RISC Report

Addressing the Diverse Needs and Wants of Rural America: Opportunities for the U.S. Postal Service

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Addressing the Diverse Needs and Wants of Rural America: Opportunities for the U.S. Postal Service
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Executive Summary

You squint out your living room window, looking for signs of your postal carrier. Until recently, you would not have been waiting. The gift you had shipped online was also available at a store in town. You could have just driven the five miles to town, but the store closed three months ago, leaving you with fewer options. You remind yourself that your carrier will be here soon with your package, and you can go back to making dinner. You are one of 51 million rural Americans, making up 16.5 percent of the U.S. population.

Post offices are a staple of main streets from California to Maine. This presence reflects over 200 years of postal and American history, particularly in rural America. In fact, the U.S. Postal Service operates 13,000 rural postal retail locations, representing 39 percent of all postal retail locations. Delivery footprints extend from many of these facilities, creating hub-and-spoke networks that connect rural and non-rural areas.

To gather insights on rural America, the U.S. Postal Service Office of Inspector General (OIG) analyzed what rural customers across the country need and want from USPS. Our findings center on three key themes:

1. **Retail:** Rural customers have a unique need for a postal retail presence.
2. **Engagement and Perception of Mail and Parcels:** Rural customers have distinct engagement with the Postal Service, including how they interact with mail and parcels.
3. **Social Value:** The Postal Service has important “social” value for rural customers that is not directly derived through postal product and service transactions.

The OIG’s research highlights that rural and non-rural Americans have a lot in common. Both groups value the Postal Service, personally and in their community. Yet, the rural postal experience has unique characteristics. In terms of the social value of the Postal Service, rural customers are more likely to view USPS as valuable to their community. There are also some distinct characteristics of rural engagement with mail and parcels. The OIG’s survey indicates that rural customers are less likely to receive mail or package delivery at their physical address. For packages, the Postal Service uses “parcel lockers” as one way to store a package until a customer is able to pick it up. Because customers in rural areas may be more likely to have to come in to pick up their packages, the OIG found that parcel lockers could be increasingly important in rural areas. The OIG also found that gathering periodic feedback from rural customers could help the Postal Service ensure retail product and service offerings reflect customer input.

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2 Parcel delivery lockers or “parcel lockers” are physical lockers that the Postal Service uses to store packages until a customer can come pick up his or her packages.
What the OIG Recommends

To ensure that retail product and service offerings consider distinct or changing rural customer needs, we recommend USPS management:

1. Assess the feasibility of partnering with state and local governments to offer additional hunting and fishing licenses in rural areas, as allowable.

2. Assess how to cost-effectively and proactively solicit rural customer preferences nationwide where retail survey data are currently unavailable.

Because rural customers may be less likely to get mail or package delivery to their physical address, and to help consider the needs and wants of rural America, we recommend USPS management:

3. Identify a cost-effective means of tracking parcel locker utilization in rural areas.

4. Develop actionable metrics to identify underutilized large PO Boxes in rural areas and create a plan to convert some of those boxes into parcel lockers as appropriate.
Observations

Introduction

In recent years the United States has been undergoing tremendous demographic change. Many rural areas have seen their share of the total population slowly decline as Americans move into urban and suburban neighborhoods. With these changes, the U.S. Postal Service will remain an important fixture in rural America. For more than 200 years, the Postal Service has been a lifeline for rural communities. This role endures and may be even more vital in years to come, as USPS continues to link rural communities with the national economy.

Objectives, Scope, and Methodology

The U.S. Postal Service Office of Inspector General (OIG) conducted market research to see what rural customers across the country need and want from the Postal Service. The primary objectives guiding this research focused on three questions:

1. What value does the Postal Service have in rural communities?
2. How do rural customers currently use specific postal products and services?
3. What products or services could the Postal Service consider offering to rural America?

The OIG consulted with NORC at the University of Chicago, whose staff has expertise in survey research in rural communities, to ask rural Americans what they need and want from the Postal Service. We defined rural areas using Rural Urban Commuting Area (RUCA) codes.3 Developed by the U.S. Department of Agriculture (USDA), RUCA codes classify U.S. Census tracts using measures of population density, urbanization, and daily commuting. The use of RUCA codes to define rural areas is consistent with standard research practices in a number of applied areas, such as health, safety, and education.4 The estimated rural population based on the NORC methodology is 51 million people according to the 2010 Census, or about 16.5 percent of the U.S. population.5 The OIG used this definition throughout our research, including for our analysis of postal data.6 The OIG’s research approach followed a four-step methodology:

1. Analyzing past surveys, postal facilities, and demographic datasets. The OIG analyzed existing datasets, including OIG and USPS surveys, USPS retail facilities data,7 U.S. Census Bureau data, and USDA data (for example, RUCA codes for census tracts).8
2. Hosting qualitative, moderated online discussion boards. In November 2018, the OIG engaged 61 rural respondents in in-depth, three-day online conversations designed to explore how rural customers currently use postal

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3 The OIG commissioned NORC at the University of Chicago (formerly known as the National Opinion Research Center) to run a quantitative survey consistent with the methodology described in Appendix A. The OIG used the survey data for its analysis, which is described in Appendix A. We refer to this OIG-commissioned survey as the “OIG survey” throughout this paper.


5 Primary RUCA codes range from one to ten. For our research, people living in census tracts with RUCA codes greater than or equal to four are defined as “rural,” and people living in census tracts less than four are “non-rural.” Please see Appendix C for additional information on the definition of rural.

6 The definition of rural used in this white paper is different than the Postal Service’s definition of rural, which refers to a type of delivery. The Postal Service has three different types of delivery — city, rural, and contract delivery service. Please see OIG, Modes of Delivery, Report No. DR-AR-11-006, July 11, 2011, https://www.uspsoig.gov/document/modes-delivery.

7 References to retail locations in this white paper consist of the following different facility types and subtypes: Administrative Post Offices, Branches, Carrier Annexes, Contract Postal Units, Finance Branches (Delivery and No Delivery), Finance Stations (Delivery and No Delivery), Mail Post Offices, Part Time Post Offices, Remotely Managed Post Offices, Stations, and several other types offering retail window hours based on the Facilities Database. The OIG calculated that there are approximately 33,000 facilities in total and 13,000 of these retail facilities are rural.

8 Census data refers to the U.S. Census Bureau’s Topologically Integrated Geographic Encoding and Referencing (TIGER) GIS datasets. For links to USDA’s files, please see https://www.ers.usda.gov/data-products/rural-urban-commuting-area-codes.aspx.

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products and services, and what they value most from the Postal Service. The OIG analyzed these conversations to inform its subsequent methods and analysis – including our quantitative survey of customers.

3. **Fielding a quantitative survey of customers.** In May 2019, the OIG worked with NORC to survey 2,533 respondents (1,311 rural and 1,222 non-rural) to test ideas that rural customers raised in the qualitative online discussion boards. A full description of the research methodology is contained in Appendix C.

4. **Interviewing Postal Service employees and executives.** In Spring 2019, the OIG interviewed 14 postmasters and former postmasters in rural areas, across all seven USPS Areas, and attended a chapter meeting of the United Postmasters and Managers of America. We asked questions about the needs of their rural communities and discussed issues related to rural postal products and service offerings, several of which were tested in the OIG survey. The OIG also interviewed senior USPS management to clarify nationwide priorities and policies.

Figure 1: Rural Areas are Geographically Dispersed Across the United States
The most recent Census (2010) highlights the dispersed nature of rural communities in the United States.

Source: OIG analysis of USDA RUCA data and Census TIGER GIS data.

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9 Quotes in this white paper refer to anonymized participant comments from the OIG’s online discussion boards. Please see Appendix C for specific details on the OIG’s qualitative research methodology.

10 The OIG surveyed the non-rural U.S. population to benchmark against rural. Appendix C describes NORC’s methodology, which underpins the statistical analysis that the OIG conducted on survey data (Appendix A), and the geographic analysis of postal data (Appendix B). The survey included some telephone survey responses from non-internet households to account for lower levels of internet access in rural areas. Unless otherwise explicitly stated, survey results for rural and non-rural populations are statistically significant and are shown in Appendix A.
Rural America Values Social Aspects of the Postal Service in Their Communities

This section examines what the Postal Service means to rural Americans. We explore broad measures, such as brand perception and engagement, along with USPS’s social value for rural customers.

- **Brand Perception and Engagement**
- **Value to the Community**
- **Human Interaction is Critical**
Brand Perception and Engagement

The OIG’s survey reveals that most Americans are generally satisfied with the Postal Service, but rural customers are more likely to be very satisfied. One reason for this is that rural customers are more likely to derive value from non-transactional aspects of their post office visits.

Rural Customers Have a Positive Perception of the Postal Service Brand

Most customers (rural and non-rural) have a positive view of the Postal Service brand. While both groups are generally satisfied with the Postal Service — 83 percent of rural and 81 percent of non-rural respondents said they are either very or somewhat satisfied — rural postal customers are more likely to be very satisfied with the Postal Service (50 percent compared to 44 percent).

Rurality is a Driver of Brand Satisfaction

The OIG conducted regression analysis to better understand rurality and demographics as they affect brand satisfaction. We found that rurality is a statistically significant positive driver of satisfaction. This is true even when controlling for other factors, including how frequently the person goes to the post office and their demographics (for example, gender). There are other possible reasons why this might be the case. For instance, this could be related to the regional differences in USPS productivity. Past OIG research highlights that higher real wages in different geographic areas are associated with a more productive workforce, which could affect customer satisfaction.11

Why the Postal Brand is Strong in Rural America

The OIG used its survey data to identify additional reasons why rural customers value the Postal Service. One reason is that rural customers have more frequent social interactions at post offices. For instance, rural customers are more likely to talk with friends at the post office (37 percent compared with 23 percent of non-rural). Rural customers are also more likely to be interested in other non-transactional activities such as using bulletin boards. Thirty-one percent of rural customers, compared to 26 percent of non-rural customers, were interested in using a physical bulletin board at the post office. Customers use these to, for instance, catch up on upcoming community events. Overall, rural customers may be more likely to say they are very satisfied with the Postal Service because the postal experience offers greater social value in their communities.

Table 1: Measures of Brand Perception and Engagement

<table>
<thead>
<tr>
<th>Measure</th>
<th>Rural</th>
<th>Non-Rural</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very satisfied with USPS overall</td>
<td>50%</td>
<td>44%</td>
</tr>
<tr>
<td>Enjoy the overall retail experience</td>
<td>50%</td>
<td>43%</td>
</tr>
<tr>
<td>Wait less than 5 minutes in line at the post office</td>
<td>70%</td>
<td>52%</td>
</tr>
<tr>
<td>Talk to friends at the post office</td>
<td>37%</td>
<td>23%</td>
</tr>
<tr>
<td>Interested in using a public bulletin board</td>
<td>31%</td>
<td>26%</td>
</tr>
</tbody>
</table>

Source: OIG analysis of rural and non-rural OIG survey data.

Value to the Community

The OIG’s survey sheds light on the social value the Postal Service provides to rural communities. This is non-transactional value, which does not appear on any balance sheet but is nevertheless important to the postal experience.

The Institution Is Valuable to Rural Communities

Rural customers are more likely to view the Postal Service as valuable to their community. Fifty-six percent of rural customers (and 48 percent of non-rural customers) said the Postal Service is very valuable to their communities. Adding in those who said the Postal Service was somewhat valuable, this figure rises to 81 percent compared to 78 percent for non-rural customers.

Where Everybody Knows Your Name

Rural customers are more likely to know the names of postal staff. In fact, a majority of rural customers (56 percent) know the name of their clerk, carrier, or postmaster compared with only 44 percent of non-rural customers. The OIG also found that personal familiarity affects satisfaction — a customer who knows at least some of their post office staff is 29 percent more likely to have a positive retail experience, even controlling for demographics or different reasons to visit. Since rural customers are more likely to know their postal staff, this helps explain their positive views. For instance, a customer who knows their clerk’s name creates a different dynamic — dropping off a package means catching up with a friend. While the “social value” of the Postal Service in rural America is not necessarily something USPS can directly monetize, the data suggest that USPS should explore how to leverage the social value it brings to rural communities.

Wait Time in Line

Even controlling for wait time in line, rural customers are more likely to have a positive experience. This could be related to the social value of the rural post office, since more than half of rural customers know their postal staff by name. Postmasters that the OIG spoke to also confirmed this. For instance, one rural postmaster said he knows his customers at a close level because their children go to school together. Therefore, the rural experience may have a distinct social element, rather than being purely transactional.

Table 2: Measures of Value to the Community

<table>
<thead>
<tr>
<th>Measure</th>
<th>Rural</th>
<th>Non-Rural</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value of USPS to the community: very valuable</td>
<td>56%</td>
<td>48%</td>
</tr>
<tr>
<td>Know their carrier by name</td>
<td>29%</td>
<td>23%</td>
</tr>
<tr>
<td>Know their clerk by name</td>
<td>26%</td>
<td>15%</td>
</tr>
<tr>
<td>Know their postmaster by name</td>
<td>12%</td>
<td>6%</td>
</tr>
<tr>
<td>Know either their carrier, clerk, or postmaster by name</td>
<td>56%</td>
<td>44%</td>
</tr>
</tbody>
</table>

Source: OIG analysis of rural and non-rural OIG survey data.

“I find comfort in personally knowing my mailman and the people working at the post office.”

—Rural Missouri Resident
Human Interaction is Critical

When asked about their experiences at post offices, some customers highlighted the importance of human interaction. Rural customers were less likely to be interested in online self-service options, which means post offices’ physical presence may have an even larger impact in rural areas where customers value human interaction.

What If?

The Postal Service is so ingrained in rural America that it is hard to imagine what its absence would look like. Nevertheless, the OIG asked customers an open-ended question: If your local post office closed, what could the customer not do elsewhere? Both rural and non-rural customers reported that it would affect how they do things like buy stamps or get passport services, but rural customers also indicated they would feel a distinct loss of human interaction. The OIG took a deeper dive into the value of human interaction, and whether this affects rural customers’ interest in online services.

Human Interaction is Valuable to Rural Customers

To test the extent to which human interaction is a valuable component of the rural postal experience, the OIG compared rural and non-rural customers who prefer to pay and receive their bills online. These customers already express a preference for transacting online, so one would expect they might be similarly open to embracing additional self-service options for postal transactions. Surprisingly, even rural customers who prefer online transactions are less likely to be interested in automated online postal services. This includes buying stamps (26 percent of rural customers are interested in buying online compared with 37 percent of non-rural), printing online shipping labels (35 percent are interested compared with 49 percent), and scheduling a package pickup (31 percent are interested compared with 45 percent). While it is difficult to separate and quantify the value of human interaction, these data highlight that rural customers who prefer to transact online are still less likely to be interested in online USPS services, suggesting they value face-to-face interactions in many instances.

Table 3: Interest in Online Self-Service

<table>
<thead>
<tr>
<th>Measure</th>
<th>Rural</th>
<th>Non-Rural</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prefer to receive bills online</td>
<td>33%</td>
<td>46%</td>
</tr>
<tr>
<td>Prefer to pay bills online</td>
<td>59%</td>
<td>74%</td>
</tr>
<tr>
<td>Prefer to both receive and pay their bills online</td>
<td>31%</td>
<td>45%</td>
</tr>
</tbody>
</table>

Of those who prefer to both receive and pay their bills online:

<table>
<thead>
<tr>
<th>Measure</th>
<th>Rural</th>
<th>Non-Rural</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interested in buying stamps online</td>
<td>26%</td>
<td>37%</td>
</tr>
<tr>
<td>Interested in printing shipping labels online</td>
<td>35%</td>
<td>49%</td>
</tr>
<tr>
<td>Interested in scheduling a carrier pickup online</td>
<td>31%</td>
<td>45%</td>
</tr>
</tbody>
</table>

Source: OIG analysis of rural and non-rural OIG survey data.
Engagement and Perception of Mail and Parcels

This section explores how rural customers engage with and perceive mail and parcels. For instance, what types of mail are most relevant to rural customers, and what kinds of goods do they most frequently have delivered?

- Mail, Marketing Mail, and PO Boxes
- Package Delivery
- Parcel Lockers
Mail, Marketing Mail, and PO Boxes

Rural customers have a greater interest in mail and are more likely than non-rural customers to find certain mailed advertisements relevant to their lives. Rural customers are also more likely to have or visit a PO Box.

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"I don’t mind the occasional catalogs from local businesses with sales flyers and ad items. I like to receive news about farming trends and new equipment."

-Rural Montana Resident

Rural Customers Appreciate Mail, Including Marketing Mail

Rural customers are more likely than non-rural customers to look forward to checking their mailbox (41 percent compared to 37 percent non-rural) and sending mail (26 percent compared to 22 percent non-rural). While similar numbers of rural and non-rural customers enjoy receiving mail, rural customers are more likely than non-rural customers to find local ad mail relevant to their lives. This was true for both mailed advertisements and mailed company coupons from local businesses.

The OIG also surveyed customers about other kinds of mail, from solicitations for credit cards to catalogs. Rural and non-rural interest in advertisements and coupons was not significantly different in general. However, rural interest in locally-owned company ads and coupons was higher than non-rural interest. This is important to the Postal Service, especially for services such as Every Door Direct Mail and other Marketing Mail products that help local businesses promote their products and services. Certain types of mailed advertisements may be even more effective in rural areas, where customers find local coupons and advertisements to be more relevant to their lives.

Rural Customers Are Frequent Users of PO Boxes

The OIG survey also found that rural customers are more likely to have and use a PO Box than non-rural customers. Twenty-four percent of rural Americans said they use a PO Box, compared to 17 percent of non-rural Americans. Rural customers with a PO Box are also more active in their engagement with the Postal Service than their non-rural counterparts with a PO Box. Forty-three percent of rural customers with a PO Box check their mailbox six days a week, which is greater than the 33 percent of non-rural customers with a PO Box. One explanation is that some rural customers are required to have mail and parcels shipped to the post office (discussed further in the next section).

Table 4: Types of Mail that are Relevant to You

<table>
<thead>
<tr>
<th>Type of Mail</th>
<th>Rural</th>
<th>Non-Rural</th>
</tr>
</thead>
<tbody>
<tr>
<td>Locally-owned company advertisements</td>
<td>26%</td>
<td>18%</td>
</tr>
<tr>
<td>Locally-owned company coupons</td>
<td>31%</td>
<td>26%</td>
</tr>
<tr>
<td>Credit card offers</td>
<td>20%</td>
<td>21%</td>
</tr>
<tr>
<td>Catalogs</td>
<td>24%</td>
<td>21%</td>
</tr>
</tbody>
</table>

Source: OIG analysis of rural and non-rural OIG survey data.
Package Delivery
The OIG’s survey reveals that most rural and non-rural customers receive similar numbers of packages and order similar sorts of items, such as medicine.

The last place I lived didn’t have home delivery.”
-Rural Nebraska Resident

Packages
According to the OIG survey, rural and non-rural customers both receive about the same number of packages per person. The median rural and non-rural customer receives two packages a month, and about 20 percent of all customers receive five or more packages per month. In addition to volume, the OIG also examined how customers get their packages, and we found that some do not receive delivery of mail or packages to their physical address at all. This can be for a number of reasons. For example, some addresses are ineligible for physical delivery but have PO Boxes instead. The OIG surveyed customers with PO Boxes who are ineligible for street delivery, finding these customers are more likely to be rural; nine percent of rural and four percent of non-rural responders said they use a PO Box because they cannot get mail delivered to their home.

The OIG analyzed package volumes for these customers to see if the lack of delivery service affects package volumes. For instance, one might presume that the burden of coming into the post office to pick up packages would result in fewer packages received. However, the OIG’s survey revealed that the median customer who is ineligible for door delivery receives about the same number of packages as other customers (two packages per month). This makes rurality an important consideration in the Postal Service’s current and future plans to strategically expand parcel lockers.

What Are Rural Americans Getting Delivered?
For the most part, rural and non-rural customers have the same sorts of items delivered, including medicine and household essentials (as shown in Table 5). These data also highlight that most Americans rely on delivery of certain items. More than half of rural and non-rural Americans receive clothes and shoes, and a quarter of rural and non-rural customers have medicine delivered. This demonstrates how the postal network is a lifeline across the country and highlights the importance of reliable and affordable delivery, especially to rural areas where delivery options may be more limited or costly for customers.

Table 5: What Are Customers Having Delivered?

<table>
<thead>
<tr>
<th>Contents of Package</th>
<th>Rural</th>
<th>Non-Rural</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medicine</td>
<td>27%</td>
<td>25%</td>
</tr>
<tr>
<td>Household Essentials</td>
<td>25%</td>
<td>25%</td>
</tr>
<tr>
<td>Clothing or Shoes</td>
<td>52%</td>
<td>53%</td>
</tr>
</tbody>
</table>

Source: OIG analysis of rural and non-rural OIG survey data.

12 Addresses may be ineligible for delivery based on the route and whether the delivery point cannot be “efficiently, safely and conveniently served by the carrier.” See USPS, Postal Operations Manual, Section 631.23, April 2019.
13 On June 30, 2018, the Postal Service began analyzing data pertaining to no-fee “Group E” PO Boxes. Group E PO Boxes are “No-Fee” PO Boxes assigned to addresses where USPS does not provide street delivery. USPS, USPS Retail Digest, June 26, 2018.
Parcel Lockers

The Postal Service is expanding parcel lockers nationwide, but the agency lacks parcel locker utilization data. The OIG also noted consistently high levels of available large (Size 4 and 5) PO Boxes.

Parcel Lockers and Utilization Data

The Postal Service continues to add parcel lockers to retail locations in both rural and non-rural areas. Parcel lockers have cost-cutting implications for the Postal Service nationwide. The rationale for this is simple: fewer home deliveries of bulky hard-to-handle items means delivery and cost savings. Package pickup at a parcel locker also saves postal window clerk time, allowing them to assist other customers. However, USPS does not currently track any data on customer utilization of these lockers. The Postal Service could benefit from tracking parcel locker utilization data, both to understand where parcel lockers are being used and what effect this is having on customer satisfaction. Interest in parcel lockers may vary from community to community. For instance, in some rural communities, a smaller rollout of self-service options like parcel lockers may make more sense. Tracking parcel locker utilization could inform current and future initiatives to strategically expand parcel lockers.

Large PO Boxes (Size 4 and 5)

Large PO Boxes could serve a similar function to parcel lockers, in terms of delivering packages at post offices. Indeed, the Postal Service has existing instructions for its staff that describe how to deliver packages to vacant large (Size 4 and Size 5) PO Boxes in lieu of parcel lockers at post offices that do not have parcel lockers. However, the number of vacant Size 4 and 5 PO Boxes remains consistently high (see Figure 2). This presents an opportunity: the Postal Service could use these large unused PO Boxes as parcel lockers, particularly in facilities where existing parcel lockers are full, or where space limits the capacity of additional parcel lockers. This was confirmed by several OIG interviews with postmasters in rural areas. For instance, one rural postmaster said half of his or her PO Boxes are consistently vacant. Additionally, this postmaster said that small boxes are more popular, which could be because they are cheaper. This highlights large vacant PO Boxes as an opportunity since they may be more likely to be vacant than smaller PO Boxes. Using these underutilized large PO Boxes for parcels would have the added benefit of further cost savings in instances where repurposing would save the Postal Service money from having to purchase additional parcel lockers and possibly reduce extra trips and delivery costs.

“[I would like to see a different system of delivery of packages, which would mean more locker-type bins. Our office only has 3 at this time.]”

-Rural Minnesota Resident

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14 Senior postal management indicated that the vast majority of parcel lockers in rural areas, including those analyzed by the OIG, are manual parcel lockers.


17 USPS, Work Instruction Delivery to PO Box Manual Indoor Parcel Lockers (IPLs) #CSS-2011-2, June 2019.
Figure 2: Nationwide Increase in Parcel Lockers Continues Despite Consistent Numbers of Vacant Large PO Boxes

The OIG analyzed PO Box and Parcel locker data from the last three years. Despite postal guidance to repurpose some unused large (Size 4 or 5) PO Boxes as parcel lockers, the number of vacant large PO Boxes has remained consistently high, which presents an opportunity to repurpose these PO Boxes to meet the increasing need for parcel lockers.

Source: OIG analysis of USPS data.
Retail

This section explores what post offices (retail locations) mean to rural customers. We also examine potential opportunities based on the differences in the rural versus non-rural experiences.

- **Going to the Post Office**
- **Rural Retail Hours Do Not Match Customer Needs and Wants**
- **Gathering Rural Feedback**
Going to the Post Office

Rural customers often go to the post office as part of their routine. They are also more likely than non-rural customers to be interested in post offices potentially offering hunting and fishing licenses.

“\textit{I walked to the post office to mail a package. Since I walked and made the stop to the PO one of several other errands, the experience, on whole, was positive.}”

- Rural Oregon Resident

Rural Customers Visit Post Offices More Frequently

Rural and non-rural customers visit the post office for many of the same reasons — for example, to drop off a package. Forty-nine percent of rural, and 58 percent of non-rural customers said they expect to drop off packages at a retail post office in the near future. Interviews with rural postmasters indicated there was a segment of rural customers who came in regularly. The OIG’s survey confirmed this insight — 35 percent of rural customers go to the post office at least two to three times per month, compared with 28 percent of non-rural customers.

Rural and Non-Rural Customers are Interested in New Retail Products and Services

The OIG asked rural customers about several new possible retail offerings and found that rural customers are most interested in hunting and fishing licenses — 38 percent of rural customers expressed an interest compared to 29 percent of non-rural customers. The Postal Service currently has an agreement with the Department of the Interior to offer Bird Hunting Stamps (also known as “Duck Stamps”) that are used as a license for hunting migratory birds. USPS has offered Duck Stamps for decades, but according to senior postal management it has not explored offering other hunting or fishing licenses, including with state or local governments.\footnote{This could be an opportunity area for USPS.}

<table>
<thead>
<tr>
<th>Retail Measure</th>
<th>Rural</th>
<th>Non-Rural</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visit the post office at least 2-3 times per month</td>
<td>35%</td>
<td>28%</td>
</tr>
<tr>
<td>Interest in Existing Products</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Package drop off</td>
<td>49%</td>
<td>58%</td>
</tr>
<tr>
<td>Package hold/pickup</td>
<td>24%</td>
<td>24%</td>
</tr>
<tr>
<td>Self-service machine to buy stamps</td>
<td>17%</td>
<td>29%</td>
</tr>
<tr>
<td>Self-service machine to buy postage for packages</td>
<td>9%</td>
<td>16%</td>
</tr>
<tr>
<td>Money order</td>
<td>23%</td>
<td>20%</td>
</tr>
<tr>
<td>Passport applications</td>
<td>16%</td>
<td>24%</td>
</tr>
<tr>
<td>Interest in New Products\footnote{The survey asked about other additional non-postal products and services such as coffee and snacks. These food items were not significantly more desired by rural than non-rural customers.}</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hunting or fishing licenses</td>
<td>38%</td>
<td>29%</td>
</tr>
<tr>
<td>Postal gift cards (redeemable for USPS products and services)</td>
<td>20%</td>
<td>21%</td>
</tr>
<tr>
<td>Greeting cards</td>
<td>15%</td>
<td>17%</td>
</tr>
</tbody>
</table>

Source: OIG analysis of rural and non-rural OIG survey data.

\footnote{This issue is very fact specific, and the Postal Service would need to seek approval from the Postal Regulatory Commission.}
Rural Retail Hours Do Not Always Match Customer Needs and Wants

Beyond normal business hours, rural customers want weeknight hours the most. However, rural customers are currently offered far fewer weeknight hours than non-rural customers.

Strong Customer Interest in Weekday Evening Hours

The OIG’s qualitative and quantitative research revealed interest in non-core post office hours. We tested whether customers are more interested in morning or evening hours on weekdays or weekends. The greatest interest for both rural and non-rural customers was in weekday evening hours. In fact, non-rural customers want weeknight hours even more than rural customers (58 percent for rural customers and 64 percent for non-rural), suggesting that weeknight hours are a rural but also a potential national desire. To analyze this issue further, the OIG examined where and when the Postal Service offers retail window hours.

Retail Hours Offered

The OIG analyzed the current retail hours offered in both rural and non-rural areas to understand if hours align with rural customers’ needs and wants. We found that although there is a greater percentage of retail facilities and retail hours overall in rural areas relative to their share of total U.S. population, only five percent of total weeknight hours are offered in rural areas (as shown in Figure 3). This is a mismatch since more than half of rural customers indicated a preference for weeknight hours. Even though non-rural customers also indicated weeknight hours as a top preference, this mismatch disproportionately affects rural communities. In fact, for every 20 weeknight hours, one is rural.

ways to strategically allocate resources to periodically pilot different (for example, staggered) hours in different communities.

### Table 7: Interest in Non-Core Retail Window Hours

<table>
<thead>
<tr>
<th>Retail Measure</th>
<th>Rural</th>
<th>Non-Rural</th>
</tr>
</thead>
<tbody>
<tr>
<td>What Non-Core Retail Hours Would Be the Most Convenient?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weekday evenings (e.g. 5pm - 8pm)</td>
<td>58%</td>
<td>64%</td>
</tr>
<tr>
<td>Saturday afternoons (e.g. 2pm - 5pm)</td>
<td>55%</td>
<td>58%</td>
</tr>
<tr>
<td>Lunch hours (e.g. 11:30am – 1:30pm)</td>
<td>49%</td>
<td>45%</td>
</tr>
</tbody>
</table>

Source: OIG analysis of rural and non-rural OIG survey data.

### Figure 3: Comparing Rural Postal Access to Facilities and Hours

Rural and non-rural interest in non-core hours is highest for weeknights, yet the Postal Service supplies fewer rural weeknight hours. For every 20 weeknight hours, one is rural.

0% 50% 100%

Total Retail Facilities

- Rural: 39%
- Non-Rural: 61%

Total Weekly Window Hours

- Rural: 32%
- Non-Rural: 68%

Total Weekday Evening Hours

- Rural: 5%
- Non-Rural: 95%

Source: OIG analysis of rural and non-rural OIG survey data.
Gathering Rural Feedback
The Postal Service lacks retail survey data for the majority of post offices in rural areas. By better collecting data, USPS can better assess and cater to rural customer needs and wants.

The OIG examined survey data that the Postal Service gathers each year to understand where the Postal Service is gathering rural customer feedback for retail products, services, or retail window hours. One of the largest sources of postal survey data linked to geography is the retail Point of Sale (POS or “retail”) survey. Producing more than a million survey responses each year, the Postal Service uses this survey to calculate part of its Customer Insights (CI) composite index.20 The OIG geographically segmented and analyzed all of the retail survey responses for the two most recent fiscal years using the geographic coordinates of the corresponding retail facility.

The OIG’s analysis reveals gaps where the Postal Service lacks survey response data.21 The OIG examined all 33,000 retail facilities and the corresponding 5-digit ZIP Code geographic areas to produce a map of the geographies that are missing retail survey data from both FY 2017 and FY 2018. The 33,000 retail facilities correspond to approximately 30,000 5-digit ZIP Codes. Of these 30,000 geographic areas, approximately 43 percent (13,000) did not have a single retail survey, and a majority of these 13,000 survey response gaps (8,000) were rural.22 A map of ZIP Code survey data gaps is shown in Figure 4.

Despite the gaps in rural retail survey data, the Postal Service puts considerable resources toward servicing these areas. The OIG calculated that USPS offers more than half (55 percent) of its 20 million rural retail window hours in areas that are missing retail survey data. In other words, USPS is offering the majority of retail window hours without retail survey feedback from its customers. Without any retail survey data, USPS cannot ensure that the hours and services continue to meet distinct needs and wants of its rural customers. It could be feasible, for instance, to gather additional retail feedback in addition to the USPS retail survey.23 While the retail survey’s purpose is not necessarily to drive retail location hour changes, USPS lacks retail survey data across large swaths of rural America. Thus, it may be difficult for the Postal Service to know if it is offering the ideal hours to its rural customers without regular input from those communities.24

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20 The CI Composite Index changes each year. In FY 2017, the CI composite index was based on POS (retail), Delivery, Business Service Network (BSN), Customer Care Center (CCC), and enterprise Customer Care (eCC) surveys. OIG, Delivering the Best Customer Experience, Report No. RARC-WP-18-003, December 13, 2017.

21 There are institutional reasons for these POS (retail) survey gaps. For instance, the POS survey is only available to customers who complete a transaction at one of the approximately 17,900 retail units that use POS equipment. OIG, Customer Retail Experience, Report No. SAT-AR-18-001, September 28, 2018. Another reason could be few transactions at these facilities, which results in fewer survey responses. While the OIG did not cross-walk the 17,900 retail units with POS against the 33,000 retail facilities covered in our research, the OIG analyzed a second CI Composite Index survey — the delivery survey — which also revealed the majority of its gaps are in rural ZIP Codes. One relatively inexpensive way to gauge customer needs and wants in areas lacking retail survey data could be to offer mailable pre-stamped and addressed retail surveys, particularly at facilities lacking POS machines or with few transactions and no survey data.

22 The OIG did not examine all ZIP Codes since not all ZIP Codes have a retail facility offering retail window hours. Some ZIP Codes also contain more than one facility.

23 For instance, the Postal Service currently operates a mystery shopper program to identify root causes and corrective actions that could improve postal customers’ overall retail experience. Please see OIG, Customer Retail Experience, Report No. SAT-AR-18-001, September 28, 2018.

24 Although the POS survey does not explicitly ask customers about preferred retail window hours, the survey does contain an open-ended question through which a customer could request different retail window hours: “What should this Post Office do to improve your satisfaction with the service you received?”
Figure 4: Rural Areas are the Majority of Geographic Areas Lacking Survey Feedback

There are numerous parts of the country where USPS does not collect retail survey data. Many of these pockets are in rural areas. Without hearing from these communities, it could be difficult to understand what they need and want from the Postal Service.

Source: OIG analysis of Census, USDA, and USPS data.
What the OIG Recommends

Improving the Rural Customer Experience

The OIG’s findings point to ways that the Postal Service can enhance product and service offerings to match rural customers’ needs and wants. For example, although the Postal Service lacks parcel locker utilization data, it is still adding new parcel lockers nationwide each year. Rural customers could particularly benefit from USPS strategically tracking and analyzing parcel locker utilization data as well as the availability of large PO boxes, since these customers are more likely to live at addresses that are ineligible for physical delivery. Rural customers also have a distinct interest in hunting and fishing licenses based on the OIG survey.25 Similarly, understanding if and where retail hours could be adjusted to better match customer needs and wants is also important, including non-core hours such as weeknights.

Recommendations

To ensure that retail product and service offerings consider distinct or changing rural customer needs, we recommend USPS management:

1. Assess the feasibility of partnering with state and local governments to offer additional hunting and fishing licenses in rural areas, as allowable.

2. Assess how to cost-effectively and proactively solicit rural customer preferences nationwide where retail survey data are currently unavailable.

3. Identify a cost-effective means of tracking parcel locker utilization in rural areas.

4. Develop actionable metrics to identify underutilized large PO Boxes in rural areas and create a plan to convert some of those boxes into parcel lockers as appropriate.

Conclusion

With 13,000 rural retail facilities (39 percent of all retail facilities) and a delivery network touching all corners of the country, the Postal Service provides a significant number of touchpoints for rural Americans. These touchpoints are not only valuable for the products and services they provide, but for their non-transactional “social” value. This social value does not appear on any balance sheet but is nevertheless important to the postal experience for rural customers.

Considering its large physical presence, the Postal Service is well positioned to maintain and improve the effectiveness and efficiency of rural service. While rural and non-rural customers receive about the same amount of deliveries, such as medicine or clothes, rural customers are less likely to receive mail or package delivery at their physical address. As e-commerce increases, parcel lockers will be increasingly important in rural areas because they increase the flexibility for customers to pick up their packages. The OIG also found that rural customers prefer weeknight hours (for example, they could work far away all day). Together, these insights tell part of a larger story of what rural customers want from the Postal Service today. By better understanding the needs and wants of its rural customers moving forward, the Postal Service can continue to ensure it is providing quality service for all Americans.

Management’s Comments

Regarding recommendation 1, management asserted that legislative change is necessary before the Postal Service can partner with state and local governments to offer services like hunting and fishing licenses. Management agreed with recommendations 2, 3, and 4, and described planned corrective actions for each.
Evaluation of Management’s Comments

The OIG considers management’s comments responsive to all recommendations. However, regarding recommendation 1, the OIG notes that the Postal Service could submit a formal case before the Postal Regulatory Commission (PRC) — which evaluates the legality of such proposals — seeking to partner with state and local governments to provide services like hunting and fishing licenses. The PRC’s ruling would allow the Postal Service to better clarify its current authority, regardless of future legislation. Although management agrees that these services could be an area of opportunity, due to the disagreement on the Postal Service’s current authority, the OIG will consider this recommendation Closed – Not Implemented. The OIG believes that management’s stated corrective actions for recommendations 2, 3, and 4 should satisfy the intent of those recommendations. For those recommendations to be closed, management should provide documentation on the actions taken.

All recommendations require OIG concurrence before closure. 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 below to navigate to the section content.

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Appendix A: Survey Data

The OIG analyzed survey data collected by NORC using the statistical software R to perform statistical tests on the data and consistent with the Methodological Report (Appendix C). This appendix briefly describes the OIG’s methodology to perform these tests, which followed a four-step approach:

1. Data Review: Reviewing descriptive statistics for the survey data (e.g., weighted counts and proportions for both rural and non-rural groups).
2. Relevancy: Identifying potential questions related to the themes and postal data described in this paper for further review and that were appropriate for statistical analyses.
3. Testing: Conducting the appropriate statistical test (for example, chi-squared for testing of different population proportions in rural and non-rural populations). Each test was chosen based on the particular type of question and available data. For instance, some survey questions had six possible responses, while others were Boolean variables with only two possible responses — yes or no.

4. Interpretation: Interpreting the results (a full list of test results is listed in each of the tables in this appendix).

The following are the statistical significance test results for each of the sections of the paper:

- Rural America Values Social Aspects of the Postal Service in Their Communities
- Engagement and Perception of Mail and Parcels
- Retail
### Table 8: Statistical Test Results for Rural America Values Social Aspects of the Postal Service in Their Communities

<table>
<thead>
<tr>
<th>Social Value of the Postal Service in Rural America</th>
<th>Brand Perception and Engagement</th>
<th>Value to the Community</th>
<th>Interest in Online Self-Service</th>
<th>Rural</th>
<th>Non-Rural</th>
<th>Rural</th>
<th>Non-Rural</th>
<th>Rural</th>
<th>Non-Rural</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personally, very satisfied with the Postal Service (USPS)***A</td>
<td>Rural 50%</td>
<td>Non-Rural 44%</td>
<td>USPS is very valuable to the community***A</td>
<td>Rural 56%</td>
<td>Non-Rural 48%</td>
<td>Prefer to receive bills online***A</td>
<td>Rural 33%</td>
<td>Non-Rural 46%</td>
<td></td>
</tr>
<tr>
<td>Personally, somewhat or very satisfied with USPSA</td>
<td>Rural 83%</td>
<td>Non-Rural 81%</td>
<td>USPS is very or somewhat valuable to community*</td>
<td>Rural 81%</td>
<td>Non-Rural 78%</td>
<td>Prefer to pay bills online***B</td>
<td>Rural 59%</td>
<td>Non-Rural 74%</td>
<td></td>
</tr>
<tr>
<td>Rurality is a positive driver of being very satisfied with USPSc</td>
<td>+23%</td>
<td>0 (Ref.)c</td>
<td>Know either their carrier, clerk, or postmaster by name***B</td>
<td>Rural 56%</td>
<td>Non-Rural 44%</td>
<td>Prefer to receive and pay bills online***B</td>
<td>Rural 31%</td>
<td>Non-Rural 45%</td>
<td></td>
</tr>
<tr>
<td>Time in line (% waiting less than 5 minutes)***A</td>
<td>Rural 70%</td>
<td>Non-Rural 52%</td>
<td>Know their carrier by name***B</td>
<td>Rural 29%</td>
<td>Non-Rural 23%</td>
<td>Of those who prefer both to receive and pay their bills online, and are also interested in:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Talk to friends at the Post Office***B</td>
<td>Rural 37%</td>
<td>Non-Rural 23%</td>
<td>Know their clerk by name***B</td>
<td>Rural 26%</td>
<td>Non-Rural 15%</td>
<td>Buying Stamps Online***A</td>
<td>Rural 26%</td>
<td>Non-Rural 37%</td>
<td></td>
</tr>
<tr>
<td>Interested in using public bulletin board**B</td>
<td>Rural 31%</td>
<td>Non-Rural 26%</td>
<td>Know their postmaster by name***B</td>
<td>Rural 12%</td>
<td>Non-Rural 6%</td>
<td>Printing Shipping Labels Online***B</td>
<td>Rural 35%</td>
<td>Non-Rural 49%</td>
<td></td>
</tr>
<tr>
<td>Enjoy overall retail experience***B</td>
<td>Rural 50%</td>
<td>Non-Rural 43%</td>
<td>Familiarity is a positive driver of having a positive overall retail experience**B</td>
<td>+29%</td>
<td>Scheduling a Carrier Pickup Online***B</td>
<td>Rural 31%</td>
<td>Non-Rural 45%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

A Indicates significant difference between groups based on chi-squared test. Responses were ranked on a Likert scale.
B Indicates significant difference between groups based on chi-squared test. Responses were Boolean (yes or no).
C Indicates significant difference between groups based on regression analysis, including demographics (e.g., gender), and how frequently he or she visits the post office.
D Indicates significant difference between groups based on regression analysis, including demographics (e.g., gender), PO Box usage, time spent waiting in line, and rurality. Rural and non-rural columns show combined results (i.e., for both rural and non-rural).
E Indicates reference group for regression.
* Significant at the *95%, **99%, or ***>99.9% level.

Source: OIG Analysis of OIG survey data.
### Table 9: Statistical Test Results for Engagement and Perception of Mail and Parcels

<table>
<thead>
<tr>
<th>Engagement and Perception of Mail and Parcels</th>
<th>Rural</th>
<th>Non-Rural</th>
<th>Types of Mail that Are Relevant to You</th>
<th>Rural</th>
<th>Non-Rural</th>
</tr>
</thead>
<tbody>
<tr>
<td>Look forward to checking your mail**A</td>
<td>41%</td>
<td>37%</td>
<td>Outreach from organizations donations/support (e.g., charities)^A</td>
<td>13%</td>
<td>11%</td>
</tr>
<tr>
<td>Enjoy receiving mail^A</td>
<td>45%</td>
<td>44%</td>
<td>Credit card offers^A</td>
<td>20%</td>
<td>21%</td>
</tr>
<tr>
<td>Enjoy sending mail^A</td>
<td>26%</td>
<td>22%</td>
<td>Non-credit card financial offers (home loan/student loan offers)^A</td>
<td>11%</td>
<td>12%</td>
</tr>
<tr>
<td>Use a PO Box***B</td>
<td>24%</td>
<td>17%</td>
<td>Locally-owned company advertisements***A</td>
<td>26%</td>
<td>18%</td>
</tr>
<tr>
<td>Of those who use PO Boxes:</td>
<td></td>
<td></td>
<td>Locally-owned company coupons***A</td>
<td>31%</td>
<td>26%</td>
</tr>
<tr>
<td>Visit a Post Office 2-3 times per month or more frequently***A</td>
<td>68%</td>
<td>43%</td>
<td>Catalogs^A</td>
<td>24%</td>
<td>21%</td>
</tr>
<tr>
<td>Check your mailbox 6 days a week***A</td>
<td>43%</td>
<td>33%</td>
<td>Newsletters^A</td>
<td>15%</td>
<td>14%</td>
</tr>
</tbody>
</table>

A Indicates significant difference between groups based on chi-squared test. Responses were ranked on a likert scale.

B Indicates significant difference between groups based on chi-squared test. Responses were Boolean (yes or no).

* Significant at the *95%, **99%, or ***>99.9% level.

Source: OIG Analysis of OIG survey data.
Table 10: Statistical Test Results for Engagement and Perception of Mail and Parcels

<table>
<thead>
<tr>
<th>Package Volume</th>
<th>Rural</th>
<th>Non-Rural</th>
<th>What are Customers Having Shipped?</th>
<th>Rural</th>
<th>Non-Rural</th>
</tr>
</thead>
<tbody>
<tr>
<td>How many packages do you order either online, by phone, or subscription to be shipped to you?</td>
<td></td>
<td></td>
<td>What do you order to be shipped to you?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>None</td>
<td>11%</td>
<td>9%</td>
<td>Medicine</td>
<td>27%</td>
<td>25%</td>
</tr>
<tr>
<td>1 package per month</td>
<td>20%</td>
<td>20%</td>
<td>Groceries</td>
<td>8%</td>
<td>12%</td>
</tr>
<tr>
<td>2 packages per month</td>
<td>20%</td>
<td>21%</td>
<td>Prepared food (e.g. meal-kits)</td>
<td>8%</td>
<td>11%</td>
</tr>
<tr>
<td>3 packages per month</td>
<td>17%</td>
<td>17%</td>
<td>Household essentials (e.g., toilet paper)</td>
<td>25%</td>
<td>25%</td>
</tr>
<tr>
<td>4 packages per month</td>
<td>14%</td>
<td>13%</td>
<td>Required items for my job</td>
<td>15%</td>
<td>17%</td>
</tr>
<tr>
<td>5 packages or more per month</td>
<td>18%</td>
<td>20%</td>
<td>Clothing or shoes</td>
<td>52%</td>
<td>53%</td>
</tr>
<tr>
<td>Median number of packages ordered per month</td>
<td>2</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

A Indicates significant difference between groups based on chi-squared test. Responses referred to one of categories of volume levels.

B Indicates significant difference between groups based on chi-squared test. Responses were Boolean (yes or no).

* Significant at the *95%, **99%, or ***>99.9% level.

Source: OIG Analysis of OIG survey data.
Table 11: Retail Statistical Test Results

<table>
<thead>
<tr>
<th>Products and Services</th>
<th>Rural</th>
<th>Non-Rural</th>
<th>Which Retail Window Hours are Most Convenient?</th>
<th>Rural</th>
<th>Non-Rural</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visit the post office at least 2-3 times per month****</td>
<td>35%</td>
<td>28%</td>
<td>How convenient would each of the following non-core hours be based on your schedule?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interested in the following existing products:</td>
<td></td>
<td></td>
<td>Weekday mornings (e.g. 6am-8am)*</td>
<td>35%</td>
<td>33%</td>
</tr>
<tr>
<td>Package drop off****</td>
<td>49%</td>
<td>58%</td>
<td>Weekday evenings (e.g. 5pm-8pm)****</td>
<td>58%</td>
<td>64%</td>
</tr>
<tr>
<td>Package hold/pickup</td>
<td>24%</td>
<td>24%</td>
<td>Saturday mornings (e.g. 6am-8am)*</td>
<td>31%</td>
<td>32%</td>
</tr>
<tr>
<td>Kiosk for buying stamps****</td>
<td>17%</td>
<td>29%</td>
<td>Saturday afternoons (e.g. 2pm-5pm)*</td>
<td>55%</td>
<td>58%</td>
</tr>
<tr>
<td>Kiosk for shipping postage****</td>
<td>9%</td>
<td>16%</td>
<td>Sunday mornings (e.g. 6am-8am)*</td>
<td>20%</td>
<td>18%</td>
</tr>
<tr>
<td>Money order*</td>
<td>23%</td>
<td>20%</td>
<td>Sunday afternoons (e.g. 2pm-5pm)****</td>
<td>33%</td>
<td>39%</td>
</tr>
<tr>
<td>Passport applications****</td>
<td>16%</td>
<td>24%</td>
<td>Daily, during lunch hours (e.g. 11:30am-1:30pm)****</td>
<td>49%</td>
<td>45%</td>
</tr>
<tr>
<td>Interested in new products:</td>
<td></td>
<td></td>
<td>At least one of the non-core hours above would be more or less convenient for me*</td>
<td>93%</td>
<td>94%</td>
</tr>
<tr>
<td>Hunting or fishing licenses****</td>
<td>38%</td>
<td>29%</td>
<td>Are existing hours reliable?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Postal gift cards (redeemable for USPS products and services)*</td>
<td>20%</td>
<td>21%</td>
<td>Is your post office open when it’s supposed to be?*</td>
<td>95%</td>
<td>94%</td>
</tr>
<tr>
<td>Greeting cards*</td>
<td>15%</td>
<td>17%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coffee*</td>
<td>21%</td>
<td>21%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Snacks (e.g. cookies, pastry, donuts)*</td>
<td>18%</td>
<td>18%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

A Indicates significant difference between groups based on chi-squared test. Responses referred to one of several frequency categories.
B Indicates significant difference between groups based on chi-squared test. Responses were Boolean (yes or no).
* Significant at the *95%, **99%, or ***>99.9% level.
Source: OIG Analysis of OIG survey data.
Appendix B: Postal Data

This appendix briefly summarizes the steps the OIG took to gather, segment, and analyze postal data. The OIG used two pieces of software to conduct this analysis: (1) ArcGIS Pro, and (2) the statistical software R. The OIG conducted all of its analysis geographically to align with Appendix C (methodology). For each section of the paper, the OIG’s calculations relied on the same five steps:

1. **Counting the Number of Rural Facilities** – The OIG first identified the universe of all USPS facilities using USPS geodata. These data contained both ZIP Codes and latitude and longitude, which the OIG used to match with rural census tracts based on Census and USDA data.

2. **Retail Facilities** – Next, the OIG aggregated a list of all postal retail facilities using postal data. Some of the facilities in the previous step could be processing and distribution centers that do not offer retail window hours, and therefore, were removed. The OIG used this step to filter out inapplicable facilities data, selecting only retail facilities, and of those, only those postal facilities offering retail window hours.

3. **Hours** – The OIG subsequently aggregated, segmented, and analyzed USPS retail facilities for: (1) total hours per week, and (2) the non-core hours windows listed in Table 7 (customer hours preferences), and (3) annual retail window hours based on 52 weeks in a year.

4. **PO Box and Parcel Locker Data** – The OIG also aggregated, segmented, and analyzed PO Box and parcel locker data according to which facilities are rural and non-rural.

5. **Customer Insights Survey Data** – Last, the OIG aggregated, segmented, and analyzed two fiscal years of retail point of sale data for FY 2017 and FY 2018 using facility identification numbers, their geocoordinates, and census tract data with rurality codes (see Appendix C).

The following provides a summary of how the OIG used the postal data analysis for the different sections of this paper.

**Engagement and Perception of Mail and Parcels**

**Parcel Lockers and Utilization Data**

The OIG analyzed large PO Box (sizes 4 and 5) and parcel locker data to better understand challenges and opportunities for the Postal Service moving forward. The OIG examined parcel locker and PO Box data by segmenting the data geographically nationwide, as well as isolating data in rural and non-rural areas. Graphs of these data over time are shown in Figure 2.
**PO Box and Parcel Locker Analysis Over Time**

Table 12 highlights that vacancy rates have remained stable in both rural and non-rural areas over the past three years. At the same time, parcel lockers have grown over the past three years (see Table 13). While the rate of growth fluctuates from month to month, parcel lockers continue to increase over time, highlighting the importance of self-service in both rural and non-rural areas. One way the Postal Service could use these data strategically would be to test whether new deployments matched geographic areas of high utilization. Geographic areas with high parcel locker utilization would potentially demonstrate that the lockers are placed in areas where they are needed most.

Moreover, matching utilization with customer survey data (e.g., customer satisfaction) could improve insights and analysis even further to identify which expansions are most successful. However, the OIG was unable to calculate parcel locker utilization since USPS does not track parcel locker utilization data. Similarly, USPS does not have a threshold to alert management that PO Box vacancy rates are too high. Without a threshold to identify when a size 4 or 5 PO Box has been vacant too long, the OIG was unable to evaluate whether the amount of vacancies exceeded a particular threshold.

### Table 12: Size 4 and Size 5 PO Boxes Remained Constant Over the Past Three Years

<table>
<thead>
<tr>
<th>Date</th>
<th>Total Vacant Size 4 + 5 PO Boxes</th>
<th>Rural Vacant Size 4 + 5 PO Boxes</th>
<th>Non-Rural Vacant Size 4 + 5 PO Boxes</th>
<th>Rural Growth</th>
<th>Non-Rural Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>March-16</td>
<td>336,942</td>
<td>50,762</td>
<td>284,712</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>June-16</td>
<td>336,602</td>
<td>50,850</td>
<td>284,262</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>September-16</td>
<td>337,704</td>
<td>50,912</td>
<td>285,314</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>December-16</td>
<td>339,578</td>
<td>51,080</td>
<td>287,018</td>
<td>0%</td>
<td>1%</td>
</tr>
<tr>
<td>March-17</td>
<td>339,756</td>
<td>50,966</td>
<td>287,304</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>June-17</td>
<td>341,422</td>
<td>51,038</td>
<td>288,886</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>September-17</td>
<td>338,352</td>
<td>50,974</td>
<td>285,890</td>
<td>0%</td>
<td>-1%</td>
</tr>
<tr>
<td>December-17</td>
<td>344,508</td>
<td>51,266</td>
<td>291,704</td>
<td>1%</td>
<td>2%</td>
</tr>
<tr>
<td>March-18</td>
<td>343,860</td>
<td>51,164</td>
<td>291,704</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>June-18</td>
<td>345,146</td>
<td>51,246</td>
<td>292,374</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>September-18</td>
<td>343,124</td>
<td>51,192</td>
<td>290,434</td>
<td>0%</td>
<td>-1%</td>
</tr>
<tr>
<td>December-18</td>
<td>346,922</td>
<td>51,446</td>
<td>293,968</td>
<td>0%</td>
<td>1%</td>
</tr>
<tr>
<td>March-19</td>
<td>346,388</td>
<td>51,334</td>
<td>293,532</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>

Source: OIG analysis of postal data.

Note: the sum of rural and non-rural PO Boxes may not equal the total due to less than one percent of parcel lockers lacking geodata.
### Table 13: The Number of Parcel Lockers Continues to Grow

<table>
<thead>
<tr>
<th>Date</th>
<th>Total Parcel Lockers</th>
<th>Rural Parcel Lockers</th>
<th>Non-Rural Parcel Lockers</th>
<th>Rural Growth</th>
<th>Non-Rural Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>March-16</td>
<td>241,280</td>
<td>75,148</td>
<td>165,229</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>June-16</td>
<td>255,127</td>
<td>78,127</td>
<td>175,693</td>
<td>4%</td>
<td>6%</td>
</tr>
<tr>
<td>September-16</td>
<td>257,484</td>
<td>79,411</td>
<td>177,162</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>December-16</td>
<td>268,024</td>
<td>81,871</td>
<td>185,017</td>
<td>4%</td>
<td>3%</td>
</tr>
<tr>
<td>March-17</td>
<td>280,864</td>
<td>87,369</td>
<td>192,303</td>
<td>5%</td>
<td>7%</td>
</tr>
<tr>
<td>June-17</td>
<td>331,378</td>
<td>100,299</td>
<td>229,861</td>
<td>18%</td>
<td>15%</td>
</tr>
<tr>
<td>September-17</td>
<td>342,232</td>
<td>103,387</td>
<td>237,627</td>
<td>3%</td>
<td>3%</td>
</tr>
<tr>
<td>December-17</td>
<td>349,403</td>
<td>104,746</td>
<td>243,424</td>
<td>2%</td>
<td>1%</td>
</tr>
<tr>
<td>March-18</td>
<td>356,745</td>
<td>106,947</td>
<td>248,520</td>
<td>2%</td>
<td>2%</td>
</tr>
<tr>
<td>June-18</td>
<td>363,368</td>
<td>108,912</td>
<td>253,178</td>
<td>2%</td>
<td>2%</td>
</tr>
<tr>
<td>September-18</td>
<td>365,162</td>
<td>109,292</td>
<td>254,952</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>December-18</td>
<td>366,678</td>
<td>109,901</td>
<td>255,999</td>
<td>0%</td>
<td>1%</td>
</tr>
<tr>
<td>March-19</td>
<td>373,554</td>
<td>112,210</td>
<td>259,299</td>
<td>2%</td>
<td>2%</td>
</tr>
</tbody>
</table>

Source: OIG analysis of postal data.

### Retail

#### Non-Core Retail Window Hours

The OIG’s research identified retail window hours as a pain point for rural customers. To analyze this issue from the postal (supply) perspective, the OIG aggregated, segmented, and analyzed USPS retail facilities hours. The OIG first aggregated these hours on a weekly basis because the Postal Service maintains its hours on a daily basis, and the OIG had to perform the calculation to aggregate up each day of the week. The OIG aggregated the 7-day-a-week retail window hour totals for approximately 33,000 postal retail facilities, and then multiplied the weekly totals by 52 weeks to produce annual totals. The OIG calculated that the Postal Service offers approximately 60 million retail window hours (19.7 million in rural areas and 41.3 million in non-rural areas).

When the OIG lined up the hours the Postal Service offers, there were several interesting insights. First, although rural and non-rural customers both expressed preference for weeknight hours more than any other non-core hours segment, rural customers receive fewer hours offered — 5 percent of total weeknight hours offered by USPS. The OIG calculated several similar statistics to align the different hours preferences with USPS data. A list of the Postal Service’s retail window hour segments is contained in Table 14.
Table 14: Number of Annual Non-Core Retail Window Hours Per Year

<table>
<thead>
<tr>
<th>Non-Core Hours Offered by the Postal Service</th>
<th>Rural</th>
<th>Non-Rural</th>
<th>Rural</th>
<th>Non-Rural</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weekday evenings (SPM – Close)</td>
<td>71,873</td>
<td>1,311,020</td>
<td>5%</td>
<td>95%</td>
</tr>
<tr>
<td>Lunchtime (11:30AM – 1:30PM)</td>
<td>3,923,504</td>
<td>8,266,440</td>
<td>32%</td>
<td>68%</td>
</tr>
<tr>
<td>Saturday hours*</td>
<td>1,334,788</td>
<td>3,206,424</td>
<td>29%</td>
<td>71%</td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td>19,704,256</td>
<td>41,357,524</td>
<td>32%</td>
<td>68%</td>
</tr>
</tbody>
</table>

Source: OIG analysis of OIG Survey Data.

Gathering Rural Feedback

The OIG used the retail point of sale (POS) dataset to identify where the agency has good data, and some geographic areas where the agency may be missing rural customer insights. The OIG analyzed 3.5 million POS surveys from fiscal years 2017 and 2018 (combined). The OIG took the approximately 33,000 retail facility locations and matched them up to ZIP Codes corresponding to the facility location (some ZIP Codes have more than one retail facility offering retail window hours, and others have none). In total, the OIG calculated that the 33,000 retail facilities correspond to 30,000 unique ZIP Codes. Approximately 13,000 of these ZIP Codes did not generate any retail survey data, and more than half of these (8,000) are in rural areas, while 5,000 of these facilities are in non-rural areas. Despite the lack of survey data in these areas, USPS offers more than half (55 percent) of its 19.7 million rural retail window hours in these areas. The OIG then produced a map (Figure 4) to highlight where the geographies that lack survey data are located.

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31 Rather than split Saturday hours in the morning and afternoon separately as shown in Table 11, the OIG analyzed all Saturday hours together for the purposes of this table.
32 References to retail locations in this white paper consist of the following different facility types and subtypes: Administrative Post Office, Branch, Carrier Annex, Contract Postal Unit Branch, Contract Postal Unit Station, Finance Branch, Finance Branch–No Delivery, Finance Station, Finance Station–No Delivery, Mail Post Office, Part Time Post Office, Post Office Express-Branch, Post Office Express-Station, Remotely Managed Post Office, and Station. All together, the OIG calculated that there are approximately 33,000 facilities that offer at least one retail window hour, and of these, approximately 20,000 are non-rural and 13,000 are rural.
33 An alternative approach would have been to map the facilities with points (e.g., dots) at their exact latitude and longitude. For stylistic purposes, the OIG instead uses 5-digit ZIP polygons to represent these areas.
Appendix C: NORC at the University of Chicago Methodological Report

Presented to
United States Postal Service
Office of Inspector General
1735 N Lynn St 2nd FLR
Arlington VA 22209-2020
US

Presented by
NORC
55 East Monroe Street, 30th Floor
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Methodological Report
This report summarizes and justifies the methodological approach (e.g., methodology and each of the different phases of the project) employed to accomplish the overarching project objectives of accessing and measuring various aspects of the rural experience with the United States Postal Service (USPS).

**Definition of Rural**

NORC has extensive expertise in reaching and researching rural populations, including our rural focused Walsh Center on Rural Health Analysis. NORC has completed projects ranging from the study of rural hospitals to understanding drug use in various rural areas (e.g., Appalachia). Turning specifically to our AmeriSpeak panel, our sampling frame procedure ensures adequate representation in rural areas, even those not well covered by the United States Postal Service Delivery Point Sequence File. Additionally, we conduct our recruitment using multiple methods, including in-person for non-responders, and completed all interviews via both phone and web to best accommodate all panelists.

Rural Urban Commuting Area (RUCA) codes are measured two ways, using primary and secondary measurements. RUCA codes are available for all AmeriSpeak panelists and we defined rural customers via the use of AmeriSpeak geographical data. We relied only on primary RUCA codes for all AmeriSpeak panelists, and these were included for all respondents in all deliverables, allowing investigation of differences between consumers living in different types of rural communities. Primary RUCA codes greater than or equal to 4 and less than or equal to 10 are defined as rural. The use of RUCA codes to define rural areas is consistent with standard research practices in a number of applied areas, such as health, safety, and education (Pathak et al., 2018; McAndrews et al., 2017; Hawley et al., 2016). RUCA codes were also appropriate for this project’s purposes since commuting patterns may be one factor in shaping the needs or wants of rural customers in rural areas who may visit post offices as part of their commute. The inclusion of RUCA codes on all samples allows considerable flexibility during analysis.

Only AmeriSpeak respondents within RUCA codes 4 – 10 were included in the qualitative Online Discussion Boards phase of the project (Phase I) and only after undergoing an additional screener survey. AmeriSpeak already possesses most demographic and personal data of the respondents in their panel. For this reason,

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34 RUCA codes align with the OMB’s metropolitan/micropolitan county definitions but have the advantage of using census tracts as the base unit of reference, which provides “a much finer-grained measure of rurality than the OMB classification” (Hawley, Koziol, Bovaard, 2017: p. 9). The 2010 Census estimated population of RUCA codes 4-10 is 51 million, or about 16.5% of the U.S. population. For further information on the definition of RUCA codes 4 – 10 see: [https://www.ers.usda.gov/data-products/rural-urban-commuting-area-codes/documentation/](https://www.ers.usda.gov/data-products/rural-urban-commuting-area-codes/documentation/)
the screener consisted only of questions designed to help us collect a variety of rural respondents in terms of household size, household type, etc. The language found in the screener was general and did not alert respondents to the complete nature of the study.  

The next phase (Phase II) of the project was the quantitative survey. The Phase II definition of rural was consistent with Phase I, ultimately delivering a boolean variable that flagged rural and non-rural responses based on the RUCA code corresponding to where they lived.  

For both project phases, we considered biases and population heterogeneity that could affect rural customers. We examined and ensured that our approach addressed several possible sources of bias within the rural population (e.g., notwithstanding the small number of Phase I respondents). For example, rural residents have more limited internet access (Strover et al., 2017; Federal Communications Commission, 2015), and lower education levels (Koricich et al., 2018) when compared to urban residents.  

Our approach considered these factors in the design; for example, the inclusion of the telephone component of the AmeriSpeak Panel mitigates bias that may be introduced due to an online-only approach, as respondents may choose to respond via internet or telephone. Similarly, the questionnaire was carefully reviewed for language that may be confusing to rural consumers. Other differences between rural and non-rural consumers (United States Census, 2016) may exist, such as differences in age (rural consumers are more frequently older), race/ethnic identity (rural consumers are more frequently white), and these factors are consistently considered in all NORC surveys, including our flagship studies such as the General Social Survey and the Survey of Consumer Finances.  

NORC’s AmeriSpeak Panel  

Using NORC’s probability based panel AmeriSpeak, we recruited rural respondents for the online discussion boards in Phase I, including any supplemental recruiting. We recruited a mix of rural and non-rural respondents for the Phase II (survey) of the project. Unlike opt-in or convenience samples, AmeriSpeak is a probability based,
nationally representative panel of the US. Because the AmeriSpeak Panel is drawn from NORC’s National Frame, the Panel has increased coverage in rural areas, when compared to studies using other national sampling frames, and better than opt-in panels or even Address Based Sampling (ABS) in bias reduction. To accomplish this, AmeriSpeak uses a mixed mode approach, where panelists are invited to participate in studies either online, or via a telephone interview with a NORC interviewer. This mixed-mode approach substantially improves coverage in rural areas, where there may be web accessibility issues.

**Phase I: Online Discussion Boards**

During Phase I, NORC conducted three online discussion groups over the course of three days. Respondents received a consent statement explaining the nature of the study, the duration and risks of their participation, and that unattributed quotes may be used in the final reporting. Survey research repeatedly finds that the process of defining research objectives and exploring early-stage concepts is best performed via group-based qualitative research (such as focus groups or group discussions) (Eisenhower, 1994; Kreuger, 1994; Snijkers, 2002). Since this project is focused on broadly understanding the needs and wants of rural customers, this approach allowed the OIG to gather customer feedback in a structured format without limiting or narrowly directing the discussion.

**General Concerns for Qualitative Online Discussion Boards**

There are some limitations to group discussions such as focus groups or online discussion boards. Two of the most critical to the goal of gathering high-quality, generalizable data are “bandwagoning” (Cosenza & Fowler, 2000) and the use of convenience sampling to form such groups (Stewart & Shamdasani, 2014). In essence, “bandwagoning” takes place when less assertive participants bandwagon on the thoughts and opinions of more assertive participants. This phenomena of “groupthink” is often seen in group decision-making settings (Janis, 1971). Second, because of the high cost of gathering a representative sample for just a handful of respondents, convenience sampling still remains the most widely used method of forming focus groups.

Our methodology corrected for both of these pitfalls. First, the use of online discussion boards retains the ability to gather a variety of respondent input but mitigates the
tendency towards “groupthink.” Second, the ecological validity of focus groups is often in question when qualitative data gathered are based on convenience samples (Robinson, 2014). The use of the NORC AmeriSpeak panel allows us to gather a broader, more representative sample.

NORC used the AmeriSpeak panel to recruit between 15-20 rural customer participants per Board. Round 1 resulted in 16 participants. Round 2 resulted in 24 participants. Finally, round 3 resulted in 21 participants, resulting in 61 qualitative online discussion board participants in total, and ultimately 61 unique participant transcripts.

Recruited participants included a mix based on the definition of rural, and included considerations of varying internet access, employment, gender, educational level, age, race/ethnic identity, rurality and location (including distance/proximity to a post office location).

**Project-Specific Concerns for Qualitative Online Discussion Boards**

The online discussion boards consisted of a general discussion regarding respondents’ high-level perceptions of the Postal Service and their post office’s role in their area/community, discussions of how respondents use specific services in their post offices (mailing, packages, P.O. boxes, retail, etc.), and a discussion of respondent needs and wants regarding the goods and services their post office offers. Participants were asked to respond to a number of prompts from the board moderator, as well as interact with other participants, and respond to each question from the moderator. Although qualitative research is not intended to be generalized to the population of interest, the use of the AmeriSpeak Panel in recruiting participants provides assurance that ‘professional’ respondents will not be included in the discussion boards.

Following each of the online discussion boards, NORC analyzed the responses gathered and generated a brief summary report for each of the three groups. The report included data on the most widely held Postal Service perceptions, the most widely reported uses of postal services (e.g., delivery and retail), and the most widely voiced concerns or needs of the rural community. These qualitative data aided in the development of the questionnaire used in Phase II. Upon completion of Phase I, NORC also provided detailed transcripts of the online discussion boards to USPS for their use.

**Phase II: Quantitative Questionnaire**

NORC’s reputation in survey methodology is based on a commitment to the highest quality survey research practices. We employ an approach known as the Total Survey Error method (TSE) in developing our questionnaires, which recognizes the potential for error at every stage of survey design, implementation, and analysis (Weisberg 2009). TSE is a cognitive approach that considers the mental shortcuts and shortcomings that people often display when responding to a questionnaire. These potential pitfalls can be due to respondent’s incorrect comprehension of survey questions, respondent
memory and recall problems, respondent difficulties in judging the frequency of events, or respondent’s unwillingness to honestly answer sensitive questions, among others (Tourangeau, Rips, & Rasinki, 2000).

NORC researchers have been pivotal in developing systematic ways to address these problems by testing a variety of techniques in question wording, response-ordering, measuring attitude strength, attitude intensity, and attitude ambiguity across various modes of administration such as in-person, telephone, web, and mobile devices (Wolf, Joye, Smith, & Fu 2016; Schuman & Presser 1996). NORC also optimizes our surveys for mobile participation, as we know that up to one-third of participants use a mobile device to participate (this is particularly true for lower-income and younger participants).

For Phase II, NORC collaborated with the OIG Rural research team to develop and fine tune a 10-15 minute survey of 41 questions (counting multi-part questions as one). NORC then recruited a mix of both rural and non-rural respondents to complete the survey using the AmeriSpeak panel. AmeriSpeak fielded the survey and administered it using a mixed-mode method of telephone interviewing and online self-response. We hypothesized that while some experiences and perceptions will be similar across rural and non-rural respondents, but that some will differ. As such, both rural and non-rural respondents were targeted and sampled (using proportional quota sampling). Ultimately 1,311 rural, and 1,222 non-rural, respondents completed the survey for a total of 2,533 respondents. These sample sizes are adequate to reasonably represent both populations (margin of error = 4% non-rural, margin of error = 2% rural), as well as detect significant differences between the two groups.

Using the Data

The data collected from the questionnaire is generalizable, representative data of the U.S. population (both urban and rural) and allows extensive analysis both at the initial stages of post-data collection as well as at later stages that may extend beyond the timeframe of the project dates. Possible statistical analyses using these data could include cross-tabulation, parametric inferences (e.g., chi-squared), correlation, regression (e.g., linear and logistic regression), and other types of analysis. However, the appropriate weights must be used in all statistical analyses to ensure adequate manipulation and representation of the data.

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41 These margins of error are calculated for a confidence level of 95 percent with a 2018 estimated total U.S. population of 326.8 million, a 2018 estimated rural U.S. population of 56.2M, and a 2018 estimated non-rural population of 270.6M.

42 For research intended for public dissemination, such as the AP or other reputable news sources, acceptable margin of error is 4-8 percent at the 95 percent confidence interval. Given NORC does considerable research in collaboration with the Associated Press, we look to field studies with a margin of error no greater than 8-10 percent.
A Note on Weighting

The final deliverable included AmeriSpeak-generated weights, based on nationally representative panel recruitment methods. Meaning, data, when weights are properly applied, can be used to generalize to the whole population. In order to select a nationally representative sample, a stratified simple random sample without replacement is selected from NORC’s AmeriSpeak Panel. The stratification variables used for sample selection are race/ethnicity, education, age, and gender. Sample selection takes into account differential response rates by sampling strata so that the set of panel members with a completed interview is a representative sample of adults 18+ years of age.

For households with multiple panelists, we randomly selected one panelist from the household for the actual survey. After this within-household random selection and limiting the panel to one panelist per household, we performed a second random selection to select the required number of panelists for each sampling stratum. The number of panelists that are sampled from each sampling stratum was determined as follows:

The 48 sampling strata are defined by:

- Race/ethnicity (3 categories: Hispanic, non-Hispanic Black, non-Hispanic All Other)
- Age (4 categories: 18-34 years, 35-49 years, 50-64 years, 65+ years)
- Education (2 categories: some college/associate degree or less, 4-year college graduate or above)
- Gender (2 categories)
  - These 48 sampling strata are used for selecting a representative sample of the target population adults 18+ years of age.
  - The required total number of completes is proportionately allocated to each stratum based on the most recent Current Population Survey (CPS) distribution.
  - The required number of completes for each stratum is inflated by the reciprocal of the expected survey completion rate (which varies by stratum) to obtain the sample size by stratum. The sample size for stratum $k$ is calculated as
    \[ n_k^0 = \frac{np_k}{r_k} \]
    \[ n_k = \frac{n}{\sum p_k} \]
    where $n$ is the required total number of completes, $p_k$ is the population proportion in stratum $k$ as estimated using CPS, and $r_k$ is the expected survey completion rate for stratum $k$. 

[End of Document]
Data are then weighted using a sample selected within sampling strata formed using a cross-classification of the following variables: race/ethnicity (Hispanic, non-Hispanic Black, All Other), age group (18-34, 35-49, 50-64, 65+), education (some college or less, college graduate or above), and sex. Thus, there are a total of 48 strata associated with each survey, and each stratum would have a distinct probability of selection associated with it. The included weights are "Weight 1" and "Weight 2." Weight 1 has weighted on the national distribution of rural vs non-rural, so it’s appropriate to use this for reporting anything on the national sample as a whole.

Weight 2, on the other hand, is weighted individually (rural and non-rural) on the common demographics, so the proportion of rural versus non-rural is not in line with the national proportion. Weight 2 has the benefit of oversampling rural population and is appropriate to use for any analysis to compare rural versus non-rural population; the OIG indicated that this comparison was a core objective of this research. For instance, it would be appropriate to use Weight 2 to compare rural and non-rural populations to detect significant differences using parametric inference (e.g., chi-squared), while Weight 1 could be used for total counts if looking at the nation as a whole (rather than oversampling for detecting statistically significant differences).

We refer to the combined adjustments corresponding to the final person-level panel weight and the inverse of probability of selection from the panel as the final base weight associated with the sampled panel member, and is calculated as follows:

\[ CW_{1i} = \frac{PW_i}{p_i} \]

\( CW_{1i} \) is the set of sampled panel members for the specific client survey, is the final panel weight associated with the sampled panelist, and is the probability of selection of the panelist. As mentioned previously, depends only on the sampling stratum.

Then adjustments are made for non-response and the final step in survey weighting is the raking adjustment to person-level population total. We use the following person-level characteristics in this raking adjustment:

- Age group (18-24, 25-29, 30-39, 40-49, 50-59, 60-64, 65+ years);
- Sex (male, female);
- Census Division;
- Education (less than high school, high school graduate, some college/college graduate);
- Race/ethnicity (Hispanic, non-Hispanic Black, non-Hispanic White, All Other).
Population control totals for each dimension are obtained from the 2017 February CPS supplement. The raked weights can be expressed as:

\[ CW_{3j} = \omega_i CW_{2j} \text{ if } i \in S_2 \]

where \( \omega_i \) is the raking adjustment factor for the \( i \)-th panelist who completed the survey. We determine the amount of trimming for the raked weights based on a mean squared error criterion. After trimming the raked weights, weights are re-raked to the same population totals.

References


Appendix D: Management’s Comments

September 4, 2019

FREDDY DIAZ
A) DIRECTOR, RISC

SUBJECT: Addressing the Diverse Needs and Wants of Rural America: Opportunities for the U.S. Postal Service
Report No. RISC-WP-18-DRAFT

Postal Service Headquarters has reviewed the findings and recommendations outlined in the Office of Inspector General (OIG) Addressing the Diverse Needs and Wants of Rural America: Opportunities for the U.S. Postal Service report. Overall, we agree with the findings. The following are specific OIG comments and our responses:

**OIG Report: Highlights Section:** Rural customers value the social aspects of the Postal Service in their communities — more than half of rural customers (56 percent) know either their postmaster, clerk, or carrier by name. Nine percent of rural customers use PO Boxes because they live at addresses that are ineligible to receive mail or package deliveries; however, they still receive comparable amounts of packages that are held at a post office counter or parcel locker. The majority of rural and non-rural customers want weekday retail window hours. A majority of rural retail hours occur at facilities that lack customer survey data.

**Postal Service Comments:** The Postal Service recognizes its value to rural America and the role it plays in the daily lives of this population segment. The statement that the majority of rural and non-rural customers want weekday retail window hours is somewhat inaccurate since most rural facilities lack customer survey data to indicate such. For non-rural facilities this may be a fact based on customer survey data.

**OIG report: What the OIG Recommends:** Improving the Rural Customer Experience

The OIG’s findings point to ways that the Postal Service can enhance product and service offerings to match rural customers’ needs and wants. For example, although the Postal Service lacks parcel locker utilization data, it is still adding new parcel lockers nationwide each year. Rural customers could particularly benefit from USPS strategically tracking and analyzing parcel locker utilization data as well as the availability of large PO boxes, since these customers are more likely to live at addresses that are ineligible for physical delivery. Rural customers also have
distinct interest in hunting and fishing licenses based on the OIG survey. Similarly, understanding if and where retail hours could be adjusted to better match customer needs and wants is also important, including non-core hours such as weekends.

**Postal Service Comments:** The Postal Service realizes the need for parcel lockers resulting from the increase in online commerce and package delivery. The Postal Service utilizes various types of parcel lockers including those that are free-standing units normally containing 2-4 parcel lockers or lockers that are incorporated into delivery equipment such as Cluster Box Units (CBUs). The Postal Service is exploring other parcel delivery units such as keyless parcel lockers. Many parcels are too large for even our larger parcel lockers and still require delivery to the residence, where applicable.

The Postal Service has made sure there are postal retail locations with alternate hours that are available to postal customers, including those in rural communities, in order to accommodate customers unable to visit a Post Office within normal operating hours. Alternate access sources are also available to assist customers with transactions that are typically completed at a Postal Service customer service counter.

**OIG report: Recommendations:** As part of developing a parcel locker strategy, the OIG recommends that the Postal Service’s Vice President, Delivery and Retail Operations:

- Assess the feasibility of partnering with state and local governments to offer additional hunting and fishing licenses in rural areas, as allowable.
- Assess how to cost-effectively and proactively solicit rural customer preferences nationwide where retail survey data are currently unavailable.

Because rural customers may be less likely to get mail or package delivery to their physical address, and to help consider the needs and wants of rural America, we recommend USPS management:

- Identify a cost-effective means of tracking parcel locker utilization in rural areas.
- Develop actionable metrics to identify underutilized large PO Boxes in rural areas and create a plan to convert some of those boxes into parcel lockers as appropriate.

**Recommendation 1:** Assess the feasibility of partnering with state and local governments to offer additional hunting and fishing licenses in rural areas, as allowable.

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1 This finding aligns with the recent recommendations of the Task Force on the United States Postal System, Department of the Treasury, United States Postal Service: A Sustainable Path Forward, December 2018, p. 8.
Postal Service Response/Action Plan

The Postal Service agrees that this is an opportunity area, the feasibility of which should be assessed if it becomes directly authorized. It is not allowed under current law, however. Under 39 U.S.C. § 411, the Postal Service has broad authority to partner with Federal executive agencies (such as with the U.S. Fish and Wildlife Service for the sale of migratory bird stamps and hunting licenses, or with the Department of State for the acceptance and processing of passport applications), but state, local, and tribal governments are not included in that provision. Absent similar broad statutory authority, the Postal Service is confined to offering only postal services and a limited range of existing non-postal services to those governments (39 U.S.C. § 404(a)(1)-(2), (a)(4)-(5), (e)). The sale of state, local, and tribal hunting and fishing licenses is not among the limited range of currently permitted offerings.

As such, implementation of this initiative would require legislative change, not merely approval from the Postal Regulatory Commission. In recent years a number of Members of Congress have proposed legislation to authorize such arrangements, but none has been enacted yet.

**Target implementation Date:** N/A – Implementation is beyond the Postal Service’s control.

This recommendation is predicated on required legislative change and approval from the Postal Regulatory Commission. Due to required legislative change, the Postal Service cannot implement this recommendation at this time.

**Responsible Manager:** Vice President, Marketing

**Recommendation 2:** Assess how to cost-effectively and proactively solicit rural customer preferences nationwide where retail survey data are currently unavailable.

Postal Service Response/Action Plan

The Postal Service will explore options for a customer survey to ensure rural post office retail window hours align with community input to the extent possible.

**Target implementation Date:** February 2020.

**Responsible Manager:** Vice President Delivery and Retail Operations.

**Recommendation 3:** Identify a cost-effective means of tracking parcel locker utilization in rural areas.
Postal Service Response/Action Plan

The Postal Service will initiate a means of tracking parcel locker utilization in all facilities using parcel lockers as a means of parcel delivery to post office box customers.

Target Implementation Date: June 2020

Responsible Manager: Vice President, Delivery and Retail Operations

Recommendation 4: Develop actionable metrics to identify underutilized large PO Boxes in rural areas and create a plan to convert some of those boxes into parcel lockers as appropriate.

Postal Service Response/Action Plan

The Postal Service will consider the need to convert larger size PO Boxes as they become vacant and will convert them to parcel lockers, when it makes good business sense to do so.

Target Implementation Date: September 2020,

This will vary based on vacancy of larger PO Boxes and will vary by Post Office.

Responsible Manager: Vice President, Delivery and Retail Operations.

Kevin L. McAdams
Vice President
Delivery and Retail Operations

Steven W. Montelth
Vice President
Marketing

cc: CARM
We conducted work for this white paper in accordance with the Council of the Inspectors General on Integrity and Efficiency’s Quality Standards for Inspection and Evaluation (January 2012).