



OFFICE OF INSPECTOR GENERAL

UNITED STATES POSTAL SERVICE

Capital Projects Return on Investment

Audit Report

Report Number
MI-AR-16-002

December 22, 2015





OFFICE OF INSPECTOR GENERAL

UNITED STATES POSTAL SERVICE

Highlights

Our objective was to evaluate the Postal Service's ROI for capital projects of at least \$5 million for FY 2012 through 2014.

Background

The U.S. Postal Service uses return on investment (ROI) to approve capital project investments and measure their success. The Postal Service initially calculates ROI by comparing the projected cost of a project to its projected savings, which typically come in the form of labor savings or reduced operating costs. Capital projects are investments in real property such as land, buildings, mail automation equipment, or vehicles, and the higher the ROI, the better the value of the projected capital investment for the Postal Service. Capital projects greater than \$5 million are approved by the Postal Service's Investment Review Committee (IRC) or referred to the postmaster general for final approval.

The Postal Service has a policy for developing a cash flow document to project the ROI that also provides guidance on how to develop the funding request narrative for IRC approval.

Our objective was to evaluate the Postal Service's ROI for capital projects of at least \$5 million for fiscal years (FY) 2012 through 2014.

We selected and reviewed nine capital investment projects with investments totaling over \$1 billion. The projects' investments ranged from about \$6.6 million to almost \$683.3 million, with projected ROIs ranging from 21.3 percent to 147.9 percent. For FYs 2012 through 2014, the IRC approved 79 capital projects totaling over \$2.6 billion.

What The OIG Found

We found the methodology used to calculate projected ROIs for the nine capital projects was reasonable; however, reporting improvements are needed after project approval to ensure the observed ROI reflects a project's performance. Specifically, program managers did not always update and report the cash flow when operating changes impacted an investment's ROI. In addition, management does not routinely do interim cost studies to evaluate the ongoing performance of a capital project. Therefore, they do not always have the information necessary to re-evaluate capital investment deployments.

Management did not take these steps because current policy does not require program managers to update or revise cash flows when significant operating changes occur or require all investment projects to be subject to an interim cost study. As a result, program managers do not always report the observed ROI, which is a revised estimate of the ROI based on the most recent observations of cash outflows and savings to the IRC.

We found the actual ROI for six of the nine projects, on average, exceeded the projected ROI by about 87 percent, while the remaining three projects did not meet the anticipated ROI, on average, by almost 41.3 percent. The amount of money expected to be saved but not actually realized was about \$73,766,488.



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In addition, we found there is no comprehensive knowledge management process in place to ensure the Postal Service captures and leverages all capital project information. This would be useful when program managers retire, leave, or move to another assignment.

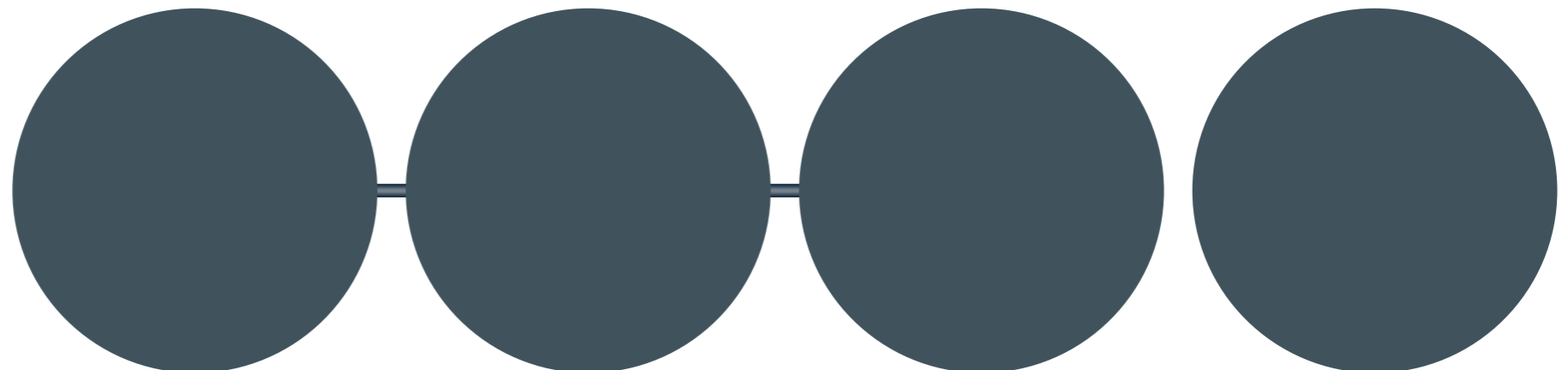
As we noted in a previous audit (*Postal Service Knowledge Management Process*, Report Number DP-AR-14-002, dated March 7, 2014), the Postal Service does not have a comprehensive knowledge management policy or process to ensure systematic and collaborative knowledge sharing. In response, management disagreed with that report's recommendation to develop a comprehensive Postal Service knowledge management strategy.

In this audit, five of the program managers for the nine projects we reviewed were retired or in another position and their knowledge of the capital project had not been preserved, making informed strategic investment decisions difficult.

What The OIG Recommended

We recommended management require cash flows to be updated when operating changes will impact the capital investment's ROI, require interim cost studies for all capital investments approved by the IRC, and establish a comprehensive knowledge management strategy for all capital projects.

Click on the circles below to reveal Recommendations:



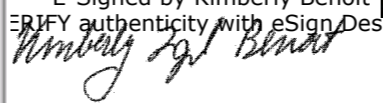
Transmittal Letter



OFFICE OF INSPECTOR GENERAL
UNITED STATES POSTAL SERVICE

December 22, 2015

MEMORANDUM FOR: MAURA A. MCNERNEY,
ACTING VICE PRESIDENT, FINANCE & PLANNING

E-Signed by Kimberly Benoit
VERIFY authenticity with eSign Desktop


FROM: Kimberly F. Benoti
Deputy Assistant Inspector General
for Technology, Investment and Cost

SUBJECT: Audit Report – Capital Projects Return on Investment
(Report Number MI-AR-16-002)

This report presents the results of our audit of the U.S. Postal Service's Capital Projects Return on Investment (Project Number 15TG032MI000).

We appreciate the cooperation and courtesies provided by your staff. If you have any questions or need additional information, please contact Michael L. Thompson, director, Major Investments, or me at 703-248-2100.

Attachment

cc: Corporate Audit and Response Management

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Findings

The Postal Service uses ROI to approve capital project investments and, subsequently, to measure a project's success.

Introduction

This report presents the results of our self-initiated audit of the U.S. Postal Service's return on investment (ROI) for major capital projects (Project Number 15TG032MI000). Our objective was to review and evaluate the Postal Service's ROI for capital projects with investments of at least \$5 million for fiscal years (FY) 2012 through 2014. See [Appendix A](#) for additional information about this audit.

The Postal Service uses ROI to approve capital project investments and, subsequently, to measure a project's success. The Postal Service initially calculates ROI by comparing the projected cost of a project to its projected savings, which typically comes in the form of labor savings or reduced operating costs. Capital projects are investments in real property such as land, buildings, mail automation equipment, or vehicles. The higher the ROI, the better the value of the projected capital investment for the Postal Service. Capital projects that require an investment of at least \$5 million are approved by the Postal Service's Investment Review Committee (IRC).¹

Postal Service policy² provides guidance on how to develop the funding request narrative for IRC-approved capital projects of \$5 million or more. These projects can include the purchase of vehicles, support equipment, material handling, mail processing automation and mechanization, and research and development proposals. The Postal Service requires that major capital projects support the organization's strategic objectives, make the best use of available resources, and establish management accountability for investment decisions. Handbook F-66 is the policy that identifies the information that must be part of a capital project request, including the cash flow documentation used in projecting the ROI. According to the Capital Program performance manager, Handbook F-66 is currently being updated, with completion expected in FY 2016.

Summary

We selected and reviewed nine completed capital investment projects with a total of over \$1 billion in investments. These investments ranged from \$6.6 million to \$683.3 million, with a projected ROI range of 21.3 percent to 147.9 percent. During FYs 2012 through 2014, the IRC approved 79 capital projects totaling over \$2.6 billion.

We found the Handbook F-66 methodology used to calculate the projected ROIs for the nine capital projects was reasonable; however, updating and reporting improvements are needed after project approval to ensure the ROI is reflective of the project's actual performance. Specifically, program managers did not always update and report the cash flow when operating changes impacted an investment's ROI. Although Handbook F-66 requires the program manager to track cash flow savings, it does not require updating cash flows and reporting when operating changes impact an investment's ROI. In addition, interim cost studies are not required, so are not routinely done to evaluate the ongoing performance of capital projects. These are typically narratives prepared to compare projected operating costs and benefits to actual results.

Finally, there is no comprehensive knowledge management (KM) process in place to ensure that the Postal Service captures and leverages all capital project information. We noted in a previous audit (*Postal Service Knowledge Management Process*, Report Number DP-AR-14-002, dated March 7, 2014) that the Postal Service does not have a comprehensive knowledge management policy or process to ensure systematic and collaborative knowledge sharing. This would be useful when program managers retire, leave, or move to another assignment.

¹ IRC members who approve capital projects are the chief operating officer and executive vice president (EVP), chief information officer and EVP, chief financial officer and EVP, chief marketing and sales officer and EVP, general counsel and EVP, and chief Human Resources officer and EVP.

² Handbook F-66, *General Investment Policies and Procedures*, November 2005, updated with *Postal Bulletin* articles through October 11, 2007.

Program managers did not always update and report cash flows when operating changes impacted an investment's ROI.

Cash Flow Updates

Program managers did not always update and report cash flows when operating changes impacted an investment's ROI. In our sample, we found the cash flows for five of the nine projects should have been updated because of operating changes. During the audit, the Business Case Development manager updated three of the cash flows. Handbook F-66 outlines the policy to develop the cash flow document used to project the ROI and the funding request narrative. The handbook requires the program manager to track cash flow savings; however, it does not require updating of cash flows. As a result, program managers did not always update cash flows to calculate the observed³ ROI. Additionally, the *Detailed Capital Investment Report*⁴ is supposed to capture the observed ROI; however, three of the nine projects we reviewed did not have observed ROI data to compare to the projected ROI.

As an example, we reviewed the ROI for the Self-Service Expansion Project Phase 1 (SEP1) cash flow for the Self-Service Kiosk (SSK). This cash flow projected capital spending of about [REDACTED] million, a projected ROI of [REDACTED] percent, and projected total workhour reductions of almost [REDACTED] million over the 6-year life of the project. The actual labor hours were not reduced as projected in the cash flow. Without the labor hours being reduced, the ROI could not be achieved. When cash flows are not updated with observed operating changes, the impact of and need for managerial action or lessons learned is not fully understood. See [Appendix B](#) for a more detailed explanation of our recalculated ROIs for the nine cash flows we reviewed.

Table 1. U.S. Postal Service Office of Inspector General (OIG) Analysis of ROI

#	Project Name	Postal Service-Projected ROI	OIG-Calculated ROI	Difference +/-	Monetary Impact
1	Flats Recognition Improvement Program - Phase 2	26.3%	38.9% ⁵	+12.6%	
2	Automated Parcel and Bundle Sorter (APBS) - Service Life Extension Program	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
3	Combined Input Output Sub-System Label Printer Replacement	147.9%	515.3% ⁶	+367.4%	
4	SEP1	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
5	Postal Automated Redirection System - Phase 2	24.3%	26.1% ⁷	+1.8%	
6	Postal Automated Redirection System - Phase 4	40.8%	50.3% ⁸	+9.5%	

³ The observed ROI is a revised estimate of the ROI based on most recent observations of ongoing cash outflows and achieved savings.

⁴ The DCIR was formerly an appendix to the *Investment Highlights Report* - it is issued quarterly along with a project index. For each project, it provides a detailed summary of all currently active capital projects and capital projects completed during that period or in the two previous quarters. It includes an introduction; a list of projects included; and for each project, a description with relevant historical facts or events. Each projects' description includes schedule, cost, benefit, and risk data as of the date of the report. The benefit section includes the target ROI as well as an observed ROI, if it was calculated.

⁵ The Postal Service provided a post-deployment cash flow analysis ROI of [REDACTED] percent. The difference between this and the OIG's calculation is [REDACTED] percent.

⁶ The Postal Service provided a post-deployment cash flow analysis ROI of [REDACTED] percent. The difference between this and the OIG's calculation is [REDACTED] percent.

⁷ The Postal Service provided a post-deployment cash flow analysis ROI of [REDACTED] percent. The difference between this and the OIG's calculation is [REDACTED] percent.

⁸ The Postal Service provided a post-deployment cash flow analysis ROI of [REDACTED] percent. The difference between this and the OIG's calculation is [REDACTED] percent.

The purpose of an interim cost study is to assess the success of the capital project at its midpoint and compare it to initial projections.

#	Project Name	Postal Service-Projected ROI	OIG-Calculated ROI	Difference +/-	Monetary Impact
7	Asset Management Integration - Phase 1 (AM1)	21.3%	14.0% ⁹	-7.3%	\$973,488
8	Distribution Quality Improvement Program (DQIP) - Phase 3	37.9%	86.56% ¹⁰	+48.6%	
9	Automated Package Processing System - Recognition Modernization Program	████	██	████	████
Total					\$73,766,488

Source: Postal Service data and OIG analysis.

Interim Cost Study

Interim cost studies are not required, so are not routinely done to evaluate the ongoing performance of capital projects. The purpose of an interim cost study is to assess the success of the capital project at its midpoint and compare it to initial projections. This allows management to determine whether the objectives of the project are being met.

According to Handbook F-66, cost studies determine the costs and benefits for major equipment programs, national programs involving major operational changes, national budget planning, and national program evaluation reports. Cost studies also assist Postal Service Headquarters in assessing field performance. Finance’s Capital Investments & Business Analysis group is responsible for performing analyses and studies for IRC-approved programs. Conducting an interim cost study enables the program manager to implement timely corrective actions for projects that are over budget, behind schedule, or not meeting performance goals.

Knowledge Management

We found that five of the program managers for the nine projects we reviewed were retired or in another position and their knowledge of the capital project had not been captured and preserved. As we noted in our earlier audit,¹² KM is an all-inclusive process that enhances intellectual capital to achieve organizational objectives by leveraging information and expertise. KM efforts typically focus on organizational objectives such as improved performance, competitive advantage, innovation, sharing lessons learned, and integrating and continuously improving the organization. The knowledge part of KM is defined as a mix of experience, values, intelligence, insight, and inspiration that provides a framework for intelligent decision-making.

⁹ The Postal Service provided a post-deployment cash flow analysis ROI of █████ percent. The difference between this and OIG’s calculation is █████ percent.

¹⁰ The Postal Service provided a post-deployment cash flow analysis ROI of █████ percent. The difference between this and OIG’s calculation is █████ percent.

¹¹ The Postal Service provided a post-deployment cash flow analysis ROI of █████ percent. The difference between this and the OIG’s calculation is █████ percent.

¹² *Postal Service Knowledge Management Process* (Report Number DP-AR-14-002, dated March 7, 2014). Management was unresponsive and did not agree with our recommendation to develop a comprehensive Postal Service KM strategy and we view the recommendation as unresolved.

A comprehensive KM policy for capital projects could ensure the informal and experiential knowledge of its employees is captured for present and future employees.

Organizations also use KM to enhance revenue and financial growth, remain competitive in the business world, and improve employee training, innovation, responsiveness, and organizational culture. As noted in the OIG's earlier report, the Postal Service is at risk of losing extensive knowledge as a result of downsizing and the retirement eligibility of about 31 percent of its workforce.

A comprehensive KM policy for capital projects could ensure the informal and experiential knowledge of its employees is captured for present and future employees. For example, all modifications, tracking data, cash flows, reports, presentations, and studies should be preserved. Preserving knowledge makes it easier to make informed strategic investment decisions in the future.

Recommendations

We recommend management require cash flows to be updated when operating changes will impact the capital investment's ROI, require interim cost studies for all capital investments approved by the IRC, and establish a comprehensive knowledge management strategy for all capital projects.

We recommend the acting vice president, Finance and Planning:

1. Update Postal Service Handbook F-66, *General Investment Policies and Procedures*, to require:
 - Program managers to update cash flows and report on any significant operating changes that will impact the capital investment's return on investment; and
 - Perform interim cost studies on all capital investments approved by the Investment Review Committee.
2. Establish a comprehensive knowledge management strategy for all capital projects.

Management's Comments

Management partially agreed with recommendation 1 and agreed with recommendation 2. See [Appendix D](#) for management's comments in their entirety.

In response to recommendation 1, management stated they would update Handbook F-66 to follow the investment tollgate process and provide updated cash flows by September 30, 2016. Management also stated they would perform interim cost studies when studies are deemed significant or if senior management requests them.

In response to recommendation 2, management stated they already have an electronic repository that contains archived capital investment project information that they will include in new manager orientation sessions. The target implementation date is February 28, 2016.

Management provided additional information in their response. Regarding the findings, management stated that with the investment tollgate process, they will only do interim cost studies when there are significant issues or if senior management requests one. Management also stated that if a project is meeting or exceeding its projected performance metrics there is no compelling reason to perform an interim cost study and calculation of the observed ROI is not required.

Management disagreed with the OIG's method of calculating the ROI that included reviewing workhour reductions. Management stated they did not budget program workhour reductions because of some difficult upgrades, major initiatives, and declining volume. Management stated their decision to forego workhour reductions did not impact savings captured.

Management also stated that the Capital Investments and Business Analysis group maintains an electronic repository of investment-related information, warehouses tollgate information, and publishes the status of every investment in the Investment Highlights Report. Management stated that these activities ensure that past investment information is sufficiently archived.

Lastly, management disagreed with the monetary impact stating that we did not prove that the Postal Service is not capturing savings through other means and suggested that using actual returns from other programs could provide an overall positive return.

Evaluation of Management's Comments

The OIG considers management's comments responsive to the recommendations in the report and corrective actions should resolve the issues identified in the report.

Management disagreed with our recommendation to perform interim cost studies stating that the investment tollgate process eliminates the need for updated investment information. We agree that tollgates are a source of investment information; however, tollgates are only done for investments of over \$25 million and at specified timeframes. Interim cost studies, unlike tollgates, would enable program managers to implement timely corrective actions for projects that are over budget, behind schedule, or not meeting performance goals before a required tollgate.

Regarding management's comments about workhour savings achieved through other means, sufficient evidence was not provided to support this claim. Workhours are about 70 percent of Postal Service operating costs, therefore, documenting the achievement of workhour savings is key to understanding a project's relative success.

In their response, management stated that knowledge is preserved in an electronic repository along with tollgates and regular reporting. However, program managers did not indicate they had knowledge of or refer us to the repository in response to inquiries as part of this audit. As such, we did not evaluate the electronic repository. We will review the usefulness of the repository to share and archive investment information in future audit work.

All recommendations require OIG concurrence before closure. Consequently, the OIG requests written confirmation when corrective actions are completed. Recommendation 1 should not be closed in the Postal Service's follow-up tracking system until the OIG provides written confirmation that the recommendation can be closed. We consider recommendation 2 closed with the issuance of this report.

Appendices

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Appendix A: Additional Information

Background

The Postal Service requests capital investments using a narrative report and cash flow statement that is outlined in Handbook F-66. The total cost of a project is outlined, including the planning, start-up, and direct costs of a project, as well as all related costs and expenditures. The cash flow includes both capital and expense amounts necessary to complete the project, bring it to operational status, and fund it through its projected length. In our sample the average length of the capital projects was about 8 years.

Because a financial evaluation is only as good as its assumptions and input data, it must be as accurate and realistic as possible. To achieve the most reliable results, Handbook F-66 directs program managers to obtain project input from all available resources, including internal specialists, external consultants, and other subject matter experts.

Objective, Scope, and Methodology

Our objective was to review and evaluate the Postal Service's ROI for capital projects of at least \$5 million for FYs 2012 through 2014. To accomplish our objective we:

- Selected and reviewed the following nine completed capital investment projects:
 - Flats Recognition Improvement Program - Phase 2
 - APBS - Service Life Extension Program
 - Combined Input Output Sub-System Label Printer Replacement
 - Postal Automated Redirection System - Phase 2
 - SEP1
 - Postal Automated Redirection System - Phase 4
 - DQIP - Phase 3
 - AM1
 - Automated Package Processing System - Recognition Modernization Program
- Reviewed procedures and criteria in Handbook F-66 related to capital investments.
- Reviewed, evaluated, and recalculated the ROI for each capital project to verify that financial data and calculations were in compliance with the criteria.
- Identified and reviewed detailed capital investment reports, investment highlights, financial performance reports, accounting activity reports, capital cash outlay reports, field budgets, and other data used in the cost and benefit analysis that support ROI calculations for each project to assure the use of accurate and complete data.
- Interviewed program managers and other relevant Postal Service personnel.

We conducted this performance audit from June through December 2015, in accordance with generally accepted government auditing standards and included such tests of internal controls as we considered necessary under the circumstances. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objective. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objective. We discussed our observations and conclusions with management on November 17, 2015, and included their comments where appropriate.

We assessed the reliability of computer-generated data by interviewing Postal Service personnel and obtaining field budget data from the field budget manager, comparing results from the *Capital Cash Outlay Report* to those of the *Program Multi-Year Capital Cash Outlay Report*, and comparing the *Financial Performance Report* to the Key Controls section of the Accounting Data Mart. We determined that the data were sufficiently reliable for the purposes of this report.

Prior Audit Coverage

Report Title	Report Number	Final Report Date	Monetary Impact
<i>Postal Service Knowledge Management Process</i>	DP-AR-14-002	3/7/2014	None

Report Results: Our report determined that the Postal Service does not have a comprehensive knowledge management policy or process or a chief knowledge officer to ensure that knowledge sharing is systematic and collaborative. Although not well-defined, there are knowledge management elements within several Postal Service systems to capture some tacit and explicit knowledge. The report recommended the Postal Service develop a comprehensive KM strategy; and join the Federal Knowledge Management Working Group, which has experts to assist, inform, and support development and implementation of a comprehensive KM strategy. Management disagreed with the finding and recommendations.

<i>U.S. Postal Service Actions Needed to Strengthen the Investment Capital</i>	GAO-14-155	January 2014	None
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Report Results: This report determined the Postal Service did not compare four of the five planned-investment timeliness and performance metrics to actual results to assess whether to continue, amend, or terminate a project, consistent with leading practices. Additionally, the Postal Service did not have comparable ROI data, thereby limiting the ability of managers to assess the investment's impact, identify modifications to potentially improve performance, and revise the investment process. Finally, its policy does not require incorporating best practices or lessons learned after project completion, which limits opportunities to improve its process in a way that could benefit future investments. The Government Accountability Office (GAO) recommended the Postal Service modify some of its capital investment policies to more closely align with leading practices, particularly for planning, selecting, and evaluating capital investments and regularly examine the extent to which managers reassess projects. The Postal Service partially concurred or concurred with all of GAO's recommendations.

Appendix B: Summary of Recalculated Return on Investments

Our review of the nine cash flows and recalculation of the ROIs is summarized below. When cash flows are not updated with observed operating changes, the impact and the need for managerial action or lessons learned is not fully understood.

Flats Recognition Improvement Program – Phase 2

This cash flow projected capital spending of about \$111 million and a projected ROI of 26.3 percent. The actual capital spending was about \$75 million. The projected savings were expected to result in total workhour reductions of almost \$291.3 million over the 9-year life of the project; however, total workhour savings tracked for the project were \$256 million through FY 2015. In this case, the ROI increased to 38.9 percent, or a 12.6 percent increase from the projected ROI.

APBS – Service Life Extension Program

The cash flow presented in the approved decision analysis report (DAR) projected capital spending of [REDACTED] million and an ROI of [REDACTED] percent with an annual net savings of \$ [REDACTED] million. In May 2011, the Postal Service approved a request to upgrade eight additional APBS machines at no additional cost. This adjustment increased the ROI to [REDACTED] percent and net annual savings to \$ [REDACTED] million. The completed project used [REDACTED] million (64 percent) of the total capital commitment and captured [REDACTED] percent of the projected savings. Our recalculation of the ROI shows that it increased by [REDACTED] percent to [REDACTED] percent; however, our calculation yielded a net annual savings of \$ [REDACTED] million, about \$ [REDACTED] million below the original projection.

Combined Input Output Sub-System Label Printer Replacement

This cash flow projected capital spending of about \$7.3 million and a projected ROI of 147.9 percent. The actual capital spending was about \$6 million. The projected savings were expected to result in total workhour reductions of almost \$45.8 million over the 7-year life of the project; however, total workhour savings tracked for this project were \$57.7 million. In this case, the ROI increased to 515.3 percent, or a 367.4 percent increase from the projected ROI.

SEP1

The SEP1 cash flow projected capital spending of about \$ [REDACTED] million for the purchase of SSKs and a projected ROI of [REDACTED] percent. The projected savings were expected to result in total workhour reductions of almost \$ [REDACTED] million over the 6-year life of the project; however, the budgeted workhours were not reduced as projected. Instead workhour savings were tracked for each SSK. In this case, the ROI was based on the reduction of workhours. Without workhour savings, there is no ROI.

Postal Automated Redirection System – Phase 2

This cash flow projected capital spending between \$577.6 million and \$677.6 million, and the projected ROI between 24.3 and 28.9 percent. The actual capital spending was about \$655 million. The projected savings were expected to result in total workhour reductions of between \$1.9 and \$2.5 billion over the 13-year life of the project or through FY 2018. The total workhour savings tracked for the project was \$2.2 billion. In this case, the ROI was 26.1 percent, or a -2.8 percent decrease to 1.8 percent increase from the projected ROI.

Postal Automated Redirection System – Phase 4

This cash flow projected capital spending of about \$90.8 million and a projected ROI of 40.8 percent. The projected savings were expected to result in total workhour reductions of about \$268.5 million between FY 2010 and FY 2017. Even though we determined that the projected workhours were not reduced in FY 2015, workhour reductions as of FY 2015 totaled about \$199.7. In this case, the ROI increased to 50.3 percent, or a 9.5 percent increase from the projected ROI.

AM1

This cash flow projected capital spending of about \$32.3 million and a projected ROI of 42.2 percent. A modification request was approved on April 8, 2011. There was no change in the original capital investment of \$32.3 million; however, projected ROI decreased to 21.3 percent. The projected savings were expected to result in total fulfillment labor savings of almost \$85.8 million, and other cost savings such as field stamp destruction savings of \$16.9 million, Vehicle Maintenance Facility work order savings of \$21.2 million, Ready Post auto-replenishment savings of \$9.9 million, stamp planning savings of \$13.6 million, and system retirement savings of \$1.3 million over the 7-year life of the project. The Postal Service reported the ROI is now 16.4 percent compared to the adjusted projected ROI of 21.3 percent. The decrease was primarily due to the loss of the Stamp Planning Savings. In this case, the ROI decreased to 14 percent, or a 7.3 percent decrease from the projected ROI.

DQIP

This cash flow projected capital spending of about \$78.6 million, a projected ROI of 37.9 percent, and net annual savings of \$33.5 million. The projected savings is based on reducing the processing cost for letter mail volume impacted by this program by \$1.28 per thousand pieces. On July 25, 2012, the Postal Service revised the plan to increase the projected net annual savings to \$57.1 million and projected ROI to 80 percent with no change to the original capital investment. The Postal Service's post-deployment actual cash flow as of May 2014 reported capital spending of \$78.4 million, net annual savings of \$64.6 million, and an 89 percent ROI. The OIG's recalculations for this project using actual data from postal sources through FY 2015 showed a net annual savings of \$51.6 million and 86.5 percent ROI. The differences between the original DAR projections and the OIG's recalculations are an increase in the net annual savings of \$18.1 million and a 48.6 percent increase in the ROI. The results of the OIG's recalculations were more consistent with the financial data and calculations present in the post-deployment cash flow.

Automated Package Processing System – Recognition Modernization Program

This cash flow projected capital spending of about \$■ million and a projected ROI of ■ percent. The projected savings were expected to result in total workhour reductions of about \$■ million between FY 2014 and FY 2019; however, we determined the projected workhour reductions were not taken through FY 2015. Without accounting for workhour savings, there is no ROI.

Appendix C: Summary of Nine Capital Investment Projects

1. Flats Recognition Improvement Program – Phase 2

This follow-up program was an incentive-based program including software releases to improve the existing Automated Flat Sorting Machine 100 and Upgraded Flat Sorting Machine 1000 recognition capabilities to increase optical character reader (OCR) read rates and reduce error rates.

2. Automated Parcel and Bundle Sorter – Service Life Extension Program

This program provided Barcode Readers and OCRs for keying induction stations for 190 Small Parcel and Bundle Sorters. The program replaced aging electronic controls with new hardware/software and installed a reject return conveyor.

3. Combined Input Output Sub-System (CROSS) Label Printer Replacement

This project was used to replace the existing High-Speed Address Printers on the CROSS machines with new printers that are more reliable and less costly to maintain.

4. Self-Service Expansion Project Phase 1

This project included the acquisition and deployment of 264 SSKs for 132 high volume post offices including the training of retail and servicing personnel. It also included the acquisition and installation of mail collection receptacles and or devices.

5. Postal Automated Redirection System – Phase 2

This project improved the way the Postal Service processes Undeliverable as Addressed (UAA) mail. This project impacted operational savings by eliminating multiple downstream handlings and moving the processing of UAA letter mail up the automation ladder. It was designed to improve service by reducing the time required to get UAA mail to its final destination.

6. Postal Automated Redirection System – Phase 4

This project was part of a program to improve the way the Postal Service handles UAA letter mail that has to be forwarded or returned to the sender by automating a labor intensive process. The project provided for a pay-for-performance contract in which compensation was directly tied to actual demonstrated improvements by the Postal Automated Redirection System supplier. This phase of the program was designed to further improve the Postal Automated Redirection System to include increased intercept rates on automation equipment, increased finalization rates, and improved Remote Encoding Center productivity.

7. Asset Management Integration – Phase 1

This program was designed to improve the Postal Service's ability to manage the material inventories and physical assets, including vehicles, vehicle spare parts, stamps, post cards, envelopes, philatelic products, expedited packaging, supplies, ReadyPost, and officially licensed retail products.

8. Distribution Quality Improvement Program– Phase 3

This program was an incentive-based program to improve Remote Computer Reader encode rates and reduce error rates through the use of a commercially available name and address database.

9. Automated Package Processing System – Recognition Modernization Program

This program was to improve package and bundle sorting operations by enhancing the address recognition technology used in the APPS machines. The project was for the purchase and installation of new OCR computer systems and software updates for all APPS machines.

Appendix D: Management's Comments

MAURA MCNERNEY
VICE PRESIDENT, FINANCE AND PLANNING (A)



December 11, 2015

LORI LAU DILLARD
DIRECTOR, AUDIT OPERATIONS

SUBJECT: Capital Projects Return on Investment – MI-AR-16-DRAFT
(November 25, 2015)

Thank you for the opportunity to review and comment on the above referenced Draft Audit Report. The Postal Service is pleased to hear that the majority of the projects reviewed in the audit exceeded the projected return on investment (ROI) targets stated within the Decision Analysis Report (DAR) business cases, on average by about 87 percent, as determined by the Office of Inspector General's (OIG) own assessment.

For the three projects that the OIG noted as not achieving the targeted ROI, management believes the report does not accurately account for the actual performance. Specifically, the report's assumptions and methodology used to derive monetary impacts on the three projects concludes that labor savings benefits are not captured if they are not specifically removed from the budget. In these three instances, the capital investment outlays for all three projects had already been completed and all three projects were tracking within their performance parameters. The only difference was that the budgeted work hour savings targets were reduced due to other significant reductions from volume and network consolidations. Accordingly, management believes the monetary impact calculations which removed work hour savings from the cash flows are not an accurate representation of actual ROI performance.

Management does not concur with the OIG's recommendation that the Postal Service perform interim cost studies on all Investment Review Committee (IRC) investments and believes such a sweeping requirement is unnecessary and does not consider the resource requirements to conduct such studies. This recommendation presumes both a serious business need and sufficient resources to conduct such studies. Management believes conducting mandatory interim cost studies is wasteful and unnecessary. Moreover, no evidence is provided to show how such interim costs studies would yield useful or actionable information that

goes beyond what is already collected within the current Investment Tollgate process. The existing process has sufficient controls for reporting investment program performance metrics. A blanket requirement would not be an effective use of already limited Postal resources.

Management believes that interim cost studies can be useful investigative tools to answer questions regarding performance and these studies have been performed in the past; however, interim cost studies should be used on a case-by-case basis where there is an identified business need to audit a program's performance that is in question or to answer specific operational questions.

Finally, management would like to clarify that while the report highlights capital investments over \$5 million, in reality our Investment Policies center around total investments of capital, deployment/implementation expense and first year operating expenses. The total of these funding amounts determines the approval threshold. If the funding requested is \$1 million, approval is required by the Technology Review Committee (TRC). If the funding is \$5 million, approval is required by the IRC. Additionally, if the total capital investment amount requested is \$5 million or more, the approval of the Postmaster General (PMG) and Chief Executive Officer is also required.

Findings

Finding #1: We found the methodology used to calculate projected ROIs for the nine capital projects was reasonable; however, reporting improvements are needed after project approval to ensure the observed ROI reflects (*sic*) a project's performance. Specifically, program managers did not always update and report the cash flow when operating changes impacted an investment's ROI. In addition, management does not routinely do interim cost studies to evaluate the ongoing performance of a capital project. Therefore, they do not always have the information necessary to re-evaluate capital investment deployments.

Management did not take these steps because current policy does not require program managers to update or revise cash flows when significant operating changes occur or require all investment projects to be subject to an interim cost study. As a result, program managers do not always report the observed ROI, which is a revised estimate of the ROI based on the most recent observations of cash outflows and savings to the IRC.

Management disagrees with this finding. Under the Investment Tollgate process – which has been in practice for many years – interim costs studies are not required and are only conducted if there are significant issues or are requested by senior

management. The "observed ROI" field cited by the report is an optional informational column and completion is not a requirement.

The Postal Service's Investment Tollgate process for investment projects has largely eliminated the need for interim cost studies since projects that are greater than \$25 million must report back to the IRC after the contracts are signed (Conversion Tollgate), when they were planned to be 50 percent complete (Execution Tollgate), and after they have been completed (Post-Deployment Tollgate). At each of these tollgates the sponsoring organization is required to update the ROI and the status of the project.

If a project is meeting or exceeding its schedule and performance metrics outlined within the Decision Analysis Report (DAR) there is usually no compelling business reason to divert limited resources to perform interim cost studies unless there are specific questions surrounding the program e.g. accounting, audit, or best practices.

Finding #2: We found the actual ROI for six of the nine projects, on average, exceeded the projected ROI by about 87 percent, while the remaining three projects did not meet the anticipated ROI, on average, by almost 41.3 percent. The amount of money expected to be saved but not actually realized was about \$73,766,488.

Management disagrees with the OIG's assumption that three projects did not meet the anticipated ROI. The OIG makes the assertion that these projects failed to capture savings because the three projects did not have specific work hour reductions taken within the budgeting process. No evidence is provided by the OIG to support this assertion.

In fiscal year (FY) 2015, management made the decision to reduce the budgeted work hour savings target to the field due to the difficult stretch from programs, major initiatives, and declining volume. The decision was made not to budget these individual program savings, but each specific program was implemented and incorporated into the operations; however, we strongly believe this decision is not impacting the capture of the savings. We therefore disagree with the assumption that these projects have significantly reduced ROIs and do not concur with the corresponding monetary impacts.

The Postal Service made two separate requests to the OIG to provide their calculations and the methodologies used to derive their monetary impacts. In the absence of this information the Postal Service is unable to specifically opine any further on the monetary impacts.

Additionally, we requested that all monetary impacts of the actual versus planned results should be shown in the report — whether the results were positive or negative — to provide a balanced audit report. With six of nine projects showing

more positive results than in the DAR cash flows, using the OIG's own analysis, it stands to reason that the overall monetary impact of all nine programs taken as a whole could easily have resulted in a positive overall ROI impact rather than the reported negative monetary impact included in the audit.

Finding #3: In addition, we found there is no comprehensive knowledge management process in place to ensure the Postal Service captures and leverages all capital project information. This would be useful when program managers retire, leave, or move to another assignment.

As we noted in a previous audit (Postal Service Knowledge Management Process, Report Number DP-AR-14-002, dated March 7, 2014), the Postal Service does not have a comprehensive knowledge management policy or process to ensure systematic and collaborative knowledge sharing. In response, management disagreed with that report's recommendation to develop a comprehensive Postal Service knowledge management strategy.

In this audit, five of the program managers for the nine projects we reviewed were retired or in another position and their knowledge of the capital project had not been preserved, making informed strategic investment decisions difficult.

Management disagrees with Finding #3. While the OIG found that five program managers retired or moved to other positions at the Postal Service, the Capital Investments and Business Analysis group maintains a centralized document repository of investment DARs and DAR related information. In addition to program DAR documents, the Investment Tollgate process both monitors and captures information about projects and warehouses that information in the BlueShare site. In addition, the status of each major investment project is published in the Investment Highlights report. These activities ensure that past information is sufficiently archived to ensure future strategic investment decisions benefit from complete information on prior efforts and experiences.

When there is a need for a new program manager or executive to access historical information surrounding an investment project within this site – access is granted or a project's information is provided. Accordingly, management believes that sufficient Knowledge Management (KM) is being maintained to enable continuity of institutional knowledge surrounding strategic investments.

Recommendations

Recommendation 1:

We recommend the acting vice president, Finance and Planning:

1. Update Postal Service Handbook F-66, *General Investment Policies and Procedures*, to require:

- Program managers to update cash flows and report on any significant operating changes that will impact the capital investment's return on investment; and
- Perform interim cost studies on all capital investments approved by the Investment Review Committee.

Management partially agrees with the recommendation outlined in the first bullet point. Management will update Handbook F-66, General Investment Policies and Procedures to include the existing requirements to follow the Investment Tollgate process and provide updated cash flows for projects over \$25 million in investment after deployment. In addition, the program managers will be responsible to identify and report any significant operating changes and provide updated cash flows. The Capital Investments and Business Analysis group has stated that the Handbook F-66 is currently being updated to reflect the policy changes that have been implemented since the last issuance of the handbook. The completion and issuance is expected in FY 2016.

Target Implementation Date:
September 30, 2016

Responsible Official:
Manager, Capital Investments and Business Analysis – Finance & Planning

Management partially agrees with the recommendation outlined in the second bullet. Management believes that interim cost studies should be performed; however, only on an as-needed basis as directed by a program's executive leadership team (ELT) member, the Chief Financial Officer, the IRC, or the PMG.

The performance of a cost study entails capturing detailed information based on observations and complex analysis, and requires extensive time and resources. Individual program offices and the Finance and Planning group are not staffed to conduct cost studies on every investment project, nor would it make business sense. As previously noted, the Investment Tollgate Process provides information for management on the status of DARs, including costs, benefits, schedule, and ROI.

Target Implementation Date:
N/A

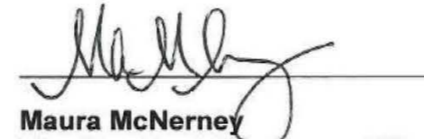
Responsible Official:
N/A

2. Establish a comprehensive knowledge management strategy for all capital projects.

We agree with the recommendation. A BlueShare site currently exists to archive Capital Investment project information and Tollgate updates. Capital Investments will update the new project process to include orientation for new program managers on the information archived within the BlueShare site and assist with accessing any historic information relevant to their projects.

Target Implementation Date:
February 28, 2016

Responsible Official:
Manager, Capital Investments – Finance & Planning



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