communications/outreach in process, Enterprise Architecture in use
August 2003	Technology	Technology must be kept current and meet the requirements of agency	Low	-Utilize RRB Enterprise Architecture with active program participation	Ongoing, Communications/outreach in process, Enterprise Architecture in use

Date Identified	Area of Risk	Description	Probability of Occurrence	Strategy for Mitigation	Current Status
August 2003	Strategic	Timing of implementation of capabilities could affect ability to maintain momentum and support	Low	-A staged implementation of the modules will be completed at the earliest possible date -Use of flexible development to facilitate minimum impact due to changes based on delays external to the scope of control	Ongoing, Project planned from EA perspective, CPIC control process will ensure proper execution of project phases
August 2003	Security	Dependent upon well defined system level security requirements and security specifications	Low	-System security plan completed, updated and utilized that links to site security plan	Ongoing, Site Security plan completed, Initial security plans scheduled
August 2003	Privacy	Privacy aspects of claimants must be assured	Low	-Employ up-to-date techniques for protection of sensitive information and protect against disclosure	Scheduled, This will be part of the overall project planning
August 2003	Project resources	Project success requires individuals with the right skill mix and involvement of all affected organizations	Medium	-Maintain Executive Committee involvement	Ongoing, Executive Committee meets every week, Senior agency staff will be actively involved with the RRB Modernization

**I.F.1. What is the date of your risk management plan?**

We expect to complete the plan by August 2004.

**I.G. Acquisition Strategy**

In order to adequately address this area of the business case and capital asset plan you must employ a strong acquisition strategy that mitigates risk to the Federal government, accommodate Section 508 as needed, and use performance based contracts and (SOWs). If you are not using performance based fixed price contracts, your acquisition strategy should clearly define the risks that prompted the use of other than performance based contracts and SOWS. Finally, your implementation of the Acquisition Strategy must be clearly defined.

**I.G.1 Will you use a single contract or several contracts to accomplish this investment?**

Multiple contracts will be used to accomplish this investment.

**I.G.1(A) What is the type of contract/task order if a single contract is used?**

Not applicable, based on previous answer.

**I.G.1(B) If multiple contract/task orders will be used, discuss the type, how they relate to each other to reach the investment outcomes, and how much each contributes to the achievement of the investment cost, schedule and performance goals. Also discuss the contract/task order solicitation or contract provisions that allow the contractor to provide innovative and transformational solutions.**

Multiple fixed price contracts will most likely be used for this investment, primarily because of the different skill sets required for the individual tasks. However, if we find it is feasible to leverage existing contracts, or a single vendor is able to provide the needed range of expertise, a single contract will be used. The targeted tasks can be performed independently of each other, however the goal of each task is the same, to provide electronic service options to our customers and adhere to the President's Management Agenda to expand electronic services. The Employer Reporting Initiative is 46%, the Retirement Application is 32%, and the Survivor Application is 22% of the investment.

An acquisition strategy has been designed to manage the procurement risk associated with developing and implementing the E-Government Service Delivery Initiative. This strategy is based upon the following criteria:

- Use existing, in-place contracts when appropriate.
- Pay the lowest price for products/services commensurate with quality, service, delivery, and reliability.
- Closely manage solicitations and the resulting contracts.
- Use outside sources and partnerships, when possible to our mission.

**I.G.2 For other than firm-fixed price, performance-based contracts, define the risk not sufficiently mitigated in the risk mitigation plan, for that contract/task order, that requires the Government to assume the risk of contract achievement of cost, schedule and performance goals. Explain the amount of risk the government will assume.**

Acquisition is done by competitive sourcing using schedule buys, GWACS or firm fixed price.

**I.G.3 Will you use financial incentives to motivate contractor performance (e.g. incentive fee, award fee)?**

Typically incentive contracts are not employed. Negotiated firm fixed price contracts and competitive procurements from schedules and multi-agency contracts are used.

**I.G.4 Discuss the competition process used for each contract/task order, including the use of RFP's, schedules or other multiple agency contracts, etc?**

Acquisition is done by competitive sourcing using schedule buys, GWACS or firm fixed price.

**I.G.5 Will you use commercially available or COTS products for this investment?**

Yes, COTS and commercially available hardware and software will be used.

**I.G.5(A) To what extent will these items be modified to meet the unique requirements of this investment?**

COTS, hardware and software packages are not modified. Only configuration is performed to optimize the performance in the RRB environment.

**I.G.5(B) What prevented the use of COTS without modification?**

COTS are not modified.

**I.G.6 What is the date of your acquisition plan?**

Initial acquisition planning has begun. We will solidify the acquisition plan once the budget is approved.

**I.G.7 How will you ensure Section 508 compliance?**

The solicitation specifies the 508 certificates that the vendor must meet. Vendors provide the required certification for any hardware, software or programming requested as part of the procurement proposal. This is verified by the COTR through the testing and acceptance process in the RRB.

**I.G.8 Acquisition Costs:**

**I.G.8(A) For budget year, what percentage of the total investment is for hardware acquisition?**

0%

**I.G.8(B) For budget year, what percentage of the total investment is for software acquisition?**

0%

**I.G.8(C) For budget year, what percentage of the total investment is for services acquisition?**

100%

**I.H. Project (Investment) and Funding Plan**

In order to successfully address this section of the business case, you must demonstrate use of an Earned Value Management System (EVMS) that meets ANSIIEIA Standard 748, for both government and contractor costs, for those parts of the total investment that require development efforts (e.g., prototypes and testing in the planning phase and development efforts in the acquisition phase) and show how close the investment is to meeting the approved cost, schedule and performance goals. Information on EVMS is available at <http://www.acq.osd.mil/pm>. For those investments in the operations/steady state phase, you must perform an operational analysis as defined in the Capital Programming Guide to demonstrate how close the investment is to achieving the expected cost, schedule and performance goals for this phase. Program status information in this section must include both the contractor's part of the investments overall costs and milestone requirements as well as the government's costs and milestone requirements to successfully complete the investment phase, segment or module being reported.

**I.H.1 Description of performance-based management system (PBMS)**

**Explain the methodology used by the agency to analyze and use the earned value performance data to manage performance. Describe the process you will use or used to verify that the contractor's project management system follows the ANSIIEIA Standard 748-A. If the investment is operational (steady state), define the operational analysis system that will be used. If this is a mixed life-cycle investment with both operational and development/modernization/enhancement (DME) system improvement aspects, EVMS must be used on the system improvement aspects of the investment and operational analysis on the operations aspects. Using information consistent with the work breakdown structure (WBS), provide the information requested in all parts of this section.**

The RRB has initiated steps to require an earned value analysis as a crucial element for project management. We have incorporated it as a requirement within our Capital Planning and Investment Control process. MS Project will be used to track and manage actual cost, schedule and performance against the OMB-approved baseline.

**I.H.2 Original baseline (OMB-approved at investment outset)**

What are the cost and schedule goals for this phase or segment/module of the investment (e.g., what are the major investment milestones or events; when will each occur; and what is the estimated cost to accomplish each one)? Also identify the funding agency for each milestone or event if this is a multi-agency investment. For operational or steady state projects, complete one line on the chart for each year of this phase. If the project is mixed life-cycle there will be two parts to the chart; one for the O&M portion and one for the developmental portion using EVMS. If this is a multi-agency investment or one of the President's E-Gov initiatives, use the detailed investment plan with milestones on the critical path, to identify agency funding for each module or milestone. (This baseline must be included in all subsequent reports, even when there are OMB-approved baseline changes shown in I.H.3).

<b>Cost and Schedule Goals: Original Baseline for a Phase/Segment/Module of Project (Investment)</b>					
Description of Milestone	Schedule			Planned Cost	Funding Agency
	Start Date	End Date	Duration (in days)		
Develop system to allow for on-line filing of retirement applications and on-line entry of direct deposit and change of address information.	10-1-04	9-30-05	251	\$495,000	RRB
Expand on-line employer reporting	10-1-04	9-30-05	251	\$460,000	RRB
Begin develop of system to allow for on-line filing of survivor applications.	10-1-05	9-30-06	250	\$360,000	RRB
Expand on-line employer reporting	10-1-05	9-30-06	250	\$300,000	RRB
Complete development of system to allow for on-line filing of survivor applications.	10-1-06	9-30-07	250	\$360,000	RRB
Expand on-line employer reporting	10-1-06	9-30-07	250	\$230,000	RRB
Completion date: 9-30-07				Total cost estimate at completion: \$2,205,000	

**I.H.3 Proposed baseline/current baseline (applicable only if OMB-approved the changes)**

Identify in this section a proposed change to the original or current baseline or an OMB-approved baseline change. What are the new cost and schedule goals for the phase or segment/module (e.g., what are the major investment milestones or events; when will each occur; and what is the estimated cost to accomplish each one)? Also identify the funding agency for each milestone or event if this is a multi-agency investment. If this is a new investment in the FY 2005 budget year, this section will be blank for your initial submission.

Not applicable

<b>Cost and Schedule Goals: Proposed or Current (OMB-Approved) Baseline for a Phase/Segment/Module of Project (Investment)</b>					
Description of Milestone	Schedule			Planned Cost	Funding Agency
	Start Date	End Date	Duration (in days)		
1.					
2.					
3.					
Completion date:				Total cost estimate at completion:	

**I.H.4 Actual performance and variance from OMB-approved baseline (original or current)**

**I.H.4(A)** This section is always filled in to reflect current status of the investment. It compares the OMB approved baseline and actual results for this phase, segment, or module of the investment. Show for each major investment milestones or events you planned (scheduled) to accomplish and the cost and what work was actually done and the cost. If the project is in the operational or steady state phase complete one line on the chart for each year. For these projects complete paragraphs C, D, F and G as appropriate. If this is a new investment in the FY 2005 budget year, this will be blank for your initial submission. OMB may ask for latest information during the budget review process.

Not applicable

Comparison of OMB-Approved Baseline and Actual Outcome for Phase/Segment/Module of a Project (Investment)									
Description of Milestone	OMB-Approved Baseline					Actual Outcome			
	Schedule			Planned Cost	Funding Agency	Schedule		Percent Complete	Actual Cost
	Start Date	End Date	Duration (in days)			Start Date	End Date		
1.									
2.									
3.									
Completion date: OMB-approved baseline:						Estimated completion date:			
Total cost: OMB-approved baseline:						Estimate at completion:			

**I.H.4(B) Provide the following investment summary information from your EVMS data (as of date):**

**I.H.4(B.1)**Show the budgeted (planned) cost of work scheduled (BCWS): \$

**I.H.4(B.2)**Show budgeted (planned) cost of work actually performed (BCWP): \$

**I.H.4(B.3)**Show the actual cost of work performed (ACWP): \$

**I.H.4(B.4)**Provide a performance curve graph plotting BCWS, BCWP and ACWP on a monthly basis from inception of this phase or segment/module through the latest report. In addition, plot the ACWP curve to the estimated cost at completion (EAC) value, and provide the following EVMS variance analysis.

Project (Investment) Summary (Cumulative)	Value
Cost Variance = (BCWP-ACWP) =	
Cost Variance % = (CV/BCWP) x 100%	
Cost Performance Index (CPI) = (BCWP/ACWP)	
Schedule Variance = (BCWP-BCWS) =	
Schedule Variance % = (SV/BCWS) x 100%	
Schedule Performance Index (SPI) = (BCWP/BCWS)	
Two independent Estimates at Completion (EAC) = ACWPcum + (Performance Factor (PF) X (BAC minus BCWPcum)), where PF1 = 1/CPI, and PF2 = 1/(CPI X SPI). =	
Variance at Completion (VAC) = (BAC minus EAC) for both EACs above =	
Variance at Completion % = (VAC/BAC) x 100% for both EACs above =	
Estimated Cost to Complete (ETC)=	
Expected Completion Date =	

**Definitions for Earned Value Management System:**

- ACWP - Actual Cost of Work Performed - What you paid.
- BAC - Budget At Completion - The baseline (planned) budget for the investment.
- BCWP - Budgeted Cost for Work Performed - The earned value.
- BOWS - Budgeted Cost for Work Scheduled - The planned costs.
- CPI - Cost Performance Index - The ratio of the budgeted to actual cost of work performed.
- CV - Cost Variance - The difference between planned and actual cost of work performed.

EAC - Estimate At Completion - The latest estimated cost at completion.  
ETC - Estimate to Completion - Funds needed to complete the investment.  
PF - Performance Factor - The cost to earn a dollar of value, or ACWPIBCWP, or I/CPI.  
SPI - Schedule Performance Index - The percent of the investment that has been completed.  
SV - Schedule Variance - The variance between the actual and planned schedules.  
VAC - Variance at Completion - The variance between the baseline and actual budget at completion.

**I.H.4(C) If cost and/or schedule variance are a negative 10 percent or more at the time of this report or EAC is projected to be 10 percent or more, explain the reason(s) for the variance(s).**

**I.H.4(D) Provide performance variance. Explain based on work accomplished to date, whether or not you still expect to achieve your performance goals. If not, explain the reasons for the variance. For steady state projects, in addition to a discussion on whether or not the system is meeting the program objectives, discuss whether the needs of the owners and users are still being met.**

**I.H.4(E) For investments using EVMS, discuss the contractor, government, and at least the two EAC index formulas in I.H.4.B, current estimates at completion. Explain the differences and the IPT's selected EAC for budgeting purposes. This paragraph is not applicable to operations/steady state investments.**

**I.H.4(F) Discuss the corrective actions that will be taken to correct the variances, the risk associated with the actions, and how close the planned actions will bring the investment to the original baseline. Define proposed baseline changes, if necessary.**

**I.H.4(G) If the investment cost, schedule or performance variances are 10% or greater, has the Agency Head concurred in the need to continue the program at the new baseline?**

Yes \_\_\_\_\_ No \_\_\_\_\_

## Exhibit 300: Part II: Additional Business Case Criteria for Information Technology

### II. A. Enterprise Architecture

In order to successfully address this area of the business case and capital asset plan you must ensure that the investment is included in the agency's EA and CPIC process, and is mapped to and supports the Federal Enterprise Architecture. You must also ensure that the business case demonstrates the relationship between the investment and the business, data, application, and technology layers of the EA.

#### II.A.I Business

##### II.A.I (A) Is this investment identified in your agency's enterprise architecture? If not, why? Yes.

Yes, the RRB's Enterprise Architecture Strategic Plan proposed several initiatives, including this one, to assist in achieving its Target Architecture. The RRB's Target Architecture is an information environment that ultimately can support 1) the interoperability of all electronic operations, 2) effective internal and external communications, and 3) an adaptive and flexible infrastructure that is proactive in addressing business needs and challenges, all with appropriate levels of security. Through a gap analysis, structural initiatives to address technology deficiencies in RRB's existing information technology environment and functional initiatives to address deficiencies of current business processes were identified. To successfully close the identified gaps, this investment is an essential foundation with which the RRB will build upon to achieve its Target Architecture.

##### II.A.I (A1) Will this investment be consistent with your agency's "to be" modernization blueprint?

Yes, the RRB's E-government Service Delivery initiative is primarily to address our customer's needs and expectations, providing them with a range of choices for conducting business, including more Internet options that are private and secure. This is in adherence with our target architecture as well align IT to meet our current and future business need.

##### II.A.I (B) Was this investment approved through the EA Review committee at your agency?

Yes, the infrastructure modernization is one of several initiatives identified in the agency's Enterprise Architecture Strategic Plan. Our Architecture Review Board has supported the plan since its inception.

##### II.A.I (C) What are the major process simplification/reengineering/design projects that are required as part of this IT investment?

This initiative facilitates the expansion of new applications, in an e-government environment. The requirements and design will highlight collaborative and reuse opportunities. The use of newer technologies in conjunction with the infrastructure modernization, RRB modernization blueprint and the metadata repository initiative should significantly simplify data access, coding of modules and creation of the web interfaces, if adopted.

##### II.A.I (D) What are the major organization restructuring, training, and change management projects that are required?

Due to the size and scope of this investment, organizational restructuring, training and change management will be required. To achieve success, individuals, systems and processes must be highly adaptive in a complex and constantly changing environment. Capable software and hardware systems are important, but even more so is a major cultural transformation within the agency. To successfully navigate obstacles and producing lasting change is one of the most critical success factors in any improvement initiative.

This investment will require RRB resources from a matrix organization structure, which will increase the complexity of project planning, execution and control. Furthermore today's applications are far more complex,

therefore multiple and varied skill levels that include the mastery of traditional languages, web-based applications as well as proficiency in platform interfaces are required.

Training on metadata guidelines, standards and procedures will be required to promote consistent documentation for the data.

With increase usage of the Internet, management of web content will become increasingly complex and time-consuming and therefore will require specific roles or organizations to effectively manage our Internet and Intranet sites.

To support this investment we will require tools and training in the following areas:

- Project Management
- Visual Studio.NET
- Unified Modeling Language (UML)

**II.A.I (E) Please list all the Lines of Business and Sub-Functions from the FEA Business Reference Model that this IT investment supports. The primary BRM mapping for this initiative should have been identified with the last six digits of the unique project (investment) identifier in section 53.8. For a list of the BRM Lines of Business and Sub-Functions, as well as guidance on mapping to the BRM, please see [www.omb.gov](http://www.omb.gov). (Note: The Services for Citizens area and the Mode of Delivery area should be thought of collectively. If you identified your primary line of business/sub-function in section 53.8 as a Service for Citizen or a Mode of Delivery, at a minimum you should identify the corresponding Mode of Delivery/Service for Citizen that applies in this section).**

Line of Business	Sub-function
Services for Citizens	
Income Security	General Retirement and Disability Unemployment Compensation Survivor Compensation
Health	Health Care Services
Mode of Delivery	
Knowledge Creation and Management	Research and Development General Purpose Data and Statistics Advising and Consulting Knowledge Dissemination
Federal Financial Assistance	Direct Transfer to Individuals
Support Delivery of Services	
Controls and Oversight	Program Monitoring Program Evaluation
Public Affairs	Customer Service Official Information Dissemination Public Relations
Planning and Resource Allocation	Budget Formulation Capital Planning Enterprise Architecture Strategic Planning Budget Execution Management Improvement
Internal Risk Mgmt and Mitigation	Contingency Planning Continuity of Operations
Management of Government Resources	
Human Resource Management	Resource Training and Development
Administrative Management	Security Management Help Desk Services
Supply Chain Management	Inventory Control Goods Acquisition Services Acquisition

Line of Business	Sub-function
Information and Technology Management	IT Infrastructure Maintenance Lifecycle/Change Management Record Retention IT Security Information Management

**II.A.2 Data**

**II.A.2(A) What types of data will be used in this investment? Examples of data types are health data, geospatial data, natural resource data, etc.**

Insurance eligibility, entitlement and payment.

**II.A.2(B) Does the data needed for this investment already exist at the Federal, State, or Local level? If so, what are your plans to gain access to that data?**

All required data already exists within the RRB. No additional data from outside the RRB is needed.

**II.A.2(C) Are there legal reasons why this data cannot be transferred? If so, what are they and did you address them in the barriers and risk sections above?**

Data will be provided to those who have a right to know under the Privacy and Freedom of Information Acts, after proper identification of the person requesting the information. Details of the method of identification are not final.

**II.A.2(D) If this initiative processes spatial data, identify planned investments for spatial data and demonstrate how the agency ensures compliance with the Federal Geographic Data Committee standards required by OMB Circular A-16.**

Not applicable

**II.A.2(E) If this activity involves the acquisition, handling or storage of information that will be disseminated to the public or used to support information that will be disseminated to the public, explain how it will comply with your agency's Information Quality guidelines (section 515 requirements)?**

Not applicable

**II.A.2(F) Managing business information means maintaining its authenticity, reliability, integrity, and usability and providing for its appropriate disposition. Address how the system will manage the business information (records) that it will contain throughout the information life cycle.**

Business information is carefully managed in the legacy systems. Life cycle stage maintenance will be re-evaluated for each E-Gov initiative using legacy rules as a guide.

### **II.A.3 Applications, Components, and Technology**

**II.A.3(A) Discuss this major investment in relationship to the Service Component Reference Model Section of the FEA. Include a discussion of the components included in this major IT investment (e.g., knowledge management, content management, customer relationship management, etc). For detailed guidance regarding components, please refer to <http://www.feapmo.gov> and the SRM Release Document.**

The E-Government Service Delivery Initiative has a direct relationship to the Service to Citizens component of the Services Component Reference Model. This initiative's primary goal is to address our customer's needs and expectations, providing them with a range of choices for conducting business, including more Internet options that are private and secure. Applicable specific domains within the FEA Service Component Reference Models (SRM) and relationships follow:

The E-government Service Delivery Initiative has a direct relationship with several domains within the FEA Service Component Reference Models (SRM). The following is a list of the relationships:

Business Management Services Domain \ Management of Process \ Program & Project Management Component  
Digital Asset Services Domain \ Knowledge Management \ Knowledge Engineering Component  
Business Analytical Services Domain \ Visualization \ Imagery Component  
Business Analytical Services Domain \ Visualization \ Multimedia Component  
Business Analytical Services Domain \ Business Intelligence \ Decision Support and Planning Component  
Back Office Services Domain \ Development and Integration \ Legacy Integration Component  
Back Office Services Domain \ Development and Integration \ Software Development Component  
Back Office Services Domain \ Human Capital / Workforce Management \ Skills Management Component

**II.A.3(B) Are all of the hardware, applications, components, and web technology requirements for this investment included in the Agency EA Technical Reference Model? If not, please explain.**

Yes, all the hardware, applications and component requirements for the E-Government Service Delivery Initiative are included in the RRB's Enterprise Portfolio of Products and Standards.

**II.A.3(C) Discuss this major IT investment in relationship to the Technical Reference Model section of the FEA. Identify each Service Area, Service Category, Service Standard, and Service Specification that collectively describes the technology supporting the major IT investment. For detailed guidance regarding the FEA TRM, please refer to <http://www.feapmo.gov>.**

The E-government Service Delivery Initiative establishes relationships with three of the Service Areas of the FEA Technical Reference Model (TRM). In the Service Access and Delivery Area / Access Channels and Delivery Channels Service Category, the Web Browser standards that are identified are Internet Explorer and Netscape. For the Service Platforms and Infrastructure Service Area \ Software Engineering Service Category, the Modeling standard of Unified Modeling Language (UML) will be utilized by this initiative. The final relationship is the Component Framework Work Service Area \ Presentation /Interface Service Category. The Static Display standard associated with this initiative is HTML and the Dynamic/Server Side Display Standard that will be used for the applications of this initiative is ASP.NET.

**II.A.3(D) Will the application leverage existing components and/or applications across the Government (i.e., FirstGov, Pay.Gov, etc). If so, please describe.**

This initiative will provide an interface with other government benefit applications available on GovBenefits.gov.

**II.A.3(E) Financial Management Systems and Projects, as indicated in Part One, must be mapped to the agency's financial management system inventory provided annually to OMB. Please identify the system name(s) and system acronym(s) as reported in the most recent systems inventory update required by Circular A-11 section 52.4.**

Not applicable

## **II. B. Security and Privacy**

In order to successfully address this area of the business case, each question below must be answered at the investment (system/application) level, not at a program or agency level. Simply referring to security plans or other documents is not an acceptable response. For IT investments under development, security planning must proceed in parallel with the development of the system to ensure that IT security requirements and costs for the lifecycle of the investment are identified and validated. All IT investments must have up-to-date security plans and be fully certified and accredited prior to becoming operational. Anything short of a full certification and accreditation indicates that identified IT security weaknesses remain and need to be remedied and is therefore not adequate to ensure funding for the investment. Additionally, to ensure that requests for increased IT security funding are appropriately addressed and prioritized, the agency must identify: 1) current costs; 2) current IT security performance gaps; and 3) how the funding request will close the performance gaps. This information must be provided to OMB through the agencies' plan of action and milestone developed for the system and tied to the IT business case through the unique project (investment) identifier.

In addition, agencies must demonstrate that they have fully considered privacy in the context of this investment. Agencies must comply with Section 208 of the E-government Act and forthcoming OMB implementing guidance and, in appropriate circumstances, conduct a privacy impact assessment that evaluates the privacy risks, alternatives and protective measures implemented at each stage of the information life cycle. Agencies should utilize the guidance provided in OMB Memoranda in conducting the PIA and submit a copy, using the unique project (investment) identifier, to OMB at [PIAkomb.eop.gov](mailto:PIAkomb.eop.gov).

**II.B.1. How is security provided and funded for this investment (e.g., by program office or by the CIO through the general support system/network)?**

This project, if approved, would be funded by the CIO through the general support system.

**II.B.1(A) What is the total dollar amount allocated to IT security for this investment in FY 2005? Please indicate whether an increase in IT security funding is requested to remediate IT security weaknesses, specifying the amount and a general description of the weakness.**

Funding for IT security has not been determined at this phase of the investment. A portion of the total dollar amount of \$65,000 for security training and \$50,000 for risk management plans will be used for this investment. An IT security weakness does not currently exist for this investment.

**II.B.2 Please describe how the investment (system/application) meets the following security requirements of the Federal Information Security Management Act, OMB policy, and NIST guidelines:**

**II.B.2(A) Does the investment (system/application) have an up-to-date security plan that meets the requirements of OMB policy and NIST guidelines? What is the date of the plan?**

This investment will impact the security plans for several major application systems. The security plans for those systems were last updated in July and August 2002. Security plans for these systems will be updated according to OMB policy requirements and NIST guidelines during the systems development life cycle for this investment.

**II.B.2(B) Has the investment been certified and accredited (C&A)?**

**Note: Certification and accreditation refers to a full C&A and does not mean interim authority to operate. Additionally, specify the C&A methodology used (e.g., NIST guidelines) and the date of the last review.**

Not applicable at this time. However, procedures for certification and accreditation will be addressed during the appropriate phase of the development life cycle for each system targeted for completion and implementation during each fiscal year covered for this investment.

**II.B.2(C) Have the management, operational, and technical security controls been tested for effectiveness? When were most recent tests performed?**

Not applicable at this time. However, the effectiveness of security controls will be tested and documented during the appropriate phase of the development life cycle for each system targeted for completion and implementation during each fiscal year covered for this investment.

**II.B.2(D) Have all system users been appropriately trained in the past year, including rules of behavior and consequences for violating the rules?**

Not applicable at this time. Training will be provided for the use of the systems implemented during the years, rules of behavior and consequences of violation of those rules will be covered in the training.

**II.B.2(E) How has incident handling capability been incorporated into the system or investment, including intrusion detection monitoring and audit log reviews? Are incidents reported to DHS' FedCIRC?**

Not applicable at this time. The agency is developing the computer security incidence response plan that covers systems supported by this investment. This plan will be in place prior to the implementation of this investment. Reporting of incidents to DHS' FedCIRC is incorporated in the procedures of the current draft of this plan.

**II.B.2(F) Is the system operated by contractors either on-site or at a contractor facility? If yes, does any such contract include specific security requirements required by law and policy? How are contractor security procedures monitored, verified, and validated by the agency?**

Yes, our web-hosting facility is contracted. Yes, we have included specific security requirements into the contract such as firewall services, intrusion detection services, backup and restoration services along with regular reporting based on IDS and firewall logs. We expect these contractual requirements to continue in effect throughout the planning, development and implementation phase of all E-Gov initiatives directed to the web-hosting facility.

**II.B.3 How does the agency ensure the effective use of security controls and authentication tools to protect privacy for those systems that promote or permit public access?**

In November 2002, the RRB implemented a PIN/Password system to authenticate identity of customers of RRB Internet services. This is used in conjunction with Secure Sockets Layer (SSL) technology to ensure complete privacy for RRB customers. This method will remain in place for current and future E-Government applications until the E-Authentication gateway is implemented.

**II.B.4 How does the agency ensure that the handling of personal information is consistent with relevant government-wide and agency policies?**

Annual security awareness training is provided, and periodic audits, reviews and evaluations of IT systems are conducted.

**II.B.5 If this is a new or significantly altered investment involving information in identifiable form collected from or about members of the public, has a Privacy Impact Assessment (PIA) for this investment been provided to OMB at [PIAgomb.eop.gov](http://PIAgomb.eop.gov) with the investment's unique project (investment) identifier?**

No, a PIA has not been provided, though authentication and security issues were thoroughly addressed in the process of the RRB's developing a pin/password regime. We will prepare a PIA for this initiative when OMB guidance is issued.

**II. C. Government Paperwork Elimination Act (GPEA)**

**II.C.1 If this investment supports electronic transactions or record-keeping that is covered by GPEA, briefly describe the transaction or record-keeping functions and how this investment relates to your agency's GPEA plan.**

This investment is necessary for the RRB to implement its e-government initiatives not already implemented. They are addressed in the RRB's GPEA plan.

In that plan we outlined one initiative in the area of government to business and two in the area of government to citizen:

Government-to-Business. In this area the RRB has a limited number of businesses with which it is engaged on a recurring basis (less than 800). These are covered employers, all of which are known to the RRB. Our goal is to offer an electronic option to covered employers that will encompass not only their furnishing needed data to the RRB electronically but also the RRB being able to communicate with them electronically. This will make it possible for the RRB and a covered employer to conduct all of their business electronically. The plan envisions using a VPN for Internet transactions under a PIN/Password regime. The goal is two-way electronic communication in a secure environment. This ambitious goal will not be fully realized until 2008. We have named this initiative the Employer Reporting Initiative.

Government-to-Citizen. In this area, the task is more complicated due to several factors. The universe of potential customers is much greater. It includes current railroad employees eligible for sickness and unemployment benefits under the Railroad Unemployment Insurance Act and both current and former railroad employees, their spouses and widows and children, eligible for retirement and survivor benefits as applicable under the Railroad Retirement Act. Further, the members of this universe are generally not engaged with the RRB on a recurring basis.

Our goal is to offer railroad employees the following electronic options via the Internet:

- (1) File an application and claims for unemployment benefits;
- (2) File claims for sickness benefits;
- (3) Request and receive on-line a statement of service and compensation;
- (4) Request and receive on-line an annuity estimate; and,
- (5) File an application for a retirement annuity.

Our goal for spouses of railroad employees is to offer the options of requesting and receiving on-line an annuity estimate and also for filing an application for a spouse annuity.

For survivors of railroad employees our goal is to provide the option of filing on-line applications for widow(er), mother/father, child, parent survivor annuities and lump-sum death benefits. Our plan would also provide for the option of submitting certain supporting statements or questionnaires.

We have grouped these goals into two initiatives: RUIAnet for electronic filing by railroad employees of application and claims for benefits under the Railroad Unemployment Insurance Act and RAILPOINT for electronic filing of applications under the Railroad Retirement Act.

**II.C.2 What is the date of electronic conversion from your GPEA plan?**

There are various target dates for various transactions for which the RRB intends to offer an electronic option for railroad employers and members of the public to conduct their business with the RRB. These dates are shown in the table below (II.C.3).

**II.C.3 Identify any OMB Paperwork Reduction Act (PRA) control numbers from information collections that are tied to this investment.**

We have grouped the information collection numbers in numeric order. It should be noted that the RRB does not intend to offer an electronic option for all the individual collection instruments (forms) within each numbered information collection. Some we have determined are not cost effective because of low volume; others we are not offering an electronic option for reasons that were explained in our July GPEA submission.

PRA #	Transaction ID and Transaction Name	Completion Date
3220-0002	#02, AA-1, Application for Employee Annuity	09-30-05
3220-0005	#5, AA-12, G-88a.1, G-88A.2	09-30-08
3220-0038	#28 G-3 EMP, Medical Reports	09-30-08
3220-0025	#36, ID-5R (SUP), Report of Employees Paid RUIA Benefits for Every Day in a Month Reported as Month of Creditable Service	09-30-08
3220-0030	#16, AA-17-18-19-20, Applications for Survivor Annuities	09-30-07
3220-0031	#19, AA-21, G-131, Application for Survivor Death Benefits	09-30-06
3220-0042	#23, AA-3, Application for Spouse Annuity	09-30-05
3220-0057	#41, Job Vacancies Report; Placement Service	09-30-08
3220-0070	#43, UI-41, UI-41A, Employer Service and Compensation Reports	09-30-06
3220-0132	#61, BA-11, Gross Earnings Report	09-30-06
3220-0136	#62, G-208, Public Service Pension Questionnaire	09-30-05
3220-0138	#64, AA-4, Self-employment Questionnaire	09-30-05
3220-0140	#65, G-346, Employee's Certification	09-30-05
3220-0154	#70, G-209, Employee Non-covered Service Pension Questionnaire	09-30-05
3220-0156	#71, Employer's Deemed Service Month Questionnaire	09-30-06
3220-0173	#77, BA-9; Railroad Separation Allowance of Severance Pay Report	09-30-07
3220-0192	#89, G-201, Customer Assessment Survey	09-30-07
3220-0196	#94, ID-5S(SUP); Investigation of Claim for Possible Days of Employment	09-30-05