



Office of Inspector General | United States Postal Service

Audit Report

Competitive Products Pricing Best Practices

Report Number CP-AR-19-003 | September 11, 2019



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Highlights

Objective

The Postal Accountability and Enhancement Act of 2006 (PAEA) divided postal products into two categories: market-dominant and competitive. The PAEA established rate-setting policies and procedures for both products. Competitive products are defined as a category of postal products and services for which similar products and services are offered by private sector carriers. The U.S. Postal Service has more flexibility in pricing competitive products. Specifically, competitive products must cover their attributable costs, are not subsidized by market dominant products, and make an appropriate contribution to institutional costs. Pricing changes generally occur annually and are subject to a regulatory review process.

Our objective was to identify opportunities for increased efficiencies in pricing processes and initiatives for competitive products using industry best practices.

What the OIG Found

The Postal Service has a pricing management system based on procedures and methodologies that were developed over 20 years ago. The Postal Service's primary sources for developing and analyzing prices comes from statistical analysis and reports that are generated on a quarterly and annual basis. These systems are not integrated; thus, it is difficult for the Postal Service to use this information to be nimble in its pricing strategy.

In recent years, pricing management systems have seen significant technological advancement, including the use of readily available pricing software to help integrate customer and organizational data, and to facilitate price setting.

Modernizing its pricing management system for competitive products could reduce manual data inputs, and support customized pricing to allow for a more agile price-setting process. A modern pricing management system could also allow for real-time cost data, market-based price information, and cloud-based data for modeling and maximizing price changes.

Additionally, a modern pricing management system would better support consistent and stable general rate increases. Currently, Postal Service competitive products do not always have consistent and stable general rate increases. Inconsistency in general rate increases can create uncertainty and difficulty in future planning for Postal Service customers.

In addition to annual general rate increases, others in the industry have controlled the growth in general rate increases by using various fees, such as peak season add-on fees, with rate increases. Further, the Postal Service could look at current operations to identify additional revenue opportunities, such as hold mail pricing and increased product offerings. A modern pricing system could help identify and justify the decision to pursue appropriate strategies to increase revenue.

What the OIG Recommended

We recommended management evaluate available options to modernize the pricing management system.

“The Postal Service has a pricing management system based on procedures and methodologies that were developed over 20 years ago.”


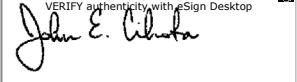
Transmittal Letter



OFFICE OF INSPECTOR GENERAL
UNITED STATES POSTAL SERVICE

September 11, 2019

MEMORANDUM FOR: STEVEN R. PHELPS
ACTING VICE PRESIDENT, PRICING AND COSTING

E-Signed by John Cihota
VERIFY authenticity with eSign Desktop 


FROM: John Cihota
Deputy Assistant Inspector General
for Finance and Pricing

SUBJECT: Audit Report – Competitive Products Pricing Best Practices
(Report Number CR-AR-19-003)

This report presents the results of our audit of the Competitive Products Pricing Best Practices (Project Number 19BG002CP000).

We appreciate the cooperation and courtesies provided by your staff. If you have any questions or need additional information, please contact Sherry Fullwood, Director, Cost and Pricing, or me at 703-248-7890.

Attachment

cc: Corporate Audit Response Management

Results

Introduction/Objective

This report presents the results of our self-initiated audit of the Competitive Products Pricing Best Practices (Project Number 19BG002CP000). Our objective was to identify opportunities for increased efficiencies in pricing processes and initiatives for competitive products using industry best practices.

Background

The Postal Accountability and Enhancement Act of 2006 (PAEA)¹ divided postal products into two categories, market-dominant and competitive; created the Postal Regulatory Commission (PRC) out of the Postal Rate Commission; and increased the PRC's regulatory powers. The PAEA established rate-setting policies and procedures for market-dominant and competitive postal products.

Competitive products are defined as postal products and services for which similar products and services are offered by private sector carriers. The Postal Service has pricing flexibility for competitive products but are subject to a regulatory review process. Price changes generally occur annually, and the Postal Service is free to price competitive products provided each product covers its attributable cost,² are not subsidized by market dominant products, and makes an appropriate contribution to institutional costs.³

Competitive products are classified into two categories: domestic and international.

- Domestic competitive products include Priority Mail Express,⁴ Priority Mail, Parcel Select, Parcel Return Service, USPS Retail Ground, and First-Class Package Service.

- International competitive products include Outbound International Expedited Services, Inbound Parcel Post (at Universal Postal Union⁵ rates), Outbound Priority Mail International, International Priority Airmail, International Surface Air Lift, International Direct Sacks–Airmail-M-Bags, and Outbound Single-Piece First-Class Package International Service.

Finding #1: Pricing Management System

The Postal Service has a pricing management system based on procedures and methodologies that were developed over 20 years ago. The Postal Service's primary sources for developing and analyzing prices comes from statistical analysis and reports that are generated on a quarterly and annual basis. These systems are not integrated; thus, it is difficult for the Postal Service to use this information to be nimble in its pricing strategy.

In recent years, pricing management systems have seen significant technological advancement, including the use of readily available pricing software to help integrate customer and organizational data, and to facilitate price setting. The Postal Service has an opportunity to update its pricing management system to improve decision making, reduce manual data inputs, and customize pricing to allow for an agile price setting process. Pricing management is the process of integrating all stakeholders' perspectives and information necessary to consistently arrive at optimal pricing decisions. Industry best practice is to develop prices by leveraging granular level data inputs, such as customer demographics, competition, and sales, among other data. This data is then input into a database for analysis using sophisticated analytical and modeling tools to identify trends and make customized pricing decisions. [Figure 1](#) illustrates a pricing management system and its key elements.

1 This act requires all competitive products collectively cover what the PRC determines to be an appropriate share of the U.S. Postal Service's institutional costs. The PRC is an independent agency that has exercised regulatory oversight over the Postal Service since its creation by the Postal Reorganization Act of 1970, with expanded responsibilities under the PAEA.

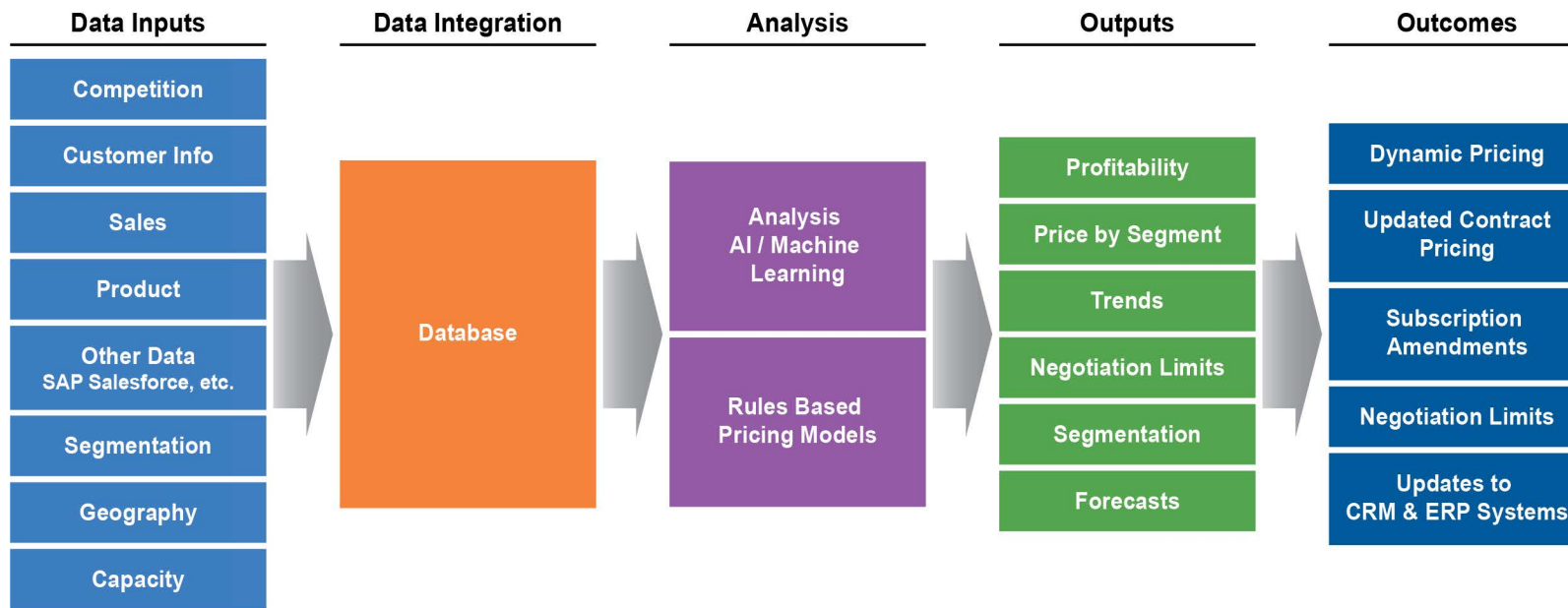
2 Direct and indirect Postal Service costs that can be reliably associated with a particular mail product. It is the sum of volume-variable plus product-specific costs.

3 Postal Service costs that cannot be directly or indirectly assigned to any mail class or product. They can be considered common costs or overhead costs needed for overall operations.

4 Priority Mail Express is the Postal Service's fastest domestic service, with limited exceptions, available 365 days a year, with a money-back guarantee, and delivery shipping to most U.S. addresses, including Post Office boxes.

5 International postal body that established the terminal dues system to set guidelines for posts to compensate one another for international deliveries.

Figure 1. Pricing Management System Elements



Source: Gartner 2018 Magic Quadrant Report on the Top Data Integration and Enterprise Integration Solutions.

The Postal Service could consider a new pricing software, changes to its general rate increases (GRI), and new approaches to pricing of competitive products to advance its current pricing management system.

Pricing Technology

In recent years, pricing management systems have seen significant technological advancement. There are readily available pricing applications that help integrate customer and organizational data, and to facilitate dynamic price setting.⁶ Many of these pricing applications use cloud computing, artificial intelligence, analytical model building,⁷ and system integration that offer early warnings, provide insight, and allow for pricing adjustments when needed.

According to the Postal Service, its current pricing process for competitive products includes looking at both internal costs as well as market conditions and trends. Some of these factors include analysis of competitors' published rates (with associated discounts and surcharges), competitor service promises (days to deliver, scanning, and success), and customer brand perception. Management stated financial and marketing reports are monitored and reviewed to determine anticipated changes to product offerings and to assess how successful past decisions have been. Internally, the Postal Service must consider the impact of its decisions on Negotiated Service Agreements,⁸ regulatory cost coverage, and operational logistics, and to leverage the Postal Service's competitive advantages where appropriate.

⁶ Dynamic price setting is a pricing strategy in which businesses set flexible prices for products or services based on current market demands. Businesses are able to change prices based on algorithms that take into account competitor pricing, supply and demand, and other external factors in the market.

⁷ Mathematical models that have a closed form solution. For example, the solution to the equations used to describe changes in a system can be expressed as a mathematical analytic function.

⁸ A customized and mutually beneficial agreement between the Postal Service and a specific mailer. Terms and conditions affecting prices or classifications require a recommended decision from the PRC.

In addition to the inputs described above, we identified several other data systems used for competitive product pricing decisions. These systems require human interaction for sampling procedures and analysis, and are compiled quarterly and annually. These systems include:

- In-Office Cost System (IOCS) - the primary probability sampling system used to allocate labor costs of clerks, mail handlers, city carriers, and supervisors to mail handling activities. IOCS takes about 550,000 samples annually.
- Origin Destination Information System / Revenue Pieces and Weight (ODIS/ RPW) - a probability sampling system of all mail exiting the postal system on a specific date through a specific Mail Exit Point. The ODIS-RPW program schedules about 128,000 on-site digital tests per year to analyze prices, forecast volumes, and measure productivity and workloads.
- City Carrier Cost System (CCCS) and Rural Carrier Cost System (RCCS) - CCCS and RCCS are used to allocate costs for delivering and collecting mail products on city and rural routes. CCCS and RCCS test about 8,500 and 6,400 samples, respectively, annually.
- Transportation Costing System (TRACS) - TRACS is a statistical sampling and data collection system that provides information for estimating costs by mail product of transportation cost. More than 19,000 truck and airline trips are sampled each year.

Although the Postal Service's competitive product pricing management system uses a variety of inputs from various parts of its organization, the inputs and systems are not integrated. Thus, it is difficult for the Postal Service to use this information to be nimble in its pricing strategy. In comparison, industry best practices support use of real-time cost data,⁹ market price information,¹⁰ and cloud-based data for modeling and maximizing price changes.

While the Postal Service does not always leverage its technologies to allow for real-time pricing decisions, it does use modern technologies in its mail processing. For example:

- Informed Visibility¹¹ is used to help strengthen market competitiveness, create new opportunities for revenue growth, drive cost savings, retain customers, and optimize operational and financial performance.
- Intelligent Mail Barcode¹² data is used to populate the Informed Visibility system.
- Cloud computing technology is used to support information technology operations, resources, and infrastructure.

Although these technologies have been used throughout the Postal Service network, the Postal Service has not been able to fully integrate these technologies to allow it to capture the required data necessary for dynamic price setting. An updated pricing management system could allow the Postal Service to optimize the pricing process by being able to:

- More swiftly adapt pricing to changes in the market place and customer needs.
- Make better, data driven pricing decisions.
- Identify weaknesses and improve efficiencies in the pricing process.
- Integrate stakeholders to consistently arrive at best pricing decisions.

⁹ Real-time data is delivered immediately after collection, with no delay in the timeliness of the information provided.

¹⁰ Competitors receive automated alerts when prices change.

¹¹ Informed Visibility is the Postal Service's data analytics platform. It provides data and analytics to external and internal customers, enabling greater visibility of mail pieces.

¹² Intelligent Mail Barcode is used to sort and track individual letters, cards, and flats. The technology allows many services to be requested and embedded within one barcode.

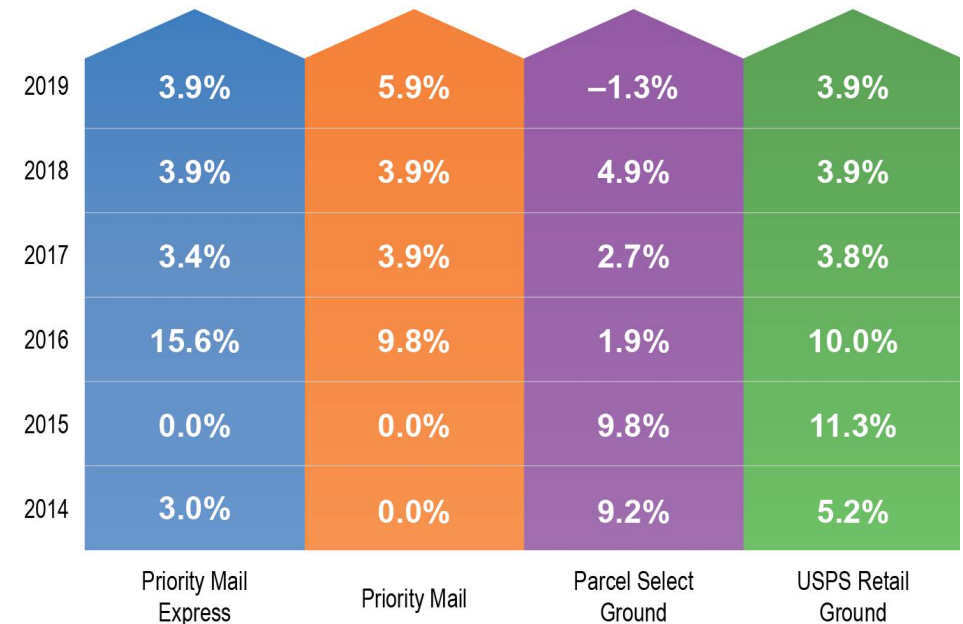
General Rate Increase

Postal Service competitive products do not always have consistent and stable General Rate Increases (GRI). A GRI is the average amount by which rates increase as applied to base rates and help organizations balance profits and losses and cover costs. The Postal Service raises rates for various reasons: network upgrades, delivery operations adjustments, higher fuel charges, equipment improvements, upgraded or new technology, employee benefits, and more. GRIs for the Postal Service are established annually.

The Postal Service has competitive products that have shown consistent GRIs over the past six years. For example, the average GRI for the Postal Service's 5-pound Ground,¹³ 1-Day,¹⁴ and 2-Day Mail¹⁵ Services for FY 2014 through FY 2019 was a consistent 2.47 percent.¹⁶ Although these specific products had consistent rate increases, overall domestic Priority Mail Express, Priority Mail, Parcel Select Ground, and USPS Retail Ground products have seen inconsistent published retail price changes during this time. Figure 2 illustrates the percentage GRIs in published retail prices for the Postal Service's Priority Mail Express, Priority Mail, Parcel Select Ground, and USPS Retail Ground for FY 2014 through FY 2019. There were fluctuations noted in some years; however, the GRIs for Priority Mail Express and USPS Retail Ground published retail rate increases have been stable since FY 2017. Priority Mail and Parcel Select Ground continue to fluctuate.

Some GRIs of published Postal Service retail competitive product rates have not been consistent and stable over the past six years. The 2018 Annual Mail Industry Survey, conducted by Idealliance, found that the most important way that the Postal Service could be a better business partner would be to keep postal rates predictable. Inconsistency in GRIs can create uncertainty and difficulty in future planning for Postal Service customers.

Figure 2. Priority Mail Express, Priority Mail, Parcel Select Ground, and USPS Retail Ground Average Annual General Rate Increases FY 2014 – FY 2019



Source: USPS Notice 123 FY 2014 - FY 2019 for Priority Mail Express and Priority Mail.

¹³ 'Ground' refers to USPS Retail Ground - retail parcels five-pound location 1 & 2.

¹⁴ '1-Day' refers to Priority Mail Express – retail letters, large envelopes and parcels five-pounds location 1 & 2.

¹⁵ '2-Day' refers to Priority Mail – retail letters, large envelopes and parcels five-pounds location 1 & 2.

¹⁶ GRIs were calculated from Notice 123 USPS FY 2014 – FY 2019 USPS Retail Ground, Priority Mail Express, and Priority Mail prices.

Pricing Approaches

In addition to the annual GRI, others in the industry have controlled the growth in GRI by using various fees, such as peak season add-on fees, with rate increases.¹⁷ Further, the Postal Service could look at current operations to identify additional revenue opportunities, such as hold mail fees and increased product offerings.

Peak Season Pricing

Others in the logistics and delivery sector control GRI increases by using them with additional fees, such as peak season fees. Peak season charges could be applied during times of high demand, for example, between November and January, to cover the higher costs for handling mail products. These higher costs are associated with more overtime paid, additional transportation costs due to increased trips, and higher facility usage. The Postal Service processed an additional 334.7 million packages from October to December 2018, compared to January to March 2019.

“The Postal Service should modernize its pricing management system to enhance the pricing process for competitive products”

Hold Mail Pricing

The Postal Service offers a hold mail service where it will hold all mail, including letters and packages, for all individuals at an address. Hold mail requests must be for a minimum of three days and a maximum of 30 days; additional days can be approved. Currently, there is no charge to request hold mail services, although holding mail requires additional space for storage and additional resources for handling.

Table 1 shows the number of hold mail services provided for FY 2017, FY 2018, and

FY 2019 October through July. The demand for hold mail services grew by about 6 percent from FY 2017 to FY 2018.

Table 1. Total Number of Addresses using Hold Mail Services

FY 2017	FY 2018	FY 2019 (Oct-July) ¹⁸
15,907,147	16,827,985	14,405,436

Source: Application System Reporting: Hold Mail Request by Channels.

Increased Product Offerings

A modernized pricing management system would provide real-time data for management to evaluate. This agility could provide management with opportunities to identify products and services that may be increasing or decreasing in demand. In addition, the system could also provide insight into popular mail products within the industry, supporting efforts to introduce additional products or services that meet current customer needs.

The Postal Service should modernize its pricing management system to enhance the pricing process for competitive products. The recently acquired technologies and available pricing software systems could be used to update the current pricing system. These enhancements should allow the Postal Service to more frequently evaluate real-time data that could impact pricing decisions, as well as stabilize GRIs across all competitive products, and identify and justify the decision to pursue appropriate strategies to increase revenue.

Recommendation #1

We recommend the **Acting Vice President, Pricing and Costing**, evaluate available options to modernize the pricing management system.

¹⁷ Additional charges, taxes, or payments that an organization adds to the already existing cost of a good or service. Fees are added to shipments based on various factors and may offer additional shipping benefits to customers. Some fees charged include address correction fees, delivery redirect fees, inside delivery, and storage charges.

¹⁸ At the time of analysis, only Oct – July for FY 2019 data was available.

Management's Comments

Management agreed with the recommendation to evaluate available options to modernize its pricing management system for competitive products. Regarding the recommendation, management stated a new pricing management system will need to have quantitative and qualitative aspects. Further, management stated they will consider the following criteria in their evaluation:

- Potential efficiencies gained against the initial and ongoing costs of a new system,
- The ability of a system to incorporate all data used to make competitive product pricing decisions; and
- The return on investment of a new system.

Additional considerations will be given to the costs of system implementation, system maintenance, data migration, training, and required updates. The target implementation date is December 21, 2020.

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

Evaluation of Management's Comments

The U.S. Postal Service Office of Inspector General (OIG) considers management's comments responsive to the recommendation in the report and corrective actions should resolve the issues identified in the report.

All recommendations require OIG concurrence before closure. The OIG requests written confirmation when corrective action is completed. The recommendation 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.

Appendices

Click on the appendix title below to navigate to the section content.

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Appendix A: Additional Information

Scope and Methodology

The scope of this project includes the review of processes and methodologies impacting competitive product pricing and competitors' best practices, from FY 2014 through FY 2018.

To achieve our objective, we:

- Reviewed Postal Service regulations, policies, and procedures related to competitive product pricing systems.
- Reviewed the PRC website to identify filings submitted associated with competitive products.
- Analyzed financial statistics for competitive products.
- Reviewed the Postal Service's general rate increases, pricing systems, and pricing strategies.

- Evaluated industry pricing management system best practices, including; pricing technologies, general rate increases, and pricing approaches. We did not evaluate specific software or technological products.

We conducted this audit from October 2018 through September 2019 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 finding and conclusions based on our audit objective. We believe that the evidence obtained provides a reasonable basis for our finding and conclusions based on our audit objective. We discussed our observations and conclusions with management on August 15, 2019, and included their comments where appropriate.

We assessed the reliability of Postal Service prices for competitive products data by completing tests for completeness, reasonableness, accuracy, and validity. We determined that the data were sufficiently reliable for the purposes of this report.

Prior Audit Coverage

Report Title	Objective	Report Number	Final Report Date	Monetary Impact
<i>Shortpaid PC Postage Parcels</i>	To evaluate Postal Service controls to identify and collect short paid postage on PC Postage parcels.	MS-AR-17-007	05-9-2017	None
<i>Postal Service Pricing Strategy</i>	To determine the adequacy and agility for managing existing prices and introducing new prices to ensure cost coverage and protect revenue.	CI-AR-12-002	12-09-2011	None

Appendix B: Management's Comments

STEVEN PHELPS
ACTING VICE PRESIDENT, PRICING AND COSTING



September 5, 2019

LAZERICK POLAND
DIRECTOR, AUDIT OPERATIONS

SUBJECT: Competitive Products Pricing Best Practices, Report Number CP-AR-10-DRAFT

Recommendation 1: We recommend the Acting Vice President, Pricing and Costing, evaluate available options to modernize the pricing management system.

Management Response/Action Plan:

The Postal Service agrees to evaluate options to modernize the pricing management process, considering gained efficiencies and ability to more effectively price competitive products. Pricing and Costing continuously seeks opportunities to increase efficiencies in competitive-products pricing with respect to the quality of data inputs, the timeliness of data and market intelligence, and the ability to leverage technology for greater pricing efficiency. As outlined in the OIG's report, pricing is not strictly a quantitative exercise. Some of the inputs come from market intelligence, customer feedback, and observed market responses to competitor pricing and other initiatives. Any new system will need to have both quantitative and qualitative aspects.

Criteria to be considered when evaluating pricing management systems include potential efficiencies gained against the initial and ongoing costs of a system, the ability of a system to incorporate all data and other pertinent information in making competitive pricing decisions, leveraging detailed data at the price cell level to make detailed pricing decisions, and identifying trends to make customized pricing decisions. In addition, given the costs of system implementation, system maintenance, data migration, training, and required updates, the organization will determine whether the benefits warrant the expenditures. Whether that system is adopted will depend on an evaluation of the return on investment as compared to today's pricing management process.

In summary, the Postal Service agrees to evaluate pricing management systems for our competitive product pricing. Factors included in the evaluation will be efficiencies expected to be gained against upfront and ongoing costs, the extent to which pertinent information, both quantitative and qualitative, can be incorporated, and the kinds of dynamic pricing decisions that can be enabled.

Target Implementation Date: December 21, 2020.

Responsible Official: Steven Phelps, Acting Vice President, Pricing and Costing

A handwritten signature in blue ink that reads "Steven Phelps".

Steven Phelps

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WASHINGTON DC 20260-5657
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CC:

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