

Review of Document Imaging
Report No. 99-15, September 23, 1999

This report represents the results of a review by the Office of Inspector General (OIG) related to the planning phase of the Railroad Retirement Board's (RRB) document imaging initiative.

Background

The Railroad Retirement Board's mission is to administer retirement/survivor and unemployment/sickness insurance benefit programs for railroad workers and their families. For the fiscal year ended September 30, 1998, the RRB paid approximately \$8.2 billion in benefits under the Railroad Retirement Act (RRA) and Railroad Unemployment Insurance Act (RUIA) to nearly 772,000 beneficiaries.

The RRB is an information-intensive agency that stores and handles many paper documents in claim folders. In its Strategic Plan for 1997-2002, one RRB objective is to "ensure that the technology infrastructure supports achievement of the agency's Strategic Plan." One way the agency will accomplish this goal is "take advantage of existing and emerging technologies." Document Imaging and Workflow software are technologies for scanning paper documents and creating permanent, easily accessible electronic records instead of paper claim folders.

The RRB currently uses document imaging to process sickness insurance applications and to retain copies of tax statements. During fiscal year 1998, the RRB's Automated Data Processing (ADP) Steering Committee approved capital expenditures of approximately \$400,000 for computer hardware and software to replace the existing obsolete system with a modern system. The replacement RUIA system became operational on June 14, 1999. The RRB is now planning to expand the imaging system to other RUIA areas.

In addition, the RRB created work teams to examine alternatives for expanding document imaging and workflow to RRA activities. The work teams prepared a Cost Benefit Analysis (CBA) which examined the alternatives, projected cost savings and agency benefits for each alternative, and made recommendations. On March 10, 1999, the ADP Steering Committee approved the CBA and fiscal year 1999 expenditures of \$311,000 for the RRA document imaging expansion. The total developmental cost of the RRA project is estimated at \$2.5 million including \$1.1 million in RRB staff costs. The current goal is to eliminate the creation of new claim folders by January 1, 2000. However, the RRA system will not be fully implemented until fiscal year 2002.

The RRA project will establish a paperless processing system with imaged electronic documents and workflow software. Workflow software will enable the agency to automatically route work, to set call-up dates, and to establish security over the handling of items. It will also provide management with reports of pending work items and other useful

information such as historical work volumes and processing times.

Objective, Scope and Methodology

Our review concentrated on the preparation and approval of the CBA for the RRA imaging initiative and the planning stage of the RUIA replacement initiative. We were unable to do any post implementation audit work because the RUIA system did not become operational until near the end of the review and the RRA system is still in the planning stage.

The audit objectives for the review were to determine:

- If the RRB is in compliance with all applicable laws, regulations, and guidelines relating to the RRB's document imaging initiatives;
- If the RRB chose the most cost effective alternative for the RRA initiative;and,
- If the proposed expansion of document imaging will meet the needs of the users of RRB data.

To accomplish the audit objective, the OIG:

- Reviewed applicable laws, regulations and procedures;
- Interviewed some members of the ADP Steering Committee;
- Reviewed minutes of the ADP Steering Committee meetings;
- Interviewed the RRB's Records Officer;
- Interviewed potential internal users of the system;
- Interviewed personnel at the Social Security Administration (SSA) who were involved in SSA's imaging project;
- Interviewed a representative from the National Archives and Records Administration (NARA);
- Reviewed and commented on the CBA including all drafts; and
- Reviewed a sample of scanned images.

The OIG conducted the audit in accordance with generally accepted government auditing standards. Auditors performed the fieldwork at the RRB headquarters office in Chicago, Illinois from October 1998 through September 1999.

Results of Review

Congress and NARA are reviewing laws and regulations relating to electronic documents, which will impact the RRB document imaging initiative. Issues they are addressing include security of electronic files and document retention. At this time, the OIG cannot provide assurance that the RRB will comply with future laws and regulations.

The RRB is not in compliance with its internal guidelines because the CBA does not contain the detailed and rigorous analysis required by the RRB's Administrative Circular IRM-12. Because of the missing details on costs and savings in the CBA, the OIG was unable to fully assess all alternatives listed in the CBA to determine if the RRB chose the most cost-effective alternative for RRA document imaging.

RRB management has involved all external and internal users in the planning process for RRA document imaging. Continued user involvement will ensure that all users' needs are met.

Detailed findings and recommendations are discussed below.

Deficient Cost Benefit Analysis

Guidance for Cost Benefit Analysis for Federal Programs is contained in the Office of Management and Budget Circular A-94. The Circular recommends an evaluation of alternatives including 1) doing nothing, 2) direct purchase, 3) upgrading existing systems, and 4) leasing. The Circular's guidance is recommended for use in internal planning but is not mandatory.

The RRA document imaging CBA evaluated four alternatives. Alternative one was to do nothing and continue to be a paper based agency. Alternative two was to keep electronic information electronic (i.e. no printouts) and expand the RRB's existing referral system. Alternative three was to establish a paperless processing system with imaged electronic documents and workflow. Alternative four was to establish a paperless processing system with electronic documents and expand the RRB's existing referral system.

In addition to the OMB guidance, the RRB's Administrative Circular IRM-12, Benefit-Cost Analyses, states that "proposed investments in a 'major system or project' require detailed and rigorous analysis." The approved CBA gives no details on the calculation of some of the cost and savings. Also, the CBA does not include all cost items.

The lack of details is illustrated by the following examples.

-- There is no explanation on what makes up the \$1.2 million projected savings in reimbursable offsite facility (Federal Records Center) costs.

-- It is impossible to determine if RRB management has allocated an adequate amount for

training because the report does not state what training will be received for the \$35,000.

The CBA does not specify how the \$100,000 contractor contingency will be used; therefore, it is impossible to tell if the amount is realistic. Although specifics are not available at this time, there should be an analysis of the potential uses of contractors.

Because of the missing details, it is impossible to verify the CBA estimates and projections, or to fully assess all alternatives listed in the CBA. The project has already been approved; therefore, it serves no purpose to revise the CBA at this point. However, it is important that future agency CBAs contain the type of detailed information that is missing from the current CBA.

The CBA also does not include the cost of larger monitors that are required for document imaging. While the RRB's standard workstation configuration includes 17-inch monitors, the work teams determined that core-imaging users need 21-inch monitors to comfortably view images. The current cost differential between 17-inch and 21-inch monitors is approximately \$450. Therefore, the total start-up cost of document imaging is understated by at least \$135,000 (300 estimated core users times \$450). We believe the differential cost should be included because the RRB is purchasing the larger monitors strictly for the imaging project.

The ADP Steering Committee approved the CBA without the detailed information to avoid delaying the project. However, to compensate for the missing details, the RRA Document Imaging work team promised the ADP Steering Committee a detailed implementation plan by September 1999. The OIG believes that the implementation plan should, at a minimum, include milestone dates for each program area and contingency plans at various budget levels.

Recommendations:

The OIG recommends that the ADP Steering Committee:

- Review and approve a detailed implementation plan before approving additional funding for the RRA imaging project (Recommendation No. 1), and,
- Charge the differential cost of the 21-inch monitors to the document-imaging project (Recommendation No. 2).

Management's Response

The ADP Steering Committee concurs with both recommendations, with a modification to recommendation No. 2. For capital planning and budgetary purposes, the Steering Committee will continue to charge the monitors to Capital Element 12, Standard Workstation Infrastructure, in the agency's Information Technology Capital Plan. However, the differential cost of the monitors will be charged to the Imaging Project during the post

implementation review when estimated and actual costs are compared.

RRB management disagrees with our finding that the CBA is lacking in details and not in compliance with Administrative Circular IRM-12. They state that the details are available in working papers and that IRM-12 is very limited in its direction.

OIG Comments

During the review, RRB management did not mention the existence of working papers when questioned on the missing details in the CBA. The OIG has since had the opportunity to review these working papers. They are a collection of memos and notes in a folder with no guarantee of long-term retention. In addition, the working papers are not sufficiently organized to be fully understandable.

Thus, we still believe that the cost and savings details should have been included in the CBA document, which is the official document. As an example, the \$1.2 million savings for reimbursable offsite facility costs represents about twelve percent of the total projected benefits for the selected alternative. In regards to training, the working papers show that the \$35,000 covers two hours of on-site training for each of the users, but does not cover the cost of materials or an instructor. The \$35,000 also does not include the cost of Eastman's user training for six RRB staff in September 1998 and May 1999 and cost of Eastman's administrator training for two staff in May 1999. These costs should have been split between the RUIA and RRA imaging project.

In regards to IRM-12, the Circular clearly states that "proposed investments in a 'major system or project' require detailed and rigorous analysis." Document imaging is a major project, yet the CBA document does not provide the detailed analysis to enable the OIG to verify the CBA estimates/projections or fully assess all alternatives.

Users of RRB Data

The expansion of document imaging to other RUIA and RRA activities will affect many users of RRB data. These users include RRB examiners, the OIG, NARA and SSA.

RRB examiners currently use document imaging to process sickness applications. After the expansion, examiners will also use imaging for processing retirement, survivor, and disability applications. In addition, the imaging system will be used for any necessary actions after the initial applications.

RRB examiners must have adequate training and procedures to ensure the integrity of the electronic file, and subsequently, the accuracy of the RRB's benefit payments. Examiners were recently trained on using the recently implemented RUIA imaging system. The RRB is now finalizing procedures for this system. The draft procedures include instructions for creating and using electronic files and for storing needed paper documents.

The OIG uses the documents to investigate and prosecute fraud. The OIG is concerned about losing forensic evidence on paper documents and using imaged documents as evidence in a trial. The OIG is concerned because some scanners will not clearly read certain colored ink or pencil. Our tests of the RRB's scanners showed that they can be adjusted to read different colors, but pencil marks, especially red pencil marks, are difficult to read. The RRB is still finalizing procedures on how to handle unreadable items. The OIG is also concerned that data could be missing if both sides of the documents are not scanned. This concern is partially alleviated by fact that the scanning equipment can be programmed on how to handle the various RRB forms. Once this programming is done the scanner will automatically scan both sides of a two-sided form. In addition, procedures explain how to scan each RRB form.

The NARA stores the RRB's documents to use for genealogical or other research. NARA must approve any change to the RRB paper and electronic document retention schedules. To obtain NARA's approval, the RRB submits a SF-115 form, Request for Records Disposition Authority. The request must be made within one year of implementation of the new system (36 CFR §1234.32). Therefore, the RRB must schedule the RUIA system by June 2000. The RRB has already prepared a draft SF-115, and we have no reason to believe they will miss the June 2000 deadline.

In addition, the RRB exchanges information with the SSA. SSA has recently completed a pilot study on document imaging and is implementing imaging at all of its Service Centers using hardware and software similar to the RRB. SSA is hoping for full implementation by the end of calendar year 1999. One goal of the RRB's document imaging initiative is full compatibility with SSA.

Document Imaging is an important initiative for the RRB because of its effects on the users mentioned above. Therefore, the OIG will be conducting additional reviews at various stages of its implementation. The reviews will be designed to ensure that users needs are satisfied and to ensure compliance with applicable laws and regulations.