



# OFFICE OF INSPECTOR GENERAL

UNITED STATES POSTAL SERVICE

## Field Material Handling Projects

### Audit Report

Report Number  
NO-AR-17-012

August 23, 2017





# OFFICE OF INSPECTOR GENERAL

## UNITED STATES POSTAL SERVICE

## Highlights

***Our objective was to determine if the Postal Service achieved its anticipated ROI for field material handling projects completed in FY 2016.***

### Background

The U.S. Postal Service has one of the largest material handling systems in the world for moving mail. It uses more than 8,500 pieces of mail processing equipment to sort over 153 billion mailpieces annually.

Since fiscal year (FY) 2014, the Postal Service has, on average, invested about \$36 million annually in field material handling (FMH) projects. FMH projects are generally needed to address safety concerns, sustain operations, or create workhour savings from more efficient mail processing.

When an FMH investment is based on workhour savings, it should improve mail processing operations and provide a return on investment (ROI). The ROI is calculated by comparing total anticipated benefits to the investment amount. The benefits are typically realized from reducing labor costs by replacing manual processing with automation.

Postal Service Headquarters Finance develops and allocates a workhour budget to the seven area vice presidents annually. These budgets establish the fiscal year workhour plan. When an FMH investment has labor savings, headquarters Finance should reduce the impacted area's workhour budget to ensure the Postal Service meets workhour reductions.

We initiated this audit based on a Postal Service briefing that reported FMH projects completed in FY 2016 had reduced workhours by over [REDACTED].

Our objective was to determine if the Postal Service achieved its anticipated ROI for field material handling projects completed in FY 2016.

We reviewed the 53 FMH projects the Postal Service reported as completed in FY 2016. These projects, which were to provide workhour savings, cost almost \$33 million in total. They ranged in cost from about \$61,000 to \$4.5 million, with projected ROIs ranging anywhere from [REDACTED] percent to [REDACTED] percent.

### What the OIG Found

The Postal Service is not currently achieving its projected ROI for the 53 FMH projects completed in FY 2016. The Postal Service's total projected ROI was [REDACTED] percent. From October 2015 through July 2017, the new projected ROI has decreased to [REDACTED] percent, a [REDACTED] percent change.

The reduced ROI occurred because the associated workhour budget reductions for the FMH projects were not always made. Additionally, Postal Service areas did not track the projects, as required, to ensure achievement of the approved FMH project plan and the associated workhour reductions and ROI.



# OFFICE OF INSPECTOR GENERAL

## UNITED STATES POSTAL SERVICE

The projected workhour reductions from the 53 FMH projects represented about [REDACTED] full-time equivalent employees. However, Postal Service labor agreements contain no-layoff provisions for full-time employees. Therefore, the Postal Service uses budget reductions as a financial tool to ensure that projects meet their projected ROIs. This does not preclude budget overruns for workhours.

Specifically, we found that headquarters Finance management partially reduced the workhour savings for 27 of the 53 FMH projects reviewed. The projected savings for 27 of the 53 FMH investments was almost [REDACTED] million for FYs 2016 and 2017. However, Finance used a reduction of about [REDACTED] million, or [REDACTED] percent less, instead of the full amount.

In one instance, the budget reduction for one of the 27 projects exceeded the projected workhour savings by [REDACTED], or [REDACTED] percent. The variances in budget reductions occurred, in part, because different workhour rates were applied during project creation than during budget development.

By not fully reducing the workhour budgets for 52 of the 53 FMH projects and exceeding the projected savings for one FMH project, the Postal Service did not realize annual savings of about [REDACTED] million.

According to the Manager, Capital Investments and Business Analysis, all FMH projects should be tracked throughout the investment process with compliance reports. However, employee roles and responsibilities in the current process do not reflect those in the published policy.

We contacted six of the seven Postal Service area offices with FMH projects to determine if they had the compliance reports for their respective projects. Of the six areas, none maintained compliance reports for FMH projects. As a result, the Postal Service cannot evaluate achieved benefits and savings that could prove useful in planning future projects.

### What the OIG Recommended

We recommended management reduce workhour budgets for the projects that should have had budget reductions; develop and implement a financial policy to apply consistent allocation of savings for FMH projects; update Postal Service policy for all investments, including FMH projects; and provide oversight to ensure project performance tracking.

# Transmittal Letter

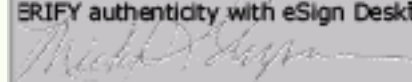


OFFICE OF INSPECTOR GENERAL  
UNITED STATES POSTAL SERVICE

August 23, 2017

**MEMORANDUM FOR:** LUKE GROSSMANN  
VICE PRESIDENT, FINANCE AND PLANNING

ROBERT CINTRON  
VICE PRESIDENT, NETWORK OPERATIONS

E-Signed by Michael Thompson  
VERIFY authenticity with eSign Desktop  


**FROM:** Michael L. Thompson  
Deputy Assistant Inspector General  
for Mission Operations

**SUBJECT:** Audit Report – Field Material Handling Projects  
(Report Number NO-AR-17-012)

This report presents the results of our audit of U.S. Postal Service Field Material Handling Projects (Project Number 17XG016NO000).

We appreciate the cooperation and courtesies provided by your staff. If you have any questions or need additional information, please contact Margaret B. McDavid, Director, Network Processing, or me at 703-248-2100.

Attachment

cc: Postmaster General  
Corporate Audit and Response Management  
Chief Financial Officer and Executive Vice President  
Chief Operating Officer and Executive Vice President

# Table of Contents

Cover	
Highlights.....	1
Background.....	1
What the OIG Found.....	1
What the OIG Recommended.....	2
Transmittal Letter.....	3
Findings.....	5
Introduction.....	5
Summary.....	5
Return on Investment Analysis.....	6
Workhour Budget Reductions.....	7
Project Performance Tracking.....	7
Recommendations.....	9
Management's Comments.....	9
Evaluation of Management's Comments.....	10
Appendices.....	11
Appendix A: Additional Information.....	12
Background.....	12
Objective, Scope, and Methodology.....	12
Prior Audit Coverage.....	13
Appendix B: Management's Comments.....	14
Contact Information.....	16

# Findings

***The Postal Service is not currently achieving its projected ROI for the 53 FMH projects completed in FY 2016.***

## Introduction

This report presents the results of our self-initiated audit of U.S. Postal Service field material handling (FMH) projects<sup>1</sup> (Project Number 17XG016NO000). Our objective was to determine if the Postal Service achieved its anticipated return on investment (ROI)<sup>2</sup> for FMH projects completed in fiscal year (FY) 2016. See [Appendix A](#) for additional information about this audit.

The Postal Service has one of the largest material handling systems in the world for moving mail. It uses more than 8,500 pieces of mail processing equipment to sort over 153 billion mailpieces annually, or about half of the world's mail.

Since FY 2014, the Postal Service Network Operations group has, on average, invested about \$36 million annually in FMH projects. FMH projects are generally needed to address safety concerns, sustain operations, or create workhour savings from more efficient mail processing. When an FMH investment is based on workhour savings, it should improve mail processing operations and provide a ROI. The ROI is calculated<sup>3</sup> by comparing the total anticipated benefits to the investment amount. The benefits are typically realized from reducing labor costs by replacing manual processing with automation. As an example, the average cost to manually process letter mail is about [REDACTED] per piece, but with automation it costs about [REDACTED] per piece.

Postal Service policy<sup>4</sup> provides guidance on how to develop the funding request narrative<sup>5</sup> for headquarters-approved FMH projects of \$5 million or less. Specifically, Handbook F-66 identifies required back-up documentation, review and approval procedures, and validation and compliance report requirements.

Postal Service Headquarters Finance develops and allocates a workhour budget to the seven area vice presidents annually. These budgets establish the fiscal year workhour plan. When an FMH investment has labor savings, Finance should reduce the impacted area's workhour budget to ensure the Postal Service meets workhour reductions.

## Summary

The Postal Service is not currently achieving its projected ROI for the 53 FMH projects completed in FY 2016. These projects, which provided workhour savings, cost almost \$33 million in total and ranged in cost from about \$61,000 to \$4.5 million, with projected ROIs ranging anywhere from [REDACTED] percent to [REDACTED] percent.

The total projected ROI of the 53 FMH projects was [REDACTED] percent. From October 2015 through July 2017,<sup>6</sup> the projected ROI has decreased to [REDACTED] percent, a [REDACTED] percent change.

The reduced ROI occurred because the associated workhour budget reductions for the FMH projects were not always made. Specifically, we found that headquarters Finance management partially reduced workhour savings for 27 of the 53 FMH projects reviewed. The projected savings for these 27 FMH investments was almost [REDACTED] million for FYs 2016 and 2017. However, Finance used a reduction of about [REDACTED] million, or [REDACTED] percent less, instead of the full amount. By not fully reducing the workhour budgets or

<sup>1</sup> These projects can include facility modernization, engineering support services, fabrications, installations, modifications, and upgrades to mail processing equipment.

<sup>2</sup> According to Handbook F-66, *General Investment Policies and Procedures*, the ROI is technically known as the internal rate of return.

<sup>3</sup> The ROI calculation is based on the project's cash flow. A cash flow is a timeline that shows the anticipated flow of investments, costs, and savings over an analysis period. The analysis period is usually 10 years; however, it varies based on the project.

<sup>4</sup> Handbook F-66, dated November 2005.

<sup>5</sup> An investment must be requested using a Decision Analysis Report (DAR) or a Justification of Expenditure.

<sup>6</sup> Our scope only included projects completed in FY 2016. As a result, we determined that the earliest a budget reduction could have been taken was October 2015. Additionally, the Manager, Field Budget, provided budget reductions as of July 26, 2017.

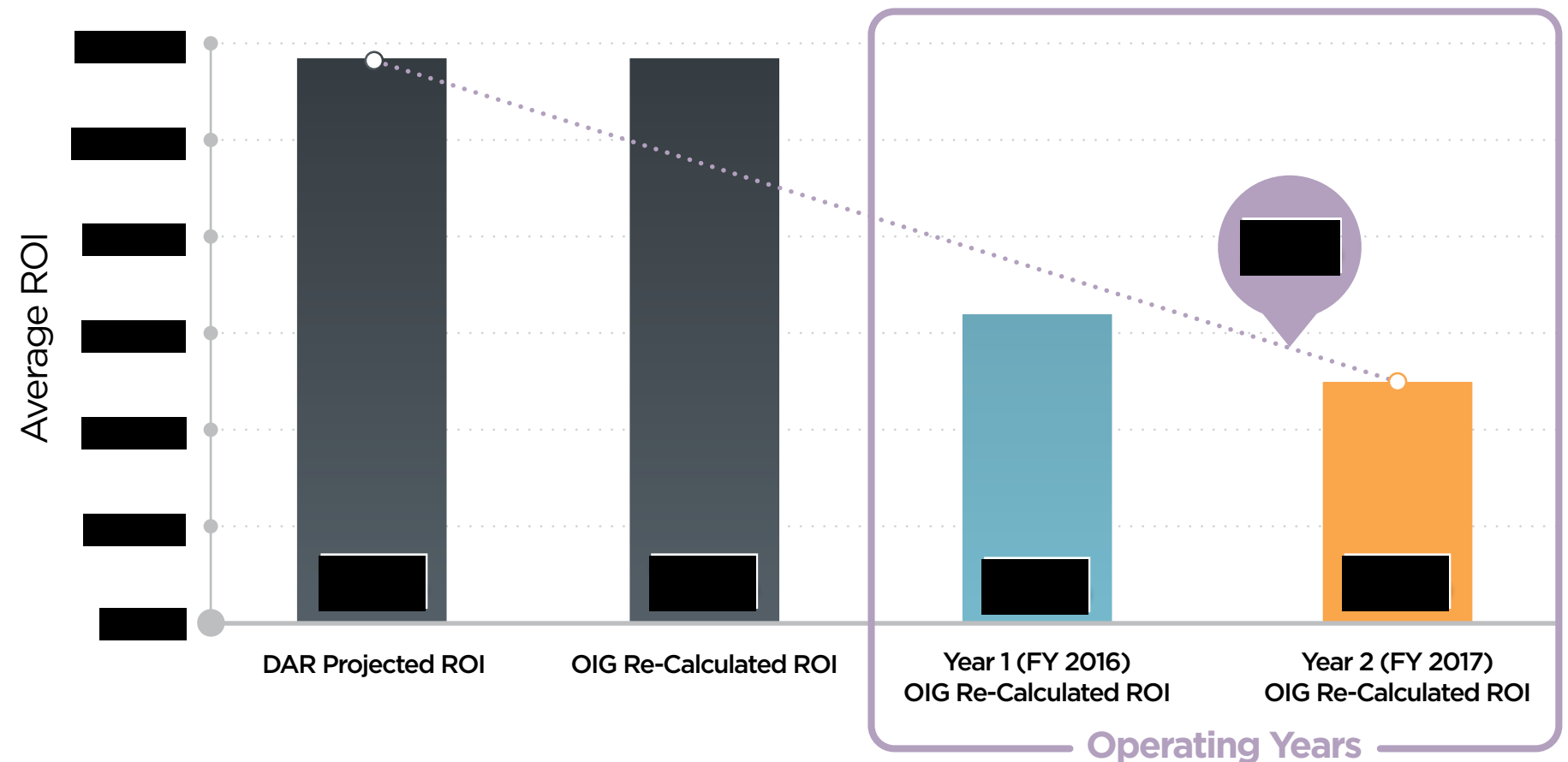
not taking a reduction at all, the Postal Service did not realize annual savings of about [REDACTED] million.

Additionally, the Postal Service areas did not track the projects, as required, to ensure achievement of the approved FMH project plan and ROI. We contacted six of the seven Postal Service area offices with FMH projects to determine if they had the compliance reports for their respective projects. Of the six areas, none maintained compliance reports for FMH projects. As a result, the Postal Service cannot evaluate achieved benefits that could prove useful in planning future projects.

## Return on Investment Analysis

The Postal Service is not currently achieving its anticipated ROI for FMH projects completed in FY 2016. The total projected ROI for the 53 FMH projects was [REDACTED] percent. From October 2015 through July 2017, the ROI has decreased to [REDACTED] percent, a [REDACTED] percent change (see Figure 1).

**Figure 1. Average ROI Trend Analysis**



Sources: Final approved DARs and U.S. Postal Service Officer of Inspector General (OIG) calculations.

If headquarters Finance does not make the required investment budget impacts to account for projected savings and track project performance, this trend will continue.



***The projected savings for 27 of the 53 FMH investments was almost [REDACTED] million for FYs 2016 and 2017; however, Finance used a reduction of about [REDACTED] million, or [REDACTED] percent less, instead of the full amount.***

**Workhour Budget Reductions**

We found that headquarters Finance did not consistently make the required investment budget impacts to account for projected savings. According to policy,<sup>7</sup> Finance should deduct workhour savings identified in the DARs from the workhour budget; however, it only deducted the workhour savings for 27 of the 53 FMH projects reviewed. According to the Manager, Budget, over the past five to six years, savings from investments in FMH projects were not used to reduce the budget because of management decisions. The projected savings for 27 of the 53 FMH investments was almost [REDACTED] million for FYs 2016 and 2017; however, Finance used a reduction of about [REDACTED] million, or [REDACTED] percent less, instead of the full amount.

In one instance, the budget reduction for one of the 27 projects exceeded the projected workhour savings by [REDACTED], or [REDACTED] percent. The variations in budget reductions occurred, in part, because different workhour rates may be applied during project creation than during budget development.

Projected workhour reductions from the 53 FMH projects represented [REDACTED] full-time equivalent employees. However, current collective bargaining agreements contain no-layoff provisions and require the Postal Service to release lower-cost part-time and temporary employees before laying off any full-time employees. Therefore, the Postal Service uses budget reductions as a financial tool to ensure that projects meet the projected ROI. This does not preclude budget overruns for workhours. By not fully reducing the workhour budgets for 52 of the 53 FMH projects and exceeding the projected workhour savings for one FMH project, the Postal Service did not realize savings of over [REDACTED] million and [REDACTED] million in FYs 2016 and 2017, respectively.

**Project Performance Tracking**

We found that the Postal Service is not tracking FMH project performance at any management level after implementation. According to the Manager, Capital Investments and Business Analysis, program sponsors maintain compliance reporting and tracking for headquarters-approved DARs of \$5 million and less; however, the current process does not reflect the published policy.<sup>8</sup> The policy states that sponsors must document actual program performance versus DAR projections and report the results to the area (see Table 1).

**Table 1. Compliance and Program Status Reporting Responsibilities**

Investment Funding Level	Reported By	Reviewed By	Reported To
Less than \$5 million	Sponsor	District Manager	Area Finance Manager

Source: Handbook F-66.

We contacted six<sup>9</sup> of the seven Postal Service area offices to determine if they had the compliance reports for their respective projects. None of the six areas maintained compliance reports for the FMH projects; however, the Pacific Area took immediate action in response to our request and began requiring compliance reports for FMH projects. The Pacific Area Controller provided compliance reports for four of the five FMH projects in their area. At the time of the report, we had not received compliance reports from any other area office.

<sup>7</sup> *Budget Cookbook Reports*, Chapter 1: Budget Development Flow Chart, dated November 29, 2013.

<sup>8</sup> Handbook F-66.

<sup>9</sup> One area (Southern) did not have a generative FMH project completed in FY 2016.



The areas did not track project performance because sufficient procedures and oversight were not in place to ensure established guidance was properly disseminated and followed. According to the Manager, Capital Investments and Business Analysis, management is in the process of updating Handbook F-66. The new update, which is estimated to be completed by December 2017, will incorporate FMH projects as a separate category in terms of approvals as well as oversight.

In addition, headquarters Network Operations Engineering did not track FMH project performance. For example, in a November 2016 briefing to senior executives, the Manager, Network Operations Engineering, reported that FMH projects completed in FY 2016 reduced workhours by over [REDACTED]. However, our analysis showed a reduction of only [REDACTED] workhours for the 53 FMH projects completed in FY 2016. This is a difference of [REDACTED] hours, or [REDACTED] percent, compared to the findings in the presentation, which initiated this audit. The Postal Service cannot evaluate achieved benefits and savings that could prove useful in planning future projects if it does not track project performance.

# Recommendations

***We recommend management reduce workhour budgets for the projects that should have had budget reductions; develop and implement a financial policy to apply consistent allocation of savings for FMH projects; update Postal Service policy for all investments, including FMH projects; and provide oversight to ensure project performance tracking.***

We recommend the Vice President, Finance and Planning:

1. Reduce Postal Service area workhour budgets for projects that should have had workhour budget reductions.
2. Develop and implement a financial policy that requires consistent allocation of savings for field material handling projects.
3. Update Postal Service Handbook F-66, *General Investment Policies and Procedures*, to define review and approval procedures, validation, and compliance report requirements for all investments, including field material handling projects.

We recommend the Vice President, Network Operations:

4. Develop and implement a supervisory process to ensure that the Manager, Network Operations Engineering, provides the oversight needed to ensure field material handling project performance tracking is conducted after implementation in accordance with policy.

## Management's Comments

Management generally agreed with the findings and recommendations; however, subsequent to their response, they stated disagreement with our calculation of the annual savings not realized by the Postal Service. Management stated that the calculation should be reduced by the budget adjustments that are planned in response to recommendation 1. In addition, management stated that lack of budgeting and tracking does not mean savings are not occurring.

Management also stated the OIG should revise the report to state the Postal Service was unable to calculate project ROIs as opposed to saying the projects have achieved less than half of their expected return. Otherwise the report should state that, based on the new projected ROI, the projects are worth the investment. Management also stated that we should revise the report to reflect that the different workhour rates management uses during budget development and project creation are not errors as there are specific local rates used for savings budgeted to the field that do not include certain Postal Service-wide factors used during project creation.

Regarding recommendation 1, management agreed to process a budget adjustment for projects with net annual savings in excess of a \$250,000 threshold. The target implementation date is August 31, 2017.

Regarding recommendation 2, management agreed to develop and implement a financial policy for the consistent allocation of savings for FMH projects. The target implementation date is September 30, 2017.

Regarding recommendation 3, management agreed to update Handbook F-66 to define review and approval procedures, validation, and compliance report requirements for all investments, including field material handling projects. The target implementation date is March 31, 2018.

Regarding recommendation 4, management agreed to provide a quarterly report on DAR metrics for projects in excess of a \$250,000 threshold. These reports will be produced for one year after the project is placed into use and sent to both the Vice President (VP), Network Operations, and VP, Finance. The target implementation date will begin with projects approved in FY 2018.

See [Appendix B](#) for management's comments in their entirety.

## Evaluation of Management's Comments

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

Regarding management's disagreement with our calculation of annual savings, we based the calculation on the status of budget reductions the Postal Service took prior to our review. It represents the savings the Postal Service could achieve if management takes proper corrective actions. Without proper budgeting and tracking, it is not possible to determine if savings are occurring.

Regarding management's suggested report revisions, we based our total projected ROI calculation of ■ percent on information available to management. The projects were justified and approved for funding based on a total projected ROI of ■ percent. Lower projected ROIs may have impacted the initial investment decisions. We used different workhour rates as an example of why variances in budget reductions occurred and did not consider them to be an error.

All recommendations require OIG concurrence before closure. Consequently, the OIG requests written confirmation when corrective actions are completed. Recommendations should not be closed in the Postal Service's follow-up tracking system until the OIG provides written confirmation that the recommendations can be closed.



# Appendices

*Click on the appendix title  
to the right to navigate  
to the section content.*

Appendix A: Additional Information.....12

    Background .....12

    Objective, Scope, and Methodology .....12

    Prior Audit Coverage.....13

Appendix B: Management’s Comments .....14

## Appendix A: Additional Information

***The Postal Service has one of the largest material handling systems in the world for moving mail. It uses more than 8,500 pieces of mail processing equipment to sort over 153 billion mailpieces annually, or about half the world's mail.***

### Background

The Postal Service has one of the largest material handling systems in the world for moving mail. It uses more than 8,500 pieces of mail processing equipment to sort over 153 billion mailpieces annually, or about half the world's mail.

Since FY 2014, the Postal Service has, on average, invested about \$36 million in FMH projects annually. These investments are made to increase mail processing efficiency and include facility modernizations, support services, and mail processing equipment upgrades.

FMH projects are generally needed to address safety concerns, sustain operations, or create workhour savings from more efficient mail processing. When an FMH investment is based on workhour savings, it should improve mail processing operations and provide a ROI. The ROI is calculated by comparing the total anticipated benefits to the investment amount. The benefits are typically realized from reducing labor costs by replacing manual processing with automation. As an example, the average cost to manually process letter mail is about [REDACTED] per piece, but with automation it costs about [REDACTED] per piece.

The VP, Network Operations, may approve all fixed mechanization projects (i.e., material handling projects) of up to \$5 million. After the VP, Network Operations, approves the project, headquarters Finance performs a final review and approval before contract award and project execution.

Postal Service Headquarters Finance also develops and allocates a workhour budget to the seven area vice presidents annually, establishing the fiscal year workhour plan. When an FMH investment has labor savings, headquarters Finance should reduce the impacted area's workhour budget to ensure workhour reductions are met.

We initiated this audit based on a Postal Service report indicating that FMH projects completed in FY 2016 reduced over [REDACTED] workhours.

### Objective, Scope, and Methodology

Our objective was to determine if the Postal Service achieved its anticipated ROI for FMH projects completed in FY 2016. To accomplish our objective we:

- Reviewed 53 generative FMH projects the Postal Service identified as completed by in FY 2016.
- Reviewed procedures and criteria in Handbook F-66 and financial guidance.
- Identified and reviewed DARs, justifications of expenditures, cash flow analyses, and ROI data for each project.
- Reviewed budget reductions taken for each project.
- Interviewed Postal Service Engineering, Budget, and area Controller officials.

We conducted this performance audit from March through August 2017, 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 July 31, 2017, and included their comments where appropriate.

We did not assess the reliability of any computer-generated data for the purposes of this report.

### **Prior Audit Coverage**

The OIG did not identify any prior audits or reviews related to the objective of this audit.



## Appendix B: Management's Comments



August 18, 2017

LORI LAU DILLARD  
DIRECTOR AUDIT OPERATIONS

SUBJECT: Draft Audit Report – Field Material Handling Projects  
Report Number NO-AR-17-DRAFT

We have received and reviewed the draft audit report dated August 3, 2017, for Project Number 17XG016NO000, *Field Material Handling Projects*. We are in agreement with much of the content of the audit, findings, and recommendations, but disagree with some specific elements.

In general, we agree that the projected savings from these projects should be included in the appropriate office's budget for the impacted fiscal years. However, we also believe that specific circumstances can lead to unique situations where not budgeting the savings may be appropriate. We also agree in general terms that project performance should be tracked, but the level of tracking should be commensurate with the level of investment.

However, we disagree that the lack of budgeting and tracking of some of these programs means that no savings is being captured for them. There is some level of operational performance of these equipment sets, regardless of whether that performance is being tracked.

#### Findings:

We propose that the report say that we are unable to specifically calculate the ROI of these programs, as opposed to saying that we have achieved less than half of the expected return. Otherwise, it should be noted that the adjusted ROI stated in the report is a significant return, and clearly worthy of the investment. It should also be explained in the report that the different rates used during project creation and budget development is not an error. Rather there are specific local rates used for the savings budgeted to the field that do not include certain servicewide factors that are correctly applied in the rates used in the decision making process.

#### Recommendations to Vice President, Finance and Planning:

1. Reduce Postal Service area workhour budgets for projects that should have had workhour budget reductions in 2017.

Response: We agree with this recommendation and will process this adjustment for projects with net annual savings in excess of a \$250,000 threshold. However, we believe that when these adjustments are done, the monetary impact should be reduced accordingly.

Date of Implementation: August 2017

Responsible Official: Manager, Field Budget

2. Develop and implement a financial policy that requires consistent allocation of savings for field material handling projects.

Response: We agree with this recommendation.

475 L'Enfant Plaza SW Room 8011  
Washington, DC 20260-0004

WWW.USPS.COM

Date of Implementation: September 30, 2017

Responsible Official: Manager, Budget  
Manager, Network Operations Engineering

3. Update Postal Service Handbook F-66, Investment Policies and Procedures, to define review and approval procedures, validation and compliance report requirements for all investments, including field material handling projects.

Response: We agree with this recommendation.

Date of Implementation: Finance will update the F-66 by March 2018. The actual publication date may differ due to internal publication review.

Responsible Official: Manager, Capital Investments and Business Analysis

Recommendations to Vice President, Network Operations:

4. Develop and implement a supervisory process to ensure that the Manager, Network Operations Engineering, provides the oversight needed to ensure field material handling project performance tracking is conducted after implementation in accordance with policy.

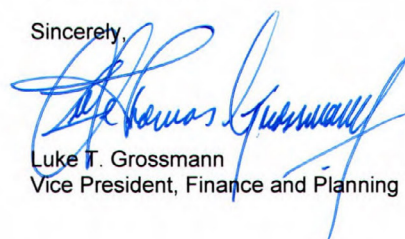
Response: We agree with this recommendation. For projects with net savings in excess of the \$250,000 threshold, Network Operations Engineering shall ensure that key performance metrics for field material handling projects are clearly identified in the Decision Analysis Report (DAR). Network Operations Engineering shall report on those metrics quarterly for one year after the project is placed into beneficial use. This report will be provided to the Vice President, Network Operations and the Vice President, Finance.

Date of Implementation: This tracking and reporting on specific DAR metrics will be implemented starting with projects that are approved in FY 2018.

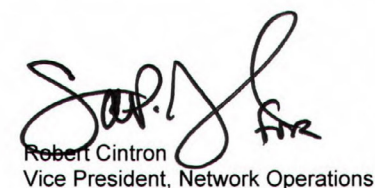
Responsible Official: Manager, Network Operations Engineering  
Manager, Budget

Thank you for the opportunity to comment on this audit and we look forward to closing out these recommendations.

Sincerely,



Luke T. Grossmann  
Vice President, Finance and Planning



Robert Cintron  
Vice President, Network Operations



OFFICE OF  
**INSPECTOR  
GENERAL**  
UNITED STATES POSTAL SERVICE

Contact us via our [Hotline](#) and [FOIA](#) forms.  
Follow us on social networks.  
Stay informed.

1735 North Lynn Street  
Arlington, VA 22209-2020  
(703) 248-2100