



June 24, 2019

MEMORANDUM FOR: JEFFREY C. JOHNSON
A/VICE PRESIDENT, ENTERPRISE ANALYTICS

An e-signature block showing a handwritten signature in cursive. Above the signature, it reads "E-Signed by Janet Sorensen" and "VERIFY authenticity with eSign Desktop" with a question mark icon.

FROM: Janet M. Sorensen
Deputy Assistant Inspector General
for Retail, Delivery, and Marketing

SUBJECT: Management Alert – Geospatial Coordinates for the Palatine
Sectional Center Facility (Report Number MS-MT-19-002)

This management alert presents issues identified during our audit of Geospatial Coordinates for the Palatine Sectional Center Facility (19RG009MS001). The objective of this management alert is to provide U.S. Postal Service officials immediate notification of the issues identified during our ongoing audit. The issue outlined in this report requires immediate attention and remediation.

We identified this issue while conducting our performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain enough, 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.

We appreciate the cooperation and courtesies provided by your staff. If you have questions or need additional information, please contact Joe Wolski, Director, Sales, Marketing, and International, or me at 703-248-2100.

Attachment

cc: Postmaster General
Vice President, Chief Information Officer and Executive Vice President
Corporate Audit Response Management

Introduction

During our Evaluation of Postal Service Zones audit (Project Number 19RG009MS000), the U.S. Postal Service Office of Inspector General (OIG) found that the geospatial coordinates used to calculate mileage and assign a zone for pricing purposes are incorrect for the Palatine Sectional Center Facility (SCF). The purpose of this alert is to bring this issue to your attention and make recommendations for immediate corrective action. The Palatine SCF is one of 195 SCFs nationwide.

The Postal Service first established zones for sorting and delivery purposes in 1943. Postage rates for zoned mail are based on mailpiece weight and the distance¹ the mailpiece travels. The Postal Service created the National Zone Charts Matrix (Matrix), which determines the distance that a mailpiece travels based on the 3-digit ZIP Code where the mail enters the mailstream (originating) to the 3-digit destination ZIP Code (destinating) -- known as a Zone Improvement Plan (ZIP) Pairing. Mailers use the Zone Matrix to determine the proper postage rates to apply to mailpieces using the ZIP Pairing. See Table 1 for volume and revenue for fiscal year (FY) 2018 related to mail classes that have zone-based pricing.

Table 1. FY 2018 Zoned Mail Classes Volume and Revenue

Mail Class	Volume (in millions)	Revenue (in millions)
Bounded Printed Matter		
Priority Mail Express		
Parcel Select		
Periodicals – Commercial (Outside County Pound Prices)		
Priority Mail		
USPS Retail Ground		
Total		

Source: Postal Service FY 2018 Nonpublic Cost and Revenue analysis.

Palatine Sectional Center Facility Coordinates

We found that the Palatine SCF was never assigned the correct geospatial coordinates which determine mileage for ZIP pairings. Instead, the actual coordinates assigned were those associated with the South Suburban SCF, which is about 28 miles away. The correct coordinates were not assigned when the facility originally opened in May 1992. This was undetected because the Postal Service does not periodically review geospatial coordinates or update them as operations change and there is no policy requiring a review. As a result, the zone pricing for 27 ZIP pairings associated with the

¹ The distance is calculated using the lower of the mileage between: (1) The center (using latitude and longitude coordinates) of the area containing the originating SCF to the nearest edge of the area of the destinating SCF; or (2) the center (using latitude and longitude coordinates) of the area containing the destinating SCF to the nearest edge of the area of the originating SCF.

Palatine SCF was incorrect. For example, mailpieces originating in Palatine, IL, and destinating for Washington, DC, are priced using Zone 4 instead of the higher priced Zone 5.

The Postal Service's Addressing and Geospatial Team, which is part of Enterprise Analytics, is responsible for calculating and publishing the data the mailing industry uses to determine a zone based on ZIP pairings. They confirmed the coordinates used for the Palatine SCF were incorrect and that there is no policy requiring a review.

Based on our initial concerns, the Addressing and Geospatial team identified an additional 37 SCFs with incorrect coordinates. We will continue to evaluate this issue as part of our ongoing audit of the Evaluation of Postal Service Zones (Project Number 19RG009MS000). Specifically, we will validate the additional sites that require coordinate changes, determine the impact on the ZIP pairing zone pricing for mail processed by those facilities, and review the overall process for maintaining geospatial coordinates for zone pricing in that report.

Recommendation #1: We recommend the **Acting Vice President, Enterprise Analytics**, correct the coordinates used for the Palatine SCF and update the Zone Matrix, as appropriate.

Recommendation #2: We recommend the **Acting Vice President, Enterprise Analytics**, evaluate coordinates for all SCFs and correct inaccuracies, as identified.

Management's Comments

Management agreed with the finding and recommendations 1 and 2.

Regarding Recommendation 1, management agreed to correct the coordinates used for the Palatine SCF and update the Zone Matrix, as appropriate. The expected implementation date is January 31, 2020.

Regarding Recommendation 2, management agreed to review and assess the impact of adjusting any of the coordinates that may be incorrectly associated with the relevant SCFs and develop a plan of action for resolution as appropriate. Management will assess whether the existing process for determining zones should be updated to take advantage of more current geospatial technology not available at the original construction of postal zones. The expected implementation date is January 31, 2020.

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

Evaluation of Management's Comments

The OIG considers management's comments responsive to the recommendations in the report.

All recommendations require OIG concurrence before closure. Consequently, the OIG requests written confirmation when corrective actions are completed. All 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.

Appendix A. Management's Comments

JEFFREY C. JOHNSON
A/ VICE PRESIDENT
ENTERPRISE ANALYTICS



June 19, 2019

LAZERICK POLAND

SUBJECT: Management Alert – *Geospatial Coordinates for the Palatine Sectional Center Facility*
(Report Number MS-MT-19-DRAFT)

Management agrees with the OIG's finding that the Palatine SCF was not assigned the correct geospatial coordinates when the facility was opened in 1992. As a result, this impacted the mileage calculations between selected ZIP pairings used in the determination of zone-based pricing.

Recommendation #1:

We recommend the Vice President, Enterprise Analytics, correct the coordinates used for the Palatine SCF and update the Zone Matrix, as appropriate.

Management Response/Action Plan:

Management agrees to correct the coordinates attached to the Palatine SCF and update the Zone Matrix product pursuant to our internal clearance process and appropriate communications.

Target Implementation Date:

January 31, 2020

Responsible Official:

Vice-President Enterprise Analytics

Recommendation #2:

We recommend the Vice President, Enterprise Analytics, evaluate coordinates for all SCFs and correct inaccuracies, as identified.

Management Response/Action Plan:

Management agrees to review and assess the impact of adjusting any of the coordinates that may be incorrectly associated with the relevant SCFs and to develop a plan of action for resolution as appropriate. As part of the resolution, Management will assess whether the existing process for determining zones should be updated to take advantage of more current geospatial technology not available at the original construction of postal zones.

Target Implementation Date:

January 31, 2020

Responsible Official:

Vice President, Enterprise Analytics

A handwritten signature in blue ink, appearing to read "Jeffrey C. Johnson".

Jeffrey C. Johnson

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cc: Postmaster General
Vice President, Chief Information Officer and Executive Vice President
Manager, Corporate Audit Response Management