OFFICE OF INSPECTOR GENERAL
UNITED STATES POSTAL SERVICE

What's up with Mail? How Mail Use Is Changing across the United States

RARC Report

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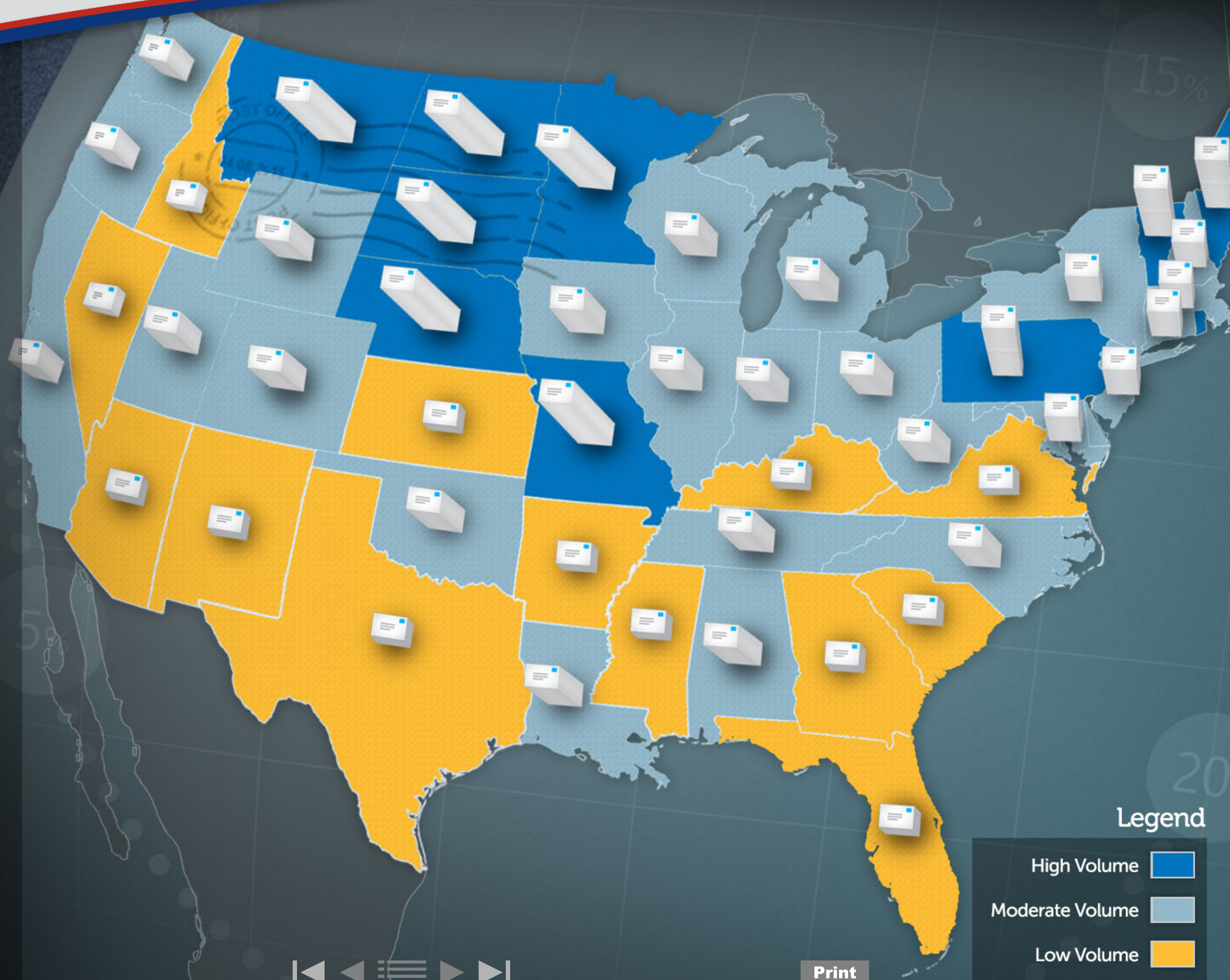

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Executive Summary

Mail volume in the United States continues to decline, but focus on this single, nationwide trend obscures an understanding of how Americans' use of the mail is changing. Moving beyond the narrative of overall decline, examining the use of mail at state and regional levels reveals that many citizens and businesses continue to rely on it for routine transactions and correspondence. A deeper understanding of the nation's changing mail use is essential for the U.S. Postal Service going forward.

In 2015, the U.S. Postal Service Office of Inspector General issued *Declines in U.S. Postal Service Mail Volume Vary Widely across the United States*, a white paper demonstrating that while some parts of the country have experienced precipitous declines in originating Single-Piece First-Class Mail (FCM-SP), volumes in other areas have not declined very much at all.

This paper builds upon that previous work by adding new data for FCM-SP and examining how First-Class Mail Presort (FCM-Presort) and Marketing Mail (previously known as Standard Mail through January 2017) volumes also vary across the country. By adding these other types of mail to the study, we analyze the changing use of over 90 percent of all mail volume. It becomes clear that declines in volume across each of these mail types appear to be slowing or even disappearing, as in the case of Marketing Mail. Also, we show that mail use is not uniform. In some areas of the country, low volumes and slow rates of decline have resulted in stability in mail use while other high volume areas have seen much faster rates of decline. Taken together, however, the differences between the highest- and lowest-volume areas appear to be narrowing over time.

It is important to keep the national use of mail in perspective. In spite of recent declines, at 154 billion pieces per year, the absolute volume of mail is still quite large. In an international

Highlights

The overall rate of mail volume decline has slowed substantially in recent years.

For all mail categories in this study, volume declines vary widely by state and region, but the difference between the highest- and lowest-volume states is narrowing.

States and regions with lower volumes are also generally showing the slowest rates of decline.

Business-to-consumer (B2C) mail like FCM-Presort and Marketing Mail continues to be important to the Postal Service, making up 78 percent of total mail volume in 2015.

Residents of high-income areas receive substantially more FCM-Presort and Marketing Mail per adult.

Residents of rural areas receive less FCM-Presort and Marketing Mail per adult than residents of other areas, especially higher-density suburbs.

context, the raw number of letters handled by the Postal Service is substantially higher than posts in other developed countries. In 2015, the per-adult volume of addressed letter mail in the United Kingdom was about 238 pieces. In comparison, the Postal Service handled 566 pieces of mail per adult from only the three categories of mail examined in this study. This is despite having a substantially larger population spread out over a much wider geographic area. In fact, the Postal Service delivers 47 percent of all mail volume worldwide.

While the original work on FCM-SP identified "mail use" solely as the sending of mail, the current work expands this definition to include the receiving of mail. Analyzing the sender of FCM-SP can reveal how citizens and small businesses continue to use the mail for communication and commerce. Because FCM-Presort and Marketing Mail are sent in bulk, often from large businesses and mail consolidators, we analyze the recipients of those types of mail and how their volumes are changing. The volume patterns of each of these three mail categories differ across the United States.

Along with regional variation in mail volume, this study explores differences related to two critical factors for mail users and the Postal Service: income and population density. Higher-income areas tend to receive more bulk mail. Interestingly, our analysis found that high-density suburbs receive more mail per adult resident than either urban or rural areas, with those rural areas receiving much less mail per adult. However, those rural areas have also experienced the slowest decline. This puts the Postal Service in a difficult position: it faces a tension between operating in a business-like manner by focusing on customers generating the most revenue and providing equitable universal service across the nation to customers who rely on mail to conduct their business and personal communications.

The financial viability of the Postal Service and its very existence depend on the demand for its mail products. While overall declines will continue to present challenges for the Postal Service, data from recent years suggest that rates of volume decline have slowed since the end of the Great Recession of 2008. Although mail volumes are unlikely to return to pre-recession levels, they are also no longer declining at high, recession-level rates. Over the last decade, the Postal Service has adjusted the size of its processing network in response to the smaller amount of mail handled. As it adjusts to the proliferation of digital alternatives and declining volumes, the Postal Service must also align its strategic planning with regional variations in customer demand. A clear understanding of mail volumes and how they are changing across the country can enable the Postal Service to better manage resources, improve existing services, guide the development of new products, and better meet the changing needs of customers.

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Observations

Introduction

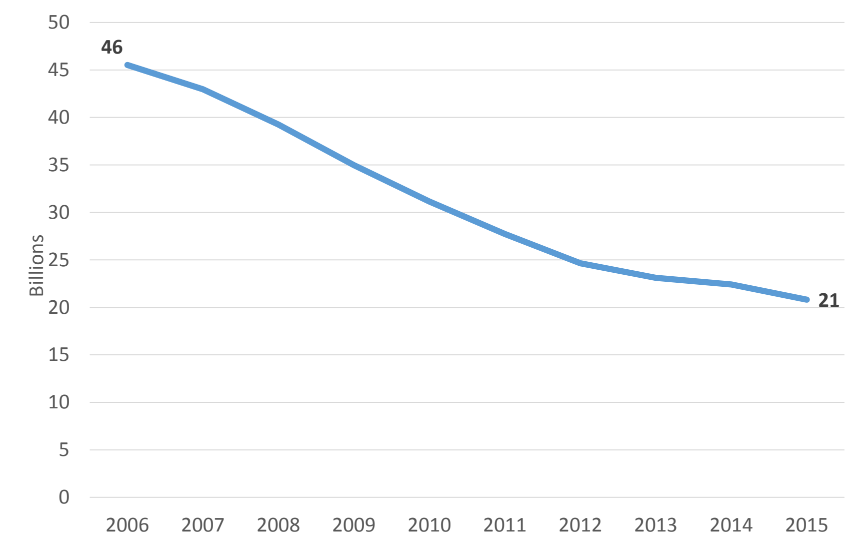
The U.S. Postal Service remains a critically important means of communication and commerce for many Americans. This vital network of facilities and carriers provides a consistent, secure, and ubiquitous avenue for businesses to reach new customers and for citizens to share ideas, conduct financial transactions, and receive ecommerce purchases. Moreover, no other entity provides these critical functions at the same levels of accessibility and affordability.

The viability of the Postal Service depends on the demand for mail products. The general decline in volume of mail in recent years has altered its long-term financial position, forcing the Postal Service to revisit how it can continue to offer efficient, affordable, and universal service to all Americans. Since the Great Recession of 2008, volumes of some mail products carried by the Postal Service have increased. For instance, packages have become an increasingly prominent product for the Postal Service, with volume growing 68 percent to 5.2 billion pieces between 2009 and 2016.[1] The volumes of core mail items including letters, however, have not returned to pre-recession levels. Though the Great Recession saw a precipitous drop in First-Class Mail Single-Piece (FCM-SP) volume, the rate of decline has slowed in recent years, as shown in Figure 1.

Figure 1: Total Volume of Single-Piece First-Class Mail, 2006-2015

Rate of Decline in the Volume of First-Class Mail Single Piece Has Slowed In Recent Years

From 2009-2012, year-to-year declines in FCM-SP total volume were in excess of 10 percent. Since 2013, annual declines have averaged less than 6 percent per year.



Source: OIG analysis of ODIS Volume Data.

However, looking only at total, nationwide volume trends obscures how millions of Americans actually use mail and depend on the Postal Service. In the 2015 white paper *Declines in U.S. Postal Service Mail Volume Vary Widely across the United States*, the U.S. Postal Service Office of Inspector General (OIG) took a first step toward exploring how mail use varied across geographic regions in the country.[2] That report found striking differences in the rate of decline for FCM-SP volume in different regions of the country and that the decline appeared to be slowing overall. Additionally, the report noted that while older households and households with higher levels of income consistently send more pieces of FCM-SP, demographic and economic factors like age, income, and education had little discernable relationship with rate of decline in volume.

1 Figures include Priority Mail, Standard Post, Parcel Select Mail, Parcel Return Service Mail, Standard Parcels, Package Service Mail, First-Class Mail Parcels, First-Class Package Service, and Priority Mail Express, reflecting data from U.S. Postal Service, *Revenue, Pieces & Weight (RPW) FY 2016,* http://about.usps.com/who-we-are/financials/revenue-pieces-weight-reports/fy2016.pdf and U.S. Postal Service, *Revenue, Pieces & Weight (RPW) FY 2009,* http://about.usps.com/who-we-are/financials/revenue-pieces-weight-reports/fy2009.pdf.

2 U.S. Postal Service Office of Inspector General, *Declines in U.S. Postal Service Mail Volume Vary Widely across the United States,* Report No. RARC-WP-15-010, April 27, 2015, https://www.uspsoig.gov/document/declines-us-postal-service-mail-volume-vary-widely-across-united-states.

In response to stakeholder feedback expressing interest in expanding this analysis to other key postal products, this paper assesses geographic variation in the use of three mail categories described in Figure 2: FCM-SP, First-Class Mail Presort (FCM-Presort), and Marketing Mail (previously known as Standard Mail through January 2017).[3] Each of these mail products experienced overall declines coinciding with the Great Recession. None of them have returned to pre-recession levels, though Marketing Mail volume has remained steady in recent years and FCM-Presort actually showed a small increase in total volume from 2014 to 2015 (See Figure 3). Together, these three types of mail constituted over 90 percent of total mail volume in 2015.[4] Analyzing trends among these different classes of mail can indicate whether these products have a sustainable level of demand and inform future strategic planning. In addition, deeply understanding regional differences in mail usage will allow the Postal Service to properly scale its operations and adjust capacity throughout its network while maintaining dependable levels of service to all Americans.

Figure 2: Mail Categories in the 2017 OIG Study

Three Mail Products Examined for This Study

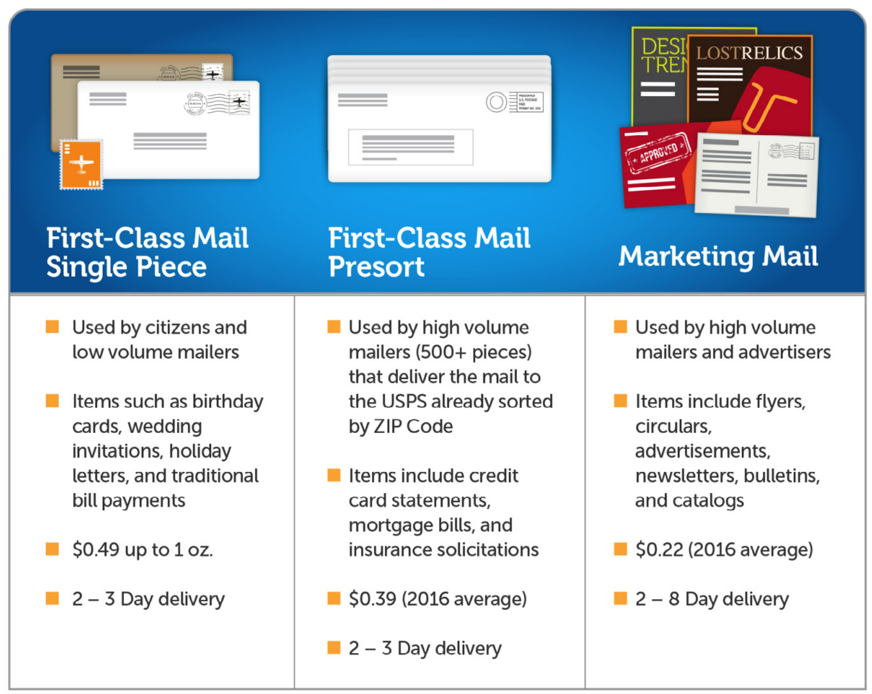
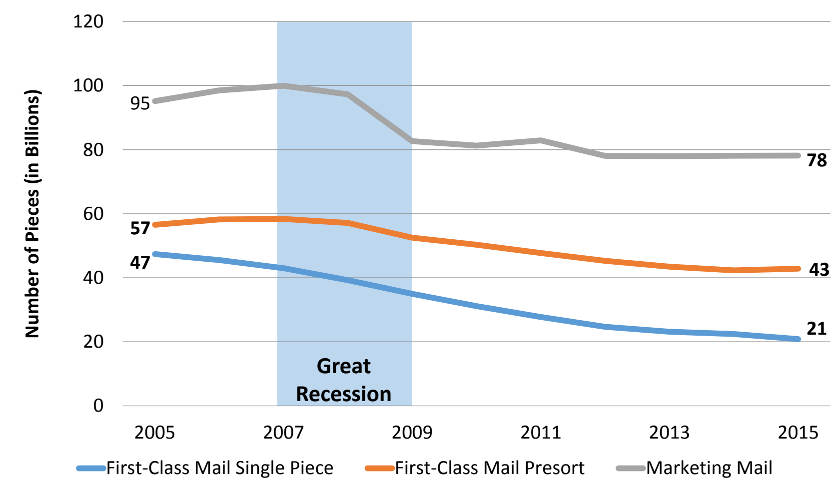


Figure 3: Total Volume Trends for First Class and Marketing Mail

Three Core Mail Products Show Different Rates of National Decline

While the reasons behind the trends vary, three of the Postal Service's core mail products have been experiencing national declines since 2007 or before. However, recent years appear to show a leveling off of volume for each mail type.



Source: OIG analysis of ODIS Volume Data.

3 Standard Mail was rebranded as Marketing Mail as of January 2017 but retains the same requirements, service standards, and postage statements. A phased transition will update postage markings, indicia, and postal supplies. For detail, see http://pe.usps.com/DMMAdvisory/Show?dmmAdvisory=DMMAdvisory122216.htm&year=2016.

4 U.S. Postal Service, *Revenue, Pieces & Weight (RPW) FY 2015*, http://about.usps.com/who-we-are/financials/revenue-pieces-weight-reports/fy2015.pdf, p. 5. The RPW filing reports 20.6 billion pieces of FCM-SP, 40.2 billion pieces of FCM-Presort, 80.1 billion pieces of Marketing Mail (known as Standard Mail at the time), and 154.2 billion total pieces of mail, including Market Dominant and Competitive (Total All Mail).

This paper explores changes in these mail products at three different geographic levels: state, regional, and 3-digit ZIP Code.[5] Through this research, the OIG has found that:

- Mail volume decline has slowed since the Great Recession, indicative of stabilizing volume. All three mail products examined in this study have experienced only single-digit percent volume declines every year since 2013, with FCM-Presort and Marketing Mail exhibiting the potential for modest increases.
- The extent of changes in mail volume continues to vary across geographic regions. However, the variation in how Americans in different parts of the country use mail is narrowing, suggesting a convergence in mail use. Across all products examined, the gap between the highest- and lowest-volume states narrowed significantly.
- Destination data for FCM-Presort and Marketing Mail show that mailers appear to be sending more mail to areas with high incomes and high-density suburban areas.[6]

Despite the fact that the overall decline in mail volume has continued, this research finds that in some parts of the country, mail is being used and relied upon more heavily than in others. While many Americans are sending fewer pieces of FCM-SP than in previous years, an examination of other types of mail, such as FCM-Presort and Marketing Mail, reveals that these products remain a vital channel for businesses to reach citizens, resulting in at least the potential for volume growth in the near future. An easy-to-use, point-and-click interactive map accompanies this report and provides detailed volume and volume change data by state at the following link: please click here for the interactive map.

Analytical Approach

Data for this study are drawn from the Postal Service's Origin Destination Information System (ODIS) database, which provides both originating and destinating information for mailpieces at the 3-digit ZIP Code level.[7] This allows us to measure mail volume by the population as reported by the U.S. Census Bureau's American FactFinder. Because the population data are only current as of 2015, our analysis extends only through that year.

There are 999 possible 3-digit ZIP Codes but only 932 are currently in use. However, the Postal Service reserves a number of these for a few special types of facilities, like government offices and military installations, to increase the efficiency of mail delivery. Because the purpose of this study is to use the origin and destination points to make determinations about mail use by customers in those geographic locations, some of these special ZIP Codes are not included in the analysis. Ultimately, this study analyzes data from 882 of the 932 3-digit ZIP Codes from around the country. As a result, ODIS volume estimates from this study might differ from volumes in Revenue, Pieces & Weight (RPW) documents published by the Postal Service from the same periods.

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5 These data allow the OIG to measure total volume, year-to-year percent changes in total volume, and volume per adult for these products. Additionally, the OIG disaggregated these measures by geographic area to examine more local trends, examining volume data by 3-digit ZIP (for Marketing Mail and FCM-Presort), by selected regions comprised of collections of 3-digit ZIPs, and by state. In so doing, the OIG hopes to control for the effects of network optimization shifting mail volumes to different facilities. The 3-digit prefix of the traditional 5-digit ZIP Code identifies a broader geographic area.

6 Because annual estimates of mean household income are available only at the 5-digit ZIP level, the mean household incomes of 5-digit ZIPs are multiplied by the number of households within the 5-digit ZIP, as calculated by the U.S. Census Bureau. Those resulting products are clustered by 3-digit ZIPs and divided by the aggregate number of households within the 3-digit ZIP, resulting in a mean household income for the 3-digit ZIP.

7 While volume data at the traditional 5-digit ZIP Code level could provide for a more in-depth and localized analysis, after consulting with our experts in postal data collection and management, it was determined the volume estimates at this geographic level were not sufficiently reliable.

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To account for operational shifts in mail handling, we have grouped these ZIP Codes into collections of 115 geographic regions, making every attempt to consider regional economic ties and postal operations.

Finally, we also conducted an analysis by state, including data from Puerto Rico and the District of Columbia. Figure 4 shows the three geographic tiers of our analysis. Together, these areas represent about 99 percent of all mail volume from these three categories (FCM-SP, FCM-Presort, and Marketing Mail). Because the age distributions of residents are similar across states, regions, and 3-digit ZIP Codes, it is difficult to identify relationships between mail use and age based on available data.[8]

Figure 4: The Three Tiers of Analysis

Source: OIG Analysis of ODIS Volume Data and USPS operations map.

While FCM-SP once made up the majority of total USPS mail volume, it now accounts for less than 14 percent.

National Trends

Single-Piece Mail

Even with its declining share of volume, FCM-SP remains the flagship product of the Postal Service. The ability to simply purchase stamps and drop envelopes in a home mailbox, at one of the ubiquitous blue collection boxes, or at a local post office makes FCM-SP the easiest way for individuals to send letter mail. Businesses also continue to rely on it to send letters conducting transactions and correspondence on a small scale. As a result, data about this type of mail's origination point are critical in understanding how people continue to use this core postal product.

When it comes to tracing national volume trends, FCM-SP is an exception among postal products. While total Postal Service mail volume peaked in 2007, FCM-SP volume has been declining since 1996.[9] Annual declines through 2006 had been manageable — averaging less than 2 percent per year, but the pace of decline rapidly accelerated during the Great Recession, quickly jumping to over 11 percent annual decline in total volume.

More recently, rates of decline have slowed down. As seen in Figure 5, the average number of pieces of FCM-SP mail sent by American adults from 2009 to 2012 dropped by nearly one-third. While declines have continued, they slowed in the subsequent

8 Previous research has demonstrated that a number of different factors correlate with mail volume at the household level including age, income, education, and high-speed Internet access. As with age, many of these factors are difficult to analyze at the 3-digit ZIP Code level and above. Also, a number of these factors exhibit multicollinearity making multivariate analysis difficult and unreliable. For instance, mail volume appears to increase with age, but age also appears to be correlated with income. This paper is intended to be a descriptive analysis of mail use within geographic areas rather than a regression-based statistical analysis. For further explanation of the relationship between mail use and age, see U.S. Postal Service Office of Inspector General, *Declines in U.S. Postal Service Mail Volume Vary Widely across the United States,* Report No. RARC-WP-15-010, April 27, 2015, https://www.uspsoig.gov/document/declines-us-postal-service-mail-volume-vary-widely-across-united-states.

9 Among the ZIPs included in this study (excluding government, military, and certain territories), the volume of FCM-SP mail has declined every year since 1996 (approximately 54.3 billion pieces). With approximately 20.8 billion pieces in 2015, FCM-SP volume has experienced a nearly 62 percent decline in volume over those 20 years.

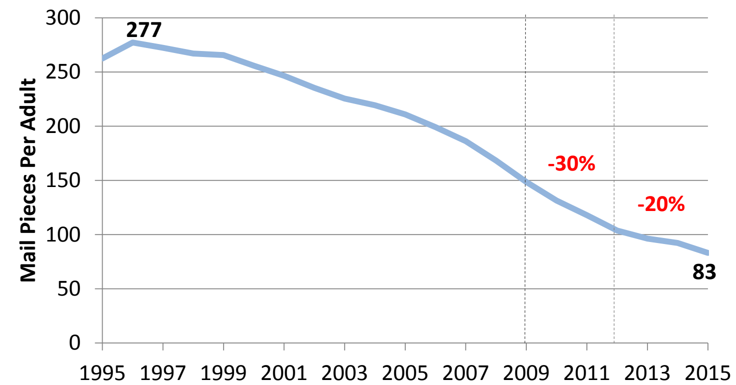
three years. Although volumes are now much lower than in the heyday of the mid 1990s, total First-Class Mail volumes are around the level they were in the early 1980s. The current, slower level of decline leads to greater predictability, stability, and an increasingly clear understanding of the new base level of demand for this hallmark product.

While analyzing the total volume decline can be useful, it does not alone convey how Americans are using the mail because changes in volume can either be mitigated or exaggerated by population shifts. For example, a slow decline in total volume can obscure a dramatic shift in the number of actual mailpieces sent by individuals if the population grows much faster than the volume falls. Instead, measuring the volume per adult resident can yield greater insight into Americans' changing use of FCM-SP.[10] While adults sent an average of 277 pieces of FCM-SP in 1996, by 2015 that number plummeted to 83 pieces per year (See Figure 5).[11]

Figure 5: FCM-SP Mail Pieces per Adult Nationwide, 1995-2015

First-Class Mail Single Piece Has Demonstrated Dramatic Declines since 1996

Whether analyzed in terms of total volume or per adult volume, the use of end-to-end, stamped mail sent by individual citizens has declined substantially. While in 1996, the average adult sent 277 pieces of FCM-SP, by 2015 that declined 70 percent to 83 pieces sent per adult.



Source: OIG analysis of ODIS Volume Data and U.S. Census Bureau American FactFinder, 2015 Population Age 18+.

Bulk Mail

In addition to single-piece mail, the Postal Service also accepts mail shipments in bulk at facilities called Business Mail Entry Units (BMEU).[12] The two largest types of letter mail sent in bulk are FCM-Presort and Marketing Mail. Aside from being submitted to the Postal Service in bulk, these products are similar in that they are often sorted by the mailer based on their destination point, lowering the processing cost for the Postal Service and qualifying for discounted postage rates. Unlike the previous section, which assesses FCM-SP by its point of origination, this section assesses bulk mail volume by its destination point. Because these mail types are sent in bulk, the origination points tend to be concentrated at mail shops, corporate offices, and large-scale preparation facilities. Examining this type of mail by the destination point instead sheds a better light on how it is used by mailers and recipients.

Despite similarities in how the mail is prepared and accepted, FCM-Presort and Marketing Mail are different in a number of ways. For instance, FCM-Presort moves through the mail much faster than Marketing Mail, with delivery in two to three days. First-Class Mail also has content standards. Bills, statements of account, items containing personal information, hand- or type-written material, and postcards must be sent via First-Class Mail.[13] Meanwhile, Marketing Mail typically is used for uniform and less time-sensitive mailings and often consists of advertising materials including flyers, circulars, newsletters, bulletins, and catalogs. Because of the lower delivery standards, lower priority in handling, and the larger portion of preparation work done by the mailer, Marketing Mail is

10 "Volume per adult" refers to a measure of the average number of pieces of mail that adults (population age 18+) are sending from a given area over the course of a year.
11 This study uses the "volume per adult" measure to control for population changes, meaning this 70 percent decrease in usage is slightly higher than the 62 percent decline in total volume over the same period. While growth in population helps mitigate the total volume and revenue losses, it may also indicate the decline in relevance of FCM-SP across the broader population.
12 U.S. Postal Service, "What is Bulk Mail? Is it Right for You?," 2017, http://pe.usps.com/BusinessMail101?ViewName=WhatIsBulkMail.
13 For additional details on First-Class Mail Standards, see http://pe.usps.com/Archive/HTML/DMMArchive20070315/233.htm#wp1037749, or on Marketing Mail Standards, see http://pe.usps.com/Archive/HTML/DMMArchive20070315/243.htm.

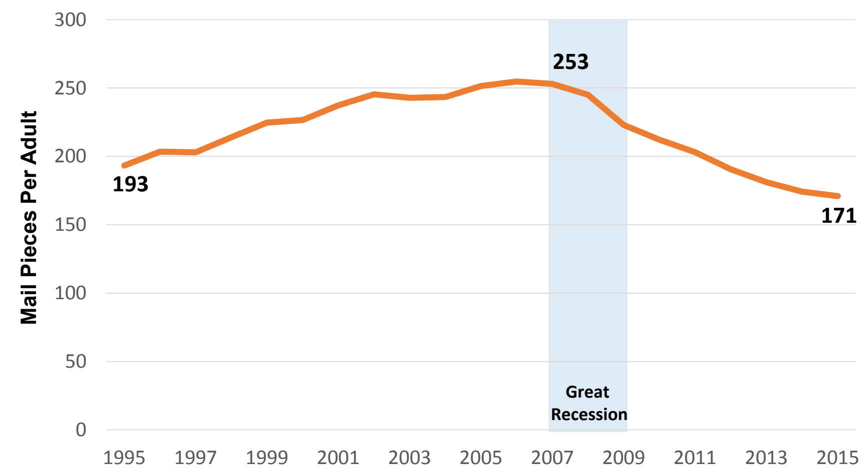
offered at a lower rate — averaging 22 cents per piece in 2015 compared to 39 cents for FCM-Presort.[14]

Even as the overall volume of FCM-SP began to decline after 1996, the volume of FCM-Presort continued to surge until its peak in 2007. That year, the Postal Service handled approximately 58 billion pieces of FCM-Presort in the 882 3-digit ZIPs in this study. Since then, there has been a national decline in the volume of FCM-Presort, but not nearly to the extent of its FCM-SP counterpart. In 2002, FCM-Presort volume (both total and per adult) overtook FCM-SP volume for the first time. Since then, the gap between the two products has grown, with FCM-Presort volume currently at about twice that of FCM-SP, and representing slightly more than a quarter of all mail volume handled by the Postal Service in 2015. American adults received an average of 253 pieces of FCM-Presort mail in 2007, steadily declining to the 2015 rate of 171 pieces per adult — a 32 percent decline, as shown in Figure 6.[15]

Figure 6: FCM-Presort Mailpieces Per Adult Nationwide, 1995-2015

First-Class Mail Presort Has Returned to the Level Seen in the Early 1990s.

Despite declining from its 2007 peak, the number of FCM-Presort mail pieces received by each adult in the U.S. has returned to the level handled by the Postal Service in the early- to mid-1990s.



Source: OIG analysis of ODIS Volume Data and U.S. Census Bureau American FactFinder, 2015 Population Age 18+.

Marketing Mail volume is more than FCM-SP and FCM-Presort combined and in 2015 made up 52 percent of total mail volume.

Marketing Mail is also playing an increasingly prominent role in the Postal Service's product portfolio. At approximately 80 billion pieces, Marketing Mail volume is higher than FCM-SP and FCM-Presort *combined.* In 2015, it made up about 52 percent of total mail volume.[16] Like FCM-Presort, Marketing Mail volume peaked in 2007. At that point, volume in the 882 3-digit ZIP Codes in this study climbed to just shy of 100 billion pieces, followed by a sharp decline to 83 billion pieces just two years later in 2009. Since then, the total volume of Marketing Mail has flattened, at approximately 80 billion pieces per year from 2012 to 2015.

While it is encouraging that the total volume of Marketing Mail is at its highest level since 2011, it is important to keep this trend in perspective. Volume per adult has actually continued to decline. The average American adult received approximately 312 pieces of Marketing Mail in 2015, down roughly 3 percent compared to the previous year. Since the peak of Marketing Mail in 2007, volume per adult is down about 28 percent though much of this decline came in the wake of the Great Recession (See Figure 7). Since 2012, declines in volume per adult have been comparatively small.

14 Average per piece rate determined by dividing total product revenue by total product volume as reported on 2015 RPW filing. See also U.S. Postal Service, *Public Cost and Revenue Analysis*, 2015, http://about.usps.com/who-we-are/financials/cost-revenue-analysis-reports/fy2015.pdf.
15 Because prior to the Great Recession volume was growing at a faster rate than the population, volume per adult of FCM-Presort mail peaked a year earlier than aggregate volume. In 2006, volume per adult was 255 pieces per adult.
16 U.S. Postal Service, *Revenue, Pieces, and Weight Report,* 2015, http://about.usps.com/who-we-are/financials/revenue-pieces-weight-reports/fy2015.pdf.

Even in the face of mounting declines, the raw number of letters handled by the Postal Service is substantially higher than posts in other developed countries. For instance, in 2015, per adult volume of addressed letter mail in the United Kingdom was about 238.[17] In comparison, the Postal Service handled 566 pieces of mail per adult from only the three categories of mail examined in this study. This is despite having a substantially larger population spread out over a much wider geographic area.[18] In fact, the Postal Service delivers 47 percent of all mail volume worldwide.[19]

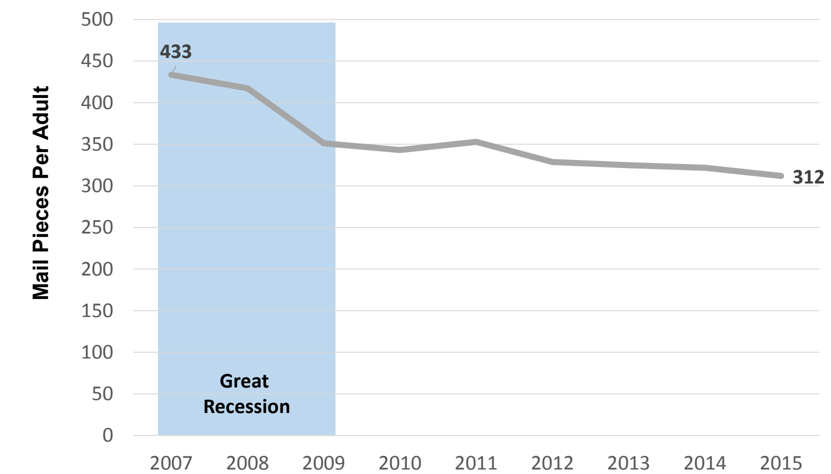
State and Regional Trends

Although national trends in both total volume and volume per adult seem to tell a clear and uniform story of declining volume with a slowdown in the decline in recent years, examining mail use at a more localized level provides a deeper understanding of how Americans are using the mail differently depending on where they live. This paper considers mail volume per adult in two ways: at the state level, and at a more localized regional level. This regional level consists of 115 regions constructed from clusters of 3-digit ZIP Codes, taking into account regional economic ties. Aside from providing deeper insight into the state findings, this regional segmentation attempts to account for the complicated and ever-changing mail processing system.

Figure 7: Marketing Mailpieces per Adult State Resident. 2007-2015

Marketing Mail Declines Have Slowed in Recent Years.

Although Marketing Mail has declined 28 percent since its 2007 peak, the majority of this decline occurred between 2007 and 2009. Since 2012, Marketing Mail volume per adult has declined only 5 percent, to 312 pieces in 2015, the same level seen in 1996.



Source: OIG analysis of ODIS Volume Data and U.S. Census Bureau American FactFinder, 2015 Population Age 18+.

This segmentation also allows us to present our findings in a readily accessible map. Along with this paper, we have created an interactive map for readers who would like to compare volumes and rates of change across states. An easy-to-use, point-and-click interactive map accompanies this report and provides detail by state at the following link: please click here for the interactive map.

Single-Piece Mail

Dividing the national data into smaller geographic units provides a more nuanced picture of the overall decline. Since 1996, some states with high volumes have experienced rapid rates of decline while states with low volumes have experienced slower rates of decline. This has resulted in a slow move toward a new national norm in individuals' use of FCM-SP at the state level. In 1996, the volume difference per adult between the highest- and lowest-volume states was 220 pieces of mail, but by 2015, it had dropped to 111 pieces.[20] This evidence suggests that residents of states are converging toward increasingly similar usage of FCM-SP — with the differences between the average number of pieces sent by adults significantly shrinking.

17 Addressed Letter Mail Volume from Ofcom, UK Postal Services: Industry Key Metrics https://www.ofcom.org.uk/research-and-data/cmr/cmr16/downloads, UK Post data (CSV) Line 109 and adult population data from United Kingdom Office of National Statistics Population Estimates https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates/datasets/populationestimatesforukenglandandwalesscotlandandnorthernireland,Table MYE2: Population estimates by single year of age and sex for local authorities in the UK, mid-2015.

18 In 2015, the Postal Service processed 20.8 billion pieces of FCM-SP, 42.8 billion pieces of FCM-Presort, and 78.1 billion pieces of Marketing Mail (known as Standard Mail at the time) totaling 141.7 billion pieces of mail (letters and flats) according to the USPS Revenue, Piece, and Weight reports.

19 U.S. Postal Service, *Postal Facts: Size and scope*, https://about.usps.com/who-we-are/postal-facts/size-scope.htm.

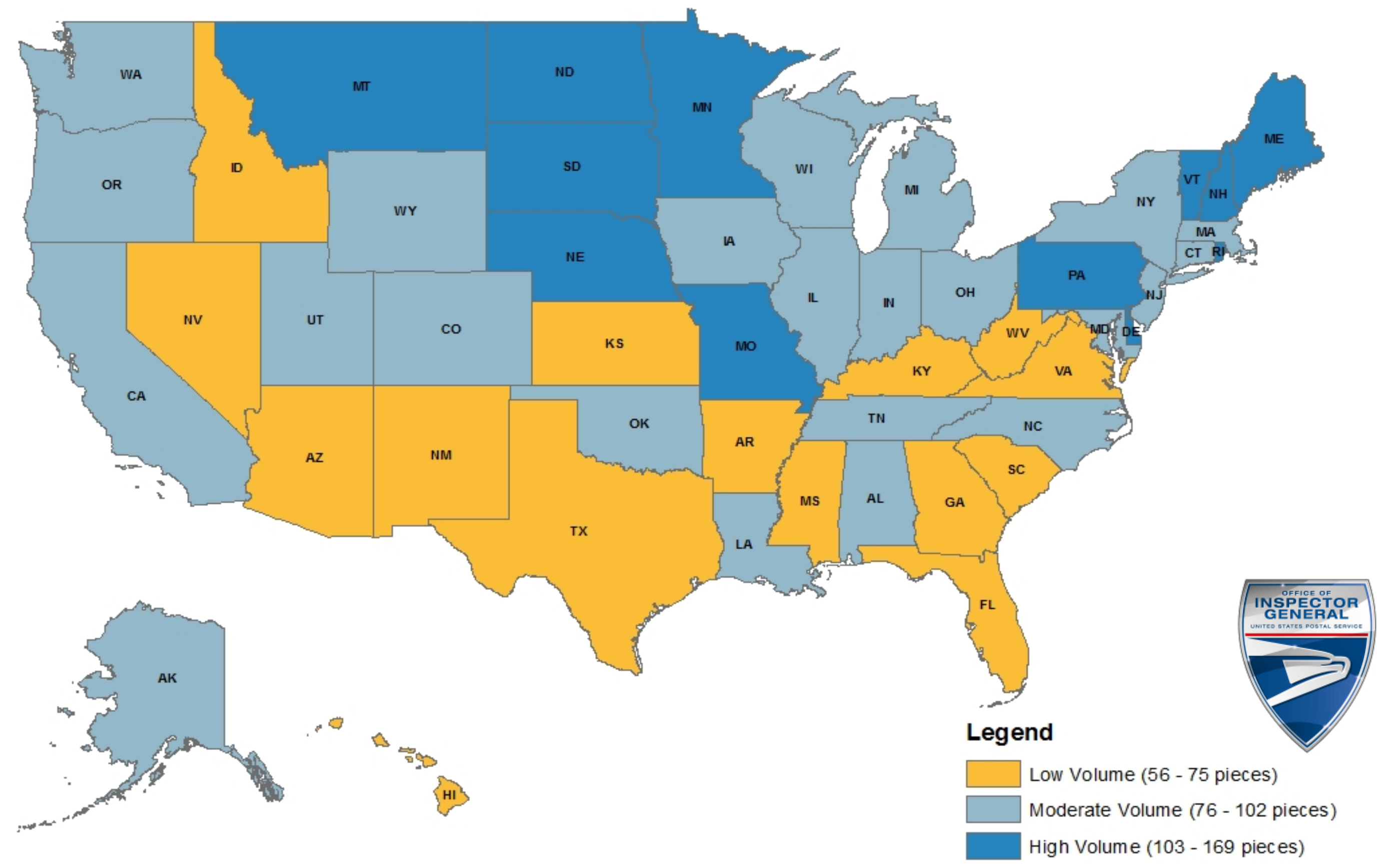
20 In 1996, volume per adult in the states ranged from 163 pieces to 396 pieces of FCM-SP mail. As expected, the most recent year of data available, FY 2015, indicates a precipitous drop in that range — 56 pieces to 176 pieces on the outer bounds, excluding Puerto Rico.

Current levels of mail use in the states can reflect where people still heavily rely on mail as a medium for communication and commerce. Of particular importance are states with high volumes but slow rates of decline, indicating both heavy reliance and relative stability in FCM-SP. The Dakotas, for example, in addition to having among the slowest rates of decline, also had among the highest volumes per adult in 2015 — 163 pieces per adult in North Dakota and 150 pieces per adult in South Dakota. As shown in Figure 8, two high-volume clusters of states exist in the Northeast and the upper Midwest. On the opposite end of the spectrum, the states with the lowest volume per adult tended to be located in a band extending across the southern tier of states, from Nevada and Arizona eastward through South Carolina.

Figure 8: FCM-SP Volume Sent Per Adult Resident by State, 2015

Individuals in the Upper Midwest and Northeast Send More Mail

On average, adults in the upper Midwest and Northeast sent significantly more First-Class Mail pieces in 2015 than those who live in other parts of the country. At the same time, residents of southern and southwestern states sent fewer mail pieces.



Source: OIG Analysis of ODIS Data on 2015 First-Class Mail Single-Piece Volume and U.S. Census Bureau American FactFinder, 2015 Population Age 18+.

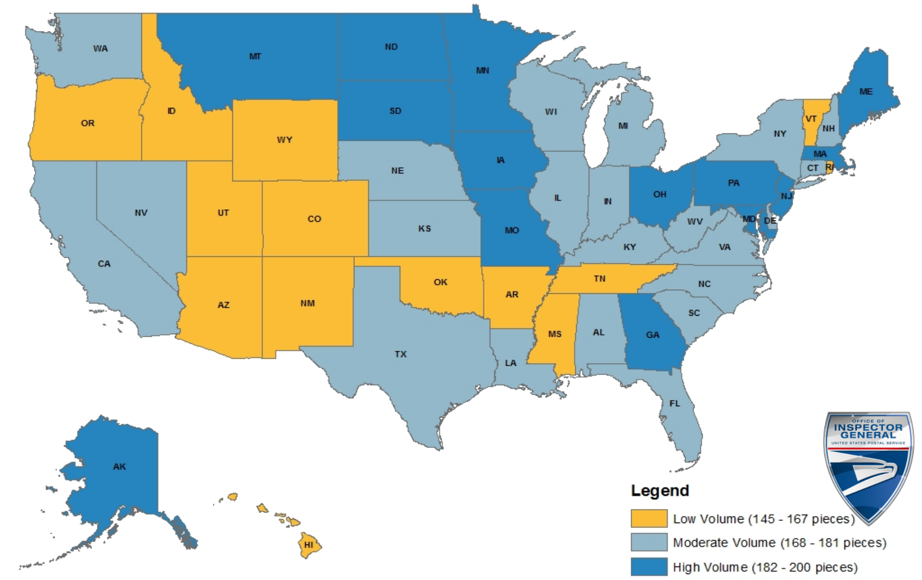
Bulk Mail

Though to a lesser degree than FCM-SP, high and low volumes per adult for FCM-Presort and Marketing Mail tend to be clustered in particular areas. Figures 9 and 10 show that states in the upper-Midwest and northeast corridor tended to receive higher volumes per adult, often of both types of bulk mail. For instance, adult residents of Minnesota averaged 192 pieces of FCM-Presort and 359 pieces of Marketing Mail in 2015. These volumes are well above the national average. Residents along the northeast corridor have similar experiences, with the District of Columbia, New Jersey, and Massachusetts having similarly high volumes for these two mail products. While states in the Southwest had lower volumes per adult, adult residents of several states in the Southeast where use of FCM-SP was lower, such as South Carolina, Georgia, and Florida, received moderate volumes of bulk mail. While less FCM-SP mail seems to be flowing out of these areas, it is clear that senders of FCM-Presort and Marketing Mail still find value in sending mail to adult residents of these states.

Figure 9: FCM-Presort Mailpieces Received per Adult Resident by State, 2015

Upper Midwest and Rust Belt Residents Receive More FCM-Presort

On average, mailers sent a relatively high number of statements, bills, and other presorted mail to adults in the upper Midwest and in eastern Rust Belt states in 2015.

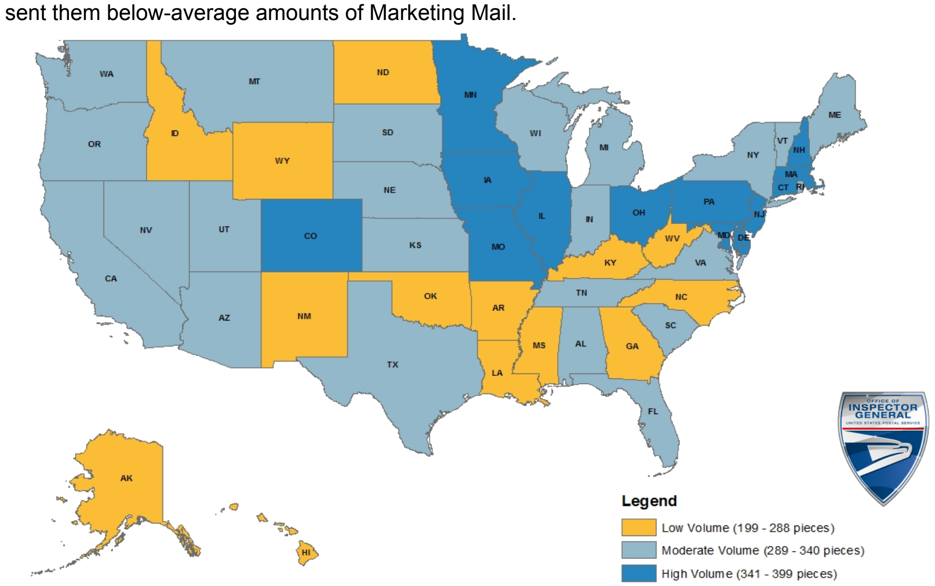


Source: OIG Analysis of ODIS Data on First-Class Mail Presort Pieces Received in 2015 and U.S. Census Bureau American FactFinder, 2015 Population Age 18+.

Figure 10: Marketing Mail Volume per Adult Resident by State, 2015

Midwest and Northeast Residents Receive More Marketing Mail

On average, adults in many Midwestern and Northeastern states received a relatively high number of Marketing Mail pieces — the bulk of which are advertisements — in 2015. Interestingly, while adults in North Dakota and Alaska received high volumes of presorted First-Class Mail, marketers sent them below-average amounts of Marketing Mail.



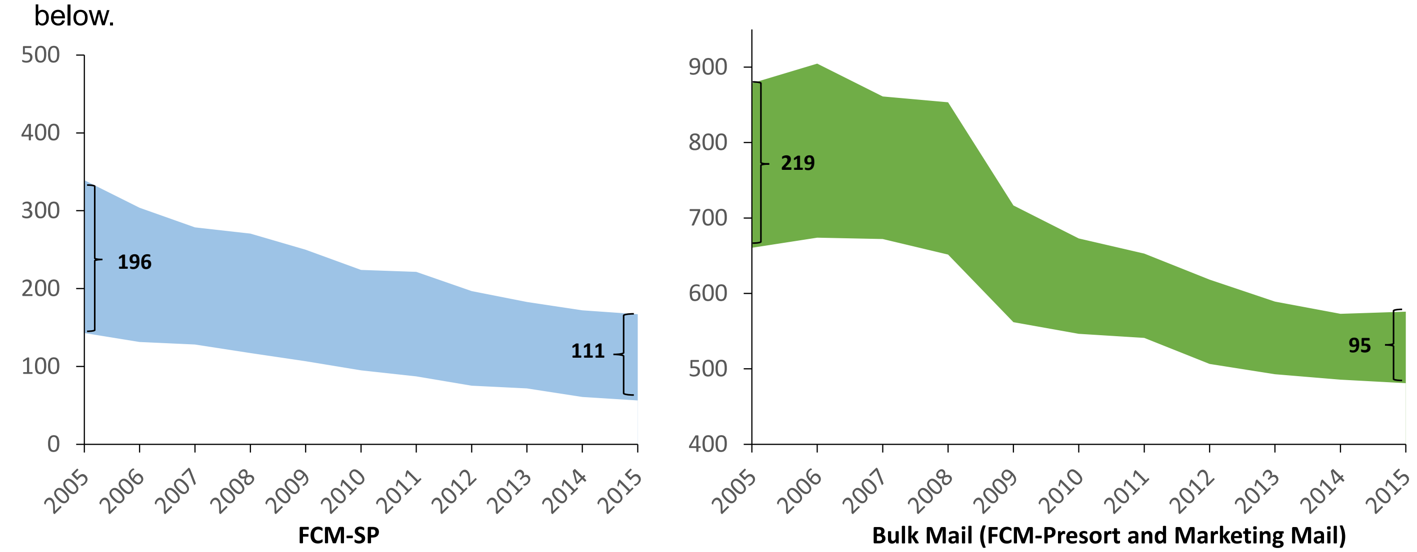
Source: OIG Analysis of ODIS Data on 2015 Marketing Mail Pieces Received and U.S. Census Bureau American FactFinder, 2015 Population Age 18+.

When looking at volume trends over time at the state level, both FCM-Presort and Marketing Mail are experiencing a narrowing in the gap between the highest and lowest volume states since their 2007 peak, similar to the trend in FCM-SP. For FCM-Presort, the difference between the highest and lowest volume states declined from 140 to 59 pieces of mail per adult resident. Marketing Mail showed wide variation between states. The range between the average volume per adult resident in the highest and lowest volume states was much wider than either of the other mail products. The highest volume state (Delaware) received an average of 399 pieces of Marketing Mail in 2015 while residents of the lowest volume state (Hawaii) only received 199 pieces per year, a 200-piece gap. Figure 11 shows the narrowing of the gap over time in state volumes per adult for FCM-SP and the combination of both types of bulk mail. When rates of decline are considered, the southern and Appalachian states all had lower-than-average rates of decline, indicating stability, despite lower volumes. This relative consistency could mean that Marketing Mail remains a strong advertising medium even in the face of growing electronic alternatives in these areas.

Figure 11: The Gap between Highest and Lowest Volume Per Adult at the State Level, 2005-2015

Difference in FCM-SP and Bulk Mail Volume for Adult Residents Is Narrowing across the Country

The variation in mail use has declined at the state level over the last decade. This means that the difference between the amount of single-piece mail sent and bulk mail received annually by adult residents in the highest-volume and lowest-volume states is narrowing. Between 2005 and 2015, the lowest-volume states declined at a slower rate than highest-volume states, resulting in the convergence evident in the graphs below.



Source: OIG Analysis of ODIS Volume Data and U.S. Census Bureau American FactFinder, 2015 Population Age 18+.

This convergence among the states is a product of the fact that those states with lower volumes per adult in 2007 tend to have slower rates of decline, while those with higher volumes per adult at the 2007 peak are experiencing higher-than-average decline. States with low volumes but also slow rates of decline indicate areas of stability. Many of these states are in the southern and Appalachian regions. Another group of interest, though less common, is states with high volumes and slow rates of decline. Just five states had above average volume and below average rate of decline for both types of bulk mail. These states — Massachusetts, Wisconsin, Iowa, Missouri, and Nebraska — represent areas with customers that are loyal to mail and highly valued by senders. For maps comparing mail use at the regional level, please refer to Appendix C.

Mail Use by Income

Dating back to the 1990s, empirical research on different types of mail has found that "mail goes where the money is."[21] That is, higher income areas tend to receive higher volumes of mail.

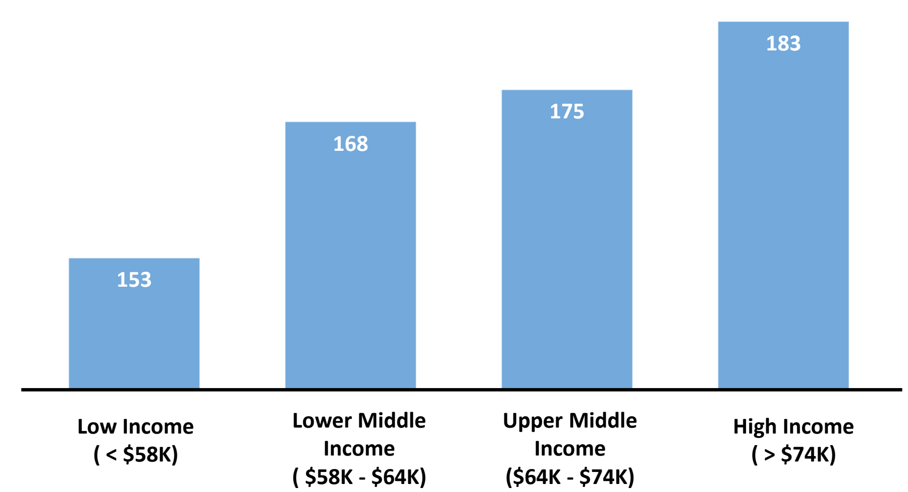
In 2015, it appears that bulk mail continues to be sent to higher-income ZIP Codes — those areas where the money is. However, there are notable exceptions. For example, the only high-income region with FCM-Presort volume per adult below the national average is the San Francisco Bay area, which includes communities in and near the Silicon Valley technology corridor. Citizens in this area might be particularly tied to digital alternatives for billing and payments. Meanwhile, this same region is a high-volume recipient of Marketing Mail, showing that advertisers still see value in sending physical advertising mail to residents around this digital hub. This divergence highlights the differing purposes of these two types of mail products, though for the most part, wealthy regions tend to receive significantly higher amounts of bills, statements and advertising mail.

Examining the 3-digit ZIP Code data by income, Figure 12 reveals that the lowest-income quartile received significantly less FCM-Presort volume per adult, 30 fewer pieces of mail per year than adults in the highest-income quartile.[22] Considering that much FCM-Presort mail consists of a variety of bills and statements, it is intuitive that lower- income areas would receive less of this type of mail. Meanwhile, the highest-income quartile received more FCM-Presort than the other three quartiles, 183 pieces per year on average, or almost one piece every other day for each adult resident. Despite the plethora of channels available to communicate information to the American public, presort mailers and recipients still find value in sending and receiving hard-copy mail for a wide variety of important items.

Figure 12: First-Class Mail Presort Per Volume Per Adult by Income Quartile

Higher-Income Areas Receive More FCM-Presort Volume Per Adult

In 2015, adult residents of low-income ZIP Codes received significantly less FCM-Presort on average, than any other income quartile. Meanwhile, high-income ZIP Codes received the most, nearly 30 more pieces per year than the lowest-income ZIP Codes.



Source: OIG analysis of ODIS Volume Data and U.S. Census Bureau American FactFinder.

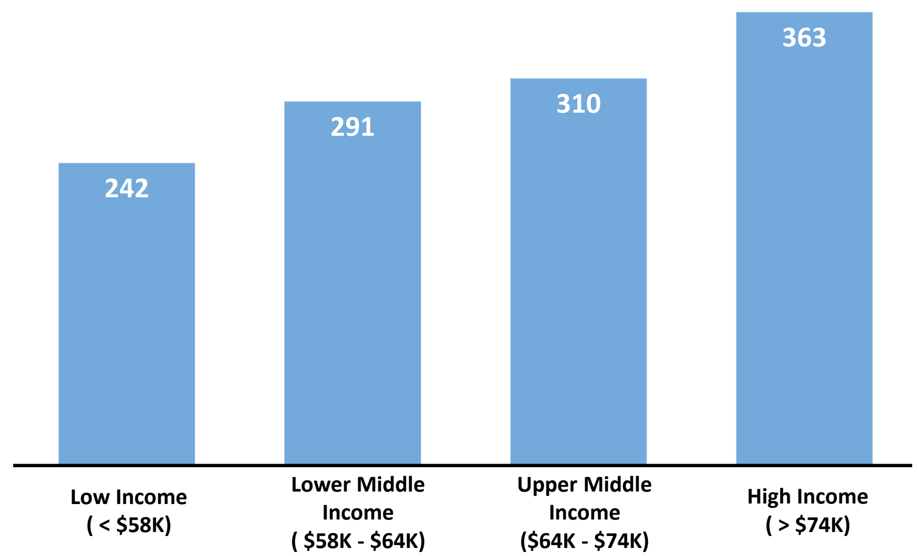
21 Kolin, Marshall, and Edward J. Smith, "Mail Goes Where the Money Is," *Emerging Competition in Postal and Delivery Services*, 1999, pp. 159-79. This study examined mail delivery on "rural routes," which also include areas like suburbs and exurbs that are more densly populated.

22 In the Census Bureau data, only 5-digit ZIP income data were available, with mean incomes subsequently aggregated to the 3-digit ZIP level. Using median income would help clarify the difference between income distributions in urban and high-density suburban areas, but those data were not available.

Figure 13: Marketing Mail Differences by Income

Higher-Income Areas Receive the Most Marketing Mail

The "mail-goes-where-the-money-is" phenomenon clearly still applies to Marketing Mail. In 2015, adult residents of high-income ZIP Codes received 121 more pieces of mail than adults in ZIP Codes from the lowest-income group.



Source: OIG analysis of ODIS Volume Data and U.S. Census Bureau American FactFinder.

Even after profound changes in technology and advertising alternatives, Marketing Mail volumes across the country are still closely related to the income of the recipient. As Figure 13 shows, the difference between the highest- and lowest-income ZIP Codes is clear. On average, residents of ZIP Codes in the highest-income quartile received 121 more pieces of Marketing Mail in 2015 than residents of the lowest-income ZIPs. Looking at differences between 3-digit ZIP Codes in nearby geographic locations can provide some striking touchpoints. For example, while residents of the Inglewood/Lenox section of Los Angeles receive only an average of 196 pieces of Marketing Mail per year, their wealthier neighbors a few miles away in the Santa Monica area receive 539.[23] It is quite clear from the data that marketers using Marketing Mail more heavily target geographic areas with greater average income throughout the United States.

Some might think higher income households receiving more mail volume would seem odd because those households can afford to be more closely tied to digital alternatives. It is true that wealthy households are more likely to use digital communication channels. However, the 2015 Postal Service *Household Diary Study* showed that wealthy households also receive more transactional mail, because those with higher income "on average, have more financial accounts, insurance policies, and credit cards — all generators of transactional mail volume."[24] While their transactions are more likely to be digital than physical relative to those with lower incomes, they are engaging in more total transactions. With a smaller slice of a much larger total pie, this means that they continue to receive larger numbers of bills, statements, and solicitations via mail due to the sheer volume of their total transactions. As a result, while higher-income areas currently receive notably more mail volume per adult, those are the same areas that may also be at the greatest risk of increased electronic diversion.

Mail Use by Population Density (Urbanization)

With 3-digit ZIP Codes, it is also possible to gain greater insight into mail use based on where communities fall on the urban-rural spectrum. This study uses adult population density to create a functional definition of community types. The most densely populated areas (more than 4,000 adults per square mile) are considered "urban" while the least densely populated (fewer than 100 adults per square mile) are considered "rural." The population densities of "suburban" areas fall in between.[25] We divided

23 The 903 3-digit ZIP Code covers Inglewood/Lenox and the 904 ZIP Code covers the Santa Monica area. The distance between the two communities is approximately 12 miles.
24 U.S. Postal Service, *Household Diary Study*, 2015, p. 28.
25 The US Census Bureau does not provide a definition for suburban areas. The thresholds for levels of urbanization within 3-digit ZIP Codes are designated by the OIG for the purposes of discussion.

these areas into two groups, high-density and low-density suburbs, to account for the fact that suburbs located at the edge of urban centers tend to have different densities, dwelling types, and layouts than suburbs on the outer periphery of metropolitan areas. An example of a high-density suburb is the 221 ZIP in Northern Virginia, which serves portions of Fairfax and Prince William Counties. This includes the communities of McLean, Tysons, Vienna, Springfield, and Woodbridge where residential neighborhoods have single-family homes interspersed with high-rise apartment complexes. An example of a low-density suburb is the adjacent 201 ZIP, farther west of Washington, DC. This suburban ZIP serves western Fairfax County and portions of Loudoun, Prince William, and Fauquier Counties, including the communities of Leesburg and Warrenton where there are mostly single-family homes, often with more open land between them.

Interestingly, both the volume of FCM-Presort per adult resident and the rate of decline differed between communities with different population densities, perhaps indicating that residents in particular types of communities place a greater value on hard-copy mail or are engaging in more transactions. Table 1 shows that high-density suburban areas receive the most of this type of mail. Comparing the highest and lowest volume areas, residents of the high-density suburbs received 23 more pieces of this type of mail than rural residents did in 2015. This difference is consistent with the notion that high-density areas receive more FCM-Presort, as they likely receive more bills and solicitations than rural residents, have more financial resources, and often live in more economically and educationally homogenous communities than urban areas. Having people with similar demographic characteristics in a geographic area makes it more efficient for businesses and advertisers to target that area with similar mailpieces.

Table 1: Mail Use Traits of Urban, Suburban, and Rural Areas, 2015[26]

	Adult Population Density	Total 3D ZIPs	Percent of Adult Population	FCM- Presort Volume, per Adult Resident	Marketing Mail Volume, per Adult Resident	Total Bulk Mail Volume, per Adult Resident
Urban	Over 4,000 per square mile	49	9%	172	289	461
High-Density Suburban	Between 501 and 4,000 per square mile	202	39%	185	343	528
Low-Density Suburban	Between 100 and 500 per square mile	188	27%	172	328	500
Rural	Fewer than 100 per square mile	443	25%	162	281	443
National		882	100%	174	319	493

Source: OIG Analysis of ODIS Data and U.S. Census Bureau American FactFinder.

26 The numbers reported in this table do not represent statistical comparisons. They represent the total mail volume in the 3-digit ZIP codes in each population density category divided by the adult population in 2015.

Despite experiencing massive declines during the recession, total Marketing Mail volume has remained relatively stable since 2011. However, communities with different population densities receive very different volumes of mail advertising. Suburban residents are also the primary targets of direct Marketing Mail, with adult residents of high-density suburbs receiving an average of 343 pieces and low-density suburbs receiving 328 pieces in 2015. There is a clear disparity between these suburban residents and their counterparts in urban and rural areas, who received on average at least 12 percent less Marketing Mail in 2015.

While adult residents of urban and rural areas receive the lowest volumes of Marketing Mail, they also have experienced smaller declines than suburban areas as shown in Figure 14. In fact, in 2015 they both experienced marginal increases in mail volume per adult. This is suggestive of stabilization and consistency in usage for marketing and direct advertising for these communities. Meanwhile, both types of suburban communities experienced small year-to-year declines in 2015 volume per adult, though they had higher volumes to begin with.

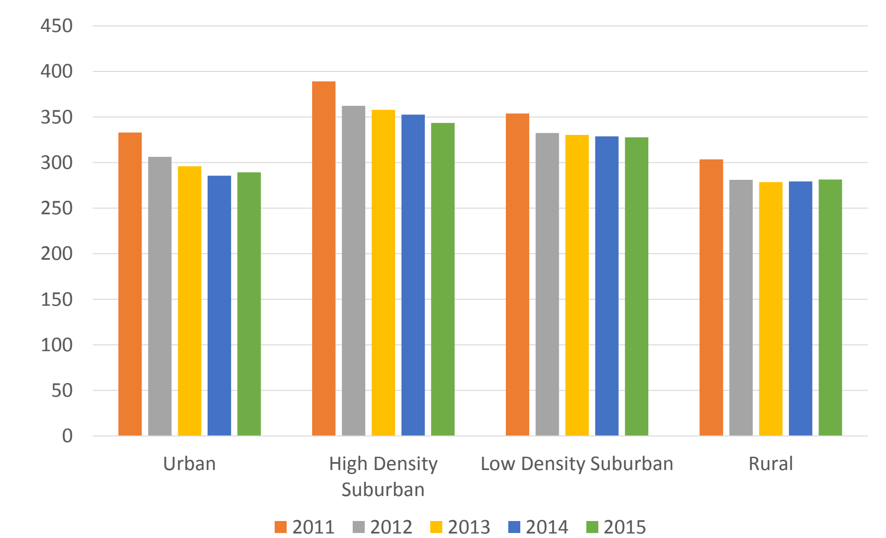
Because many 3-digit ZIP Codes cover large geographic areas, there is often variation in population density within these areas. While these classifications offer some insight on variations in behavior between communities, they should not be used to make blanket assumptions about any particular area. Generalizations about the urban, suburban, and rural makeup of areas should be taken with caution.[27]

When it comes to Marketing Mail delivery, density appears to have a point of diminishing returns. The physical proximity and similarity of high-density suburban communities makes the delivery of advertising mail cost-effective, particularly for companies that can send enough volume to qualify for discounted rates. Moreover, these suburbs are not so densely populated that alternative delivery mechanisms become widely competitive. Compare this to New York City, the nation's most highly urbanized city. The ability to reach large groups of people living in extremely dense, high-rise apartment buildings using fliers delivered directly to mail rooms, outdoor advertising (e.g. billboards), or other alternatives may make marketing through mail somewhat less attractive there. Even with high average household incomes, residents of New York City receive roughly 25 percent fewer pieces of Marketing Mail per adult (240 pieces) than the national average of 319 pieces and are on par with the entire state of Arkansas. In contrast, the close-by suburbs of Long Island (average of 488 pieces per adult) receive roughly 50 percent more than the national average.

Figure 14: Marketing Mail Volume Per Adult by Population Density Group, 2011-2015

Suburban Residents Receive Highest Volume of Marketing Mail

Adult residents of suburban areas have consistently received the most Marketing Mail, but the volume received by rural and urban residents experienced a small increase in 2015.



Source: OIG Analysis of ODIS Volume Data and U.S. Census Bureau American FactFinder.

27 As an example, the 303 ZIP code in Atlanta and north Georgia includes 13 urbanized 5-digit ZIPs in the urban core of Atlanta, 25 ZIPs that meet the high-density suburban classification, and one that falls in the rural classification.

On the opposite end of the spectrum, rural areas tend to have less commerce and thus less opportunity for direct marketing through Marketing Mail. These residents are located farther from retailers and businesses in commercial centers and shopping options tend to be more limited in rural areas. For instance, the northern two-thirds of Alaska including the city of Fairbanks (ZIP Code 997), is the least densely populated 3-digit ZIP in the nation. Adult residents there received just 107 pieces of Marketing Mail per adult in 2015.

The fact that high-density suburbs receive the most Marketing Mail volume can be a positive trend for the Postal Service. Not only does this collection of ZIPs represent a plurality of American residents (39 percent) and the most substantial portion of Marketing Mail volume (42 percent in 2015), but the population in high-density suburbs is also growing rapidly. The adult population in these areas grew by about 3.5 million between 2010 and 2015 indicating an expanding market for a key mail product. These areas also have a high population density that makes delivery less costly for the Postal Service. In explaining the differences between high-density suburbs and core urban areas, it is important to note the potential differences related to income. Although these two areas both have higher incomes than rural areas, the distribution of income in urban areas is likely substantially wider, meaning a greater mix of wealthy and poorer residents relative to the more homogenous suburbs. The Postal Service should continue to monitor Marketing Mail volumes as well as shifting demographic trends in these areas.

Conclusions

Planning for the future of the postal delivery network in a nation as vast and diverse as the United States is extremely complicated and cannot rely on nationwide volume trends alone. There is substantial variation in how much mail people across the country send and receive even as this paper shows that the volume per adult differences between the states are decreasing. This state, regional, and local variation highlights the tension the Postal Service faces as it is caught between two contrasting expectations: to operate like a business, and to provide equitable universal service across the country. Though long-term decline in letter mail volume makes operational adjustments a necessity, it is important that the Postal Service continue to provide consistent, high-quality service to customers that still rely on mail. When examining mail use at more localized levels, it is clear that end-to-end, stamp-based letter mail remains important for many people across the country to conduct their personal and commercial affairs.

Moreover, letter mail in the postal network is becoming increasingly dominated by items that are sent from one sender to many recipients, such as FCM-Presort and Marketing Mail. Thus, the receipt of mail is just as important a use as the sending of mail. It is among these mass mailed products where the strongest potential for future growth exists. Despite significant declines since 2007, it is important to note that both of these mail types have total volumes above 1996 levels, and they both appear to show a flattening trend. Marketing Mail may even be heading toward modest growth, as it remains an effective advertising channel used by businesses to target various types of consumers. In fact, the Postal Service's RPW report showed a 1 percent growth in volume during 2016.[28]

Additionally, this research highlights the roles that income and population density play in how much mail volume certain areas receive. While large mailers might be targeting certain types of areas for a wide variety of reasons, many individuals and organizations across urban, suburban, and rural areas still rely on mail and the quality service it provides to enable their business and personal lives. There could be potential network implications in states or regions with high per adult mail volumes, or with low total mail volumes but slow rates of decline, representing concentrations of some of the Postal Service's most loyal and dependable customers. These considerations could be addressed in strategic management plans. Identifying variations in volume across states and regions presents an opportunity to collaborate with mailers to better understand the impact and value of advertising mail in particular regions and communities.

28 U.S. Postal Service, *Revenue, Pieces & Weight (RPW) FY 2016*, http://about.usps.com/who-we-are/financials/revenue-pieces-weight-reports/fy2016.pdf.

While mail volume changes will continue to present challenges, data from recent years suggest that rates of letter volume decline have slowed. The fastest rates of volume decline appear to have coincided with the Great Recession of 2008, a global financial collapse of a level not seen since the Great Depression. Meanwhile, mail volumes have been in a significant state of flux because of the growth of new technologies and changing generational communication styles. Letter mail volumes are unlikely to return to pre-recession levels, but they are no longer declining at recession-level rates. It is clear that many citizens and businesses continue to rely on the mail, and the Postal Service can count on their demand for its products in the coming years. Anticipating and planning for this demand, and understanding the mail volume trends at national and widely varying local levels alike, will help the Postal Service continue to meet customers' needs both now and in the future.

Appendices

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

Appendix A: 2015 Regional Data Tables

Complete mail trend data for each of the 115 geographic regions analyzed in this study are available below. Regions are listed alphabetically by state postal abbreviation. To find data for a specific region, for example the Central Illinois region, first find "IL" in the state column of the region table. Then, look to the next column to the right to find each of Illinois's three regions listed in alphabetical order.

The tables include three data points for each of the three mail products examined in this study: originating FCM-SP; destinating FCM-Presort; and destinating Marketing Mail. The data of interest are as follows:

- Total Volume 2015 — This number is the total number of mailpieces originating from (FCM-SP) or destinating to (FCM-Presort, Marketing Mail) the region during the 2015 fiscal year.
- Volume Per Adult 2015 — This number is the volume of mail sent or received per adult resident of a particular region. An adult resident is defined as an individual age 18 or older.
- Change in Volume Per Adult, 2010-2015 — This number is the percentage change in mail volume per adult for a region starting in 2010 and ending in 2015, the most recent year of data availability. The base year of 2010 is the first post-recession year where population data are available at the ZIP Code level, giving a sense of the current per capita mail volume trend. This number also provides a sense of how mail use in a region has changed over time, controlling for shifts in population.

State	Region Name	FCM-SP Volume (Million)	FCM-SP Per Adult	2010-2015 FCM-SP Per Adult Change	FCM-Presort Volume (Million)	FCM-Presort Per Adult	2010-2015 FCM-Presort Per Adult Change	Marketing Mail Volume (Million)	Marketing Mail Per Adult	2010-2015 Marketing Mail Per Adult Change
AK	Alaska (Statewide)	48	88	-27.7%	102	186	-7.9%	123	226	-10.3%
AL	Northern Alabama	215	95	-23.8%	420	185	-11.0%	704	311	6.7%
AL	Southern Alabama	102	70	-34.0%	233	160	-21.6%	376	259	-3.6%
AR	Arkansas (Statewide)	155	69	-40.3%	359	160	-20.6%	549	244	-7.7%
AZ	Arizona (Statewide)	327	69	-32.2%	717	152	-25.5%	1,464	310	-11.9%
CA	Bay Area	492	76	-39.7%	1,000	170	-23.0%	2,280	354	-5.4%
CA	California Central Valley and Coast	149	46	-48.3%	503	156	-20.2%	859	266	-5.6%
CA	Inland Empire and Deserts	118	45	-39.9%	426	162	-20.0%	772	294	-3.9%
CA	Los Angeles Region and Orange County	962	90	-32.1%	1,924	181	-18.5%	3,866	363	-7.1%
CA	Sacramento and Northern California	315	83	-35.1%	657	173	-19.1%	1,147	303	-14.9%
CA	San Diego	200	80	-36.8%	398	160	-26.0%	856	344	-14.7%
CO	Denver and Eastern Colorado	305	83	-42.1%	617	167	-25.7%	1,384	375	-4.4%
CO	Western Colorado	26	76	-41.6%	57	163	-19.0%	94	271	-22.1%

State	Region Name	FCM-SP Volume (Million)	FCM-SP Per Adult	2010-2015 FCM-SP Per Adult Change	FCM-Presort Volume (Million)	FCM-Presort Per Adult	2010-2015 FCM-Presort Per Adult Change	Marketing Mail Volume (Million)	Marketing Mail Per Adult	2010-2015 Marketing Mail Per Adult Change
CT	Central and Eastern Connecticut	257	119	-25.4%	375	173	-25.4%	821	379	-10.3%
CT	Southwestern Connecticut	27	42	-71.5%	131	203	-17.0%	280	435	-9.3%
DC	Washington DC (District-wide)	85	158	-10.0%	107	199	-11.9%	211	394	-10.7%
DE	Delaware (Statewide)	77	107	-26.9%	128	178	-26.3%	288	399	-5.0%
FL	Central Florida and the Space Coast	188	63	-41.6%	512	171	-18.7%	1,023	341	-6.9%
FL	Florida Panhandle	108	94	-23.8%	186	162	-17.3%	316	275	-1.7%
FL	Jacksonville and North Florida	172	93	-29.4%	198	161	-17.6%	596	321	-12.9%
FL	Miami and Southeast Florida	335	66	-43.2%	932	183	-20.6%	1,737	340	-12.4%
FL	Tampa and the Gulf Coast	359	80	-33.7%	819	182	-15.6%	1,591	354	-1.7%
GA	Atlanta and North Georgia	379	73	-37.6%	984	190	-13.2%	1,572	304	-5.7%
GA	Middle Georgia	91	73	-30.9%	190	153	-5.4%	287	232	1.3%
GA	South Georgia	23	22	-78.8%	177	172	0.2%	277	269	8.7%
HI	Hawaii (Statewide)	82	75	-32.0%	177	161	-12.8%	218	199	-13.8%
IA	Cedar Rapids, Waterloo, and Quad Cities Iowa	106	97	-31.7%	188	173	-17.8%	368	339	-2.3%
IA	Des Moines and Western Iowa	126	98	-46.6%	243	190	-13.1%	443	345	-5.4%
ID	Idaho (Statewide)	84	70	-31.3%	199	167	-18.0%	342	288	-5.6%
IL	Central Illinois	207	109	-31.0%	295	155	-10.3%	552	291	0.8%
IL	Chicago and Northern Illinois	662	94	-34.3%	1,292	184	-21.5%	2,532	361	-8.8%
IL	Southern Illinois and Suburban St. Louis	20	22	-71.8%	156	167	-20.4%	306	327	-8.3%
IN	Indianapolis and Central Indiana	237	86	-34.3%	495	180	-14.5%	925	336	-1.0%
IN	Northern Indiana	89	57	-50.4%	254	165	-16.8%	497	322	-2.2%
IN	Southern Indiana	55	81	-4.2%	107	157	-8.6%	199	293	-5.1%

Executive Summary

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State	Region Name	FCM-SP Volume (Million)	FCM-SP Per Adult	2010-2015 FCM-SP Per Adult Change	FCM-Presort Volume (Million)	FCM-Presort Per Adult	2010-2015 FCM-Presort Per Adult Change	Marketing Mail Volume (Million)	Marketing Mail Per Adult	2010-2015 Marketing Mail Per Adult Change
KS	Kansas City and Eastern Kansas	47	39	-62.5%	224	186	-16.2%	436	363	1.0%
KS	Western Kansas	111	114	-31.4%	155	160	-17.3%	285	295	-0.7%
KY	Lexington and Eastern Kentucky	87	52	-51.3%	286	172	-12.3%	451	271	-5.7%
KY	Louisville and Western Kentucky	141	82	-43.0%	296	172	-18.9%	488	284	-3.9%
LA	New Orleans and Southern Louisiana	192	74	-36.0%	476	184	-7.3%	716	277	-4.5%
LA	Northern Louisiana	89	97	-11.2%	158	171	-3.4%	249	270	7.9%
MA	Boston and Central Massachusetts	371	112	-36.1%	625	188	-16.1%	1,226	369	-6.1%
MA	Cape Cod and Southern Massachusetts	93	71	-46.2%	267	205	-8.5%	536	413	10.1%
MA	Western Massachusetts	19	27	-79.8%	113	166	-28.4%	210	308	-8.5%
MD	Baltimore	220	108	-21.9%	392	192	-9.1%	631	310	-11.1%
MD	Eastern Shore	25	88	-39.1%	38	138	-34.5%	92	331	-8.7%
MD	Maryland Suburbs	91	50	-57.7%	330	182	-20.1%	756	417	-8.3%
MD	Western Maryland	15	32	-75.9%	76	167	-10.9%	155	342	4.7%
ME	Maine (Statewide)	122	115	-32.8%	194	182	-14.2%	342	320	-9.2%
MI	Detroit and Eastern Michigan	452	95	-23.6%	875	183	-20.6%	1,616	339	-15.1%
MI	Northern Michigan and Upper Peninsula	59	97	-28.7%	85	140	-21.5%	174	286	-5.3%
MI	Western Michigan	185	82	-37.7%	380	167	-20.3%	701	309	-9.4%
MN	Minnesota (Statewide)	565	136	-26.7%	795	192	-16.8%	1,487	359	-16.0%
MO	Central Missouri	117	84	-36.2%	232	166	-15.7%	409	293	3.2%
MO	Kansas City and Western Missouri	194	164	-10.5%	229	193	-5.5%	391	331	-4.6%
MO	St. Louis and Eastern Missouri	272	132	-29.1%	452	219	-14.4%	790	382	-1.6%
MS	Jackson and Northern Mississippi	110	66	-39.2%	271	162	-13.3%	398	238	-3.5%

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State	Region Name	FCM-SP Volume (Million)	FCM-SP Per Adult	2010-2015 FCM-SP Per Adult Change	FCM-Presort Volume (Million)	FCM-Presort Per Adult	2010-2015 FCM-Presort Per Adult Change	Marketing Mail Volume (Million)	Marketing Mail Per Adult	2010-2015 Marketing Mail Per Adult Change
MS	Mississippi Gulf Coast	36	61	-28.2%	85	147	-23.7%	145	248	-6.5%
MT	Montana (Statewide)	86	109	-35.9%	150	190	-13.6%	252	318	-8.6%
NC	Charlotte and Southern Coastal Plain	252	83	-39.4%	263	186	-21.5%	841	277	-12.2%
NC	Upper Piedmont, Research Triangle, and Northern Coastal Plain	337	85	-35.5%	670	169	-21.0%	1,137	287	1.1%
NC	Western North Carolina	10	17	-83.4%	77	134	-4.2%	162	283	30.9%
ND	North Dakota (Statewide)	91	163	-27.4%	102	183	-16.0%	153	274	-12.3%
NE	Omaha, Lincoln, and Eastern Nebraska	177	140	-22.6%	225	178	-17.3%	404	319	-8.3%
NE	Western Nebraska	19	136	-18.1%	24	170	0.4%	49	347	19.4%
NH	New Hampshire (Statewide)	106	105	-39.0%	175	174	-10.7%	382	380	4.8%
NJ	Central Jersey	143	113	-31.0%	248	196	-22.0%	527	416	-18.4%
NJ	North Jersey	403	97	-45.4%	782	188	-20.1%	1,516	364	-10.3%
NJ	South Jersey	151	104	-34.0%	281	194	-19.3%	611	421	-5.5%
NM	Albuquerque, Santa Fe, and Northern New Mexico	81	72	-29.7%	158	141	-28.1%	300	268	-16.2%
NM	Southern New Mexico	8	17	-76.8%	70	152	27.6%	128	280	53.5%
NV	Las Vegas and Southern Nevada	99	62	-35.5%	275	172	-16.9%	510	320	-5.3%
NV	Reno and Northern Nevada	45	83	-33.4%	91	167	-25.5%	163	300	-17.0%
NY	Long Island	259	127	-39.3%	453	223	-25.7%	993	488	-15.6%
NY	Lower Hudson Valley	146	120	-17.2%	263	217	-5.8%	556	459	-8.1%

State	Region Name	FCM-SP Volume (Million)	FCM-SP Per Adult	2010-2015 FCM-SP Per Adult Change	FCM-Presort Volume (Million)	FCM-Presort Per Adult	2010-2015 FCM-Presort Per Adult Change	Marketing Mail Volume (Million)	Marketing Mail Per Adult	2010-2015 Marketing Mail Per Adult Change
NY	Mohawk Valley, Finger Lakes, and Western New York	385	102	-33.4%	646	175	-9.3%	1,115	302	-8.5%
NY	New York City	477	70	-38.1%	1,124	165	-17.4%	1,632	240	-11.8%
NY	Upper Hudson Valley, Catskills, and Capital Region	182	109	-33.2%	297	177	-17.3%	569	340	0.6%
OH	Cincinnati and Southwestern Ohio	150	115	-33.7%	234	178	-20.5%	428	326	-1.3%
OH	Columbus and Central Ohio	337	100	-28.0%	594	176	-17.8%	1,042	309	-10.2%
OH	Northern Ohio	363	86	-45.3%	809	191	-12.9%	1,578	373	3.2%
OK	Oklahoma City, Western Oklahoma, and the Panhandle	151	88	-25.7%	269	169	-14.3%	413	259	-2.9%
OK	Tulsa and Eastern Oklahoma	98	75	-37.5%	198	151	-15.9%	348	266	-0.3%
OR	Oregon (Statewide)	285	92	-33.1%	490	159	-22.1%	910	295	-7.7%
PA	Central Pennsylvania	268	113	-28.3%	434	183	-11.5%	789	333	-10.7%
PA	Lehigh Valley and Northeastern Pennsylvania	131	96	-39.2%	250	183	-21.9%	447	327	-10.7%
PA	Philadelphia and Southeastern Pennsylvania	275	88	-37.0%	563	181	-10.2%	1,065	342	-18.4%
PA	Western Pennsylvania	380	119	-23.1%	612	191	-15.9%	1,130	352	-10.9%
PR	Puerto Rico (Territory-Wide)	62	22	-24.5%	261	94	-8.9%	110	40	4.7%
RI	Rhode Island (Statewide)	114	136	-24.0%	130	155	-24.3%	253	301	-5.3%
SC	Low Country South Carolina	57	73	-27.7%	138	177	-16.6%	244	314	-6.1%
SC	Midlands South Carolina	109	59	-38.3%	344	186	-9.3%	525	283	-2.5%
SC	Upstate South Carolina	108	101	-2.5%	187	175	-16.8%	319	299	-0.1%

State	Region Name	FCM-SP Volume (Million)	FCM-SP Per Adult	2010-2015 FCM-SP Per Adult Change	FCM-Presort Volume (Million)	FCM-Presort Per Adult	2010-2015 FCM-Presort Per Adult Change	Marketing Mail Volume (Million)	Marketing Mail Per Adult	2010-2015 Marketing Mail Per Adult Change
SD	South Dakota (Statewide)	96	150	-15.3%	127	200	-12.9%	191	300	-5.2%
TN	Central Tennessee	255	103	-31.4%	434	175	-11.1%	733	295	-5.4%
TN	Eastern Tennessee	119	89	-7.7%	185	139	-17.4%	370	277	-7.2%
TN	Western Tennessee	132	111	-36.3%	197	167	-27.8%	358	302	-10.5%
TX	Austin	143	75	-26.8%	317	166	-21.8%	528	277	-14.0%
TX	Dallas, Fort Worth, and Northeast Texas	541	82	-38.5%	1,205	183	-19.0%	2,161	328	-6.5%
TX	Houston	322	58	-36.2%	924	167	-13.2%	1,690	305	6.0%
TX	San Antonio and South Texas	189	54	-32.8%	584	166	-14.1%	903	257	0.7%
TX	West Texas and Panhandle	171	89	-17.3%	306	160	-12.8%	488	254	5.3%
UT	Provo and Southern Utah	23	57	-32.4%	54	130	-27.3%	85	206	-15.3%
UT	Salt Lake City and Northern Utah	157	98	-36.1%	260	163	-25.8%	511	321	-2.6%
VA	Blue Ridge Highlands	53	48	-60.5%	191	172	-16.4%	276	248	-12.3%
VA	Northern Virginia and Suburban DC	148	72	-51.5%	354	173	-27.7%	837	409	-17.5%
VA	Virginia Piedmont and Coastal Plain	261	81	-37.5%	560	173	-30.0%	1,036	320	-14.7%
VT	Vermont (Statewide)	85	169	-24.2%	81	162	-24.5%	154	308	-11.1%
WA	Cascade Mountains and Eastern Washington	111	98	-33.0%	191	168	-11.6%	302	266	-15.9%
WA	Seattle, Puget Sound, and Olympic Peninsula	338	80	-32.7%	769	181	-12.7%	1,386	326	-10.4%
WI	Green Bay and Northern Wisconsin	80	99	-36.8%	147	182	-11.5%	281	347	0.9%
WI	Madison, Milwaukee, and Southern Wisconsin	313	105	-34.8%	526	177	-23.0%	984	331	-7.6%
WI	Western Wisconsin	16	25	-77.8%	126	192	3.5%	227	348	9.3%

State	Region Name	FCM-SP Volume (Million)	FCM-SP Per Adult	2010-2015 FCM-SP Per Adult Change	FCM-Presort Volume (Million)	FCM-Presort Per Adult	2010-2015 FCM-Presort Per Adult Change	Marketing Mail Volume (Million)	Marketing Mail Per Adult	2010-2015 Marketing Mail Per Adult Change
WV	West Virginia (Statewide)	110	75	-38.8%	249	169	-14.5%	386	263	3.1%
WY	Wyoming (Statewide)	44	99	-46.5%	66	151	-22.5%	124	281	-13.1%

Appendix B: 2015 State Data Tables

Complete mail trend data for each of the 50 states, plus the District of Columbia and Puerto Rico, are available below. States are listed alphabetically by state postal abbreviation.

- The tables include three data points for each of the three mail products examined in this study: originating FCM-SP; destinating FCM-Presort; and destinating Marketing Mail.
- Total Volume 2015 — This number is the total number of mailpieces originating from (FCM-SP) or destinating to (FCM-Presort, Marketing Mail) the state during the 2015 fiscal year.
- Volume Per Adult 2015 — This number is the volume of mail sent or received per adult resident of a particular state. An adult resident is defined as an individual age 18 or older.
- Change in Volume Per Adult, 2010-2015 — This number is the percentage change in mail volume per adult for a state starting in 2010 and ending in 2015, the most recent year of data availability. The base year of 2010 is the first post-recession year where population data are available at the ZIP Code level, giving a sense of the current per capita mail volume trend. This number also provides a sense of how mail use in a state has changed over time, controlling for shifts in population.

State	FCM-SP Volume (Million)	FCM-SP Per Adult	2010-2015 FCM-SP Per Adult Change	FCM-Presort Volume (Million)	FCM-Presort Per Adult	2010-2015 FCM- Presort Per Adult Change	Marketing Mail Volume (Million)	Marketing Mail Per Adult	2010-2015 Marketing Mail Per Adult Change
AK	48	88	-27.7%	102	186	-7.9%	123	226	-10.3%
AL	317	85	-27.4%	653	176	-15.1%	1,080	290	2.8%
AR	155	69	-40.3%	359	160	-20.6%	549	244	-7.7%
AZ	327	69	-32.2%	717	152	-25.5%	1,464	310	-11.9%
CA	2,235	76	-36.5%	5,006	171	-20.5%	9,780	334	-8.0%
CO	332	82	-42.0%	674	167	-25.1%	1,478	366	-5.7%
CT	284	101	-35.3%	506	180	-23.4%	1,101	392	-10.0%
DC	85	158	-10.0%	107	199	-11.9%	211	394	-10.7%
DE	77	107	-26.9%	128	178	-26.3%	288	399	-5.0%
FL	1,162	74	-36.8%	2,747	176	-18.2%	5,263	337	-7.7%
GA	492	66	-41.8%	1,350	182	-10.5%	2,137	287	-3.0%
HI	82	75	-32.0%	177	161	-12.8%	218	199	-13.8%
IA	232	98	-40.7%	431	182	-15.2%	811	342	-4.0%
ID	84	70	-31.3%	199	167	-18.0%	342	288	-5.6%
IL	889	90	-35.5%	1,743	177	-19.6%	3,390	344	-7.3%
IN	380	76	-36.2%	857	172	-14.5%	1,622	325	-1.9%
KS	157	72	-45.1%	379	175	-16.6%	721	332	0.4%
KY	227	67	-46.5%	582	172	-15.8%	939	277	-4.8%
LA	281	80	-29.7%	635	181	-6.3%	965	275	-1.5%
MA	483	91	-42.9%	1,005	189	-15.9%	1,973	372	-2.4%
MD	350	76	-41.5%	836	182	-15.3%	1,634	357	-8.2%
ME	122	115	-32.8%	194	182	-14.2%	342	320	-9.2%

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MI	695	91	-28.4%	1,340	175	-20.6%	2,491	326	-12.9%
MN	565	136	-26.7%	795	192	-16.8%	1,487	359	-16.0%
MO	584	126	-25.6%	913	196	-12.7%	1,589	342	-1.2%
MS	146	65	-36.9%	356	158	-16.0%	542	241	-4.3%
MT	86	109	-35.9%	150	190	-13.6%	252	318	-8.6%
NC	599	79	-39.9%	1,309	173	-20.4%	2,140	283	-3.0%
ND	91	163	-27.4%	102	183	-16.0%	153	274	-12.3%
NE	196	140	-22.2%	248	177	-15.8%	452	322	-5.9%
NH	106	105	-39.0%	175	174	-10.7%	382	380	4.8%
NJ	697	101	-40.6%	1,311	191	-20.3%	2,653	386	-11.1%
NM	89	56	-40.5%	228	145	-17.1%	428	272	-3.1%
NV	144	67	-34.9%	365	171	-19.2%	673	315	-8.5%
NY	1,437	93	-35.0%	2,783	181	-16.2%	4,865	316	-10.3%
OH	851	95	-37.4%	1,637	184	-15.9%	3,047	342	-2.4%
OK	239	82	-31.1%	466	161	-15.0%	761	262	-1.7%
OR	285	92	-33.1%	490	159	-22.1%	910	295	-7.7%
PA	1,054	105	-30.7%	1,858	185	-14.2%	3,431	341	-13.3%
PR	62	22	-24.5%	261	94	-8.9%	110	40	4.7%
RI	114	136	-24.0%	130	155	-24.3%	253	301	-5.3%
SC	274	74	-25.2%	669	181	-13.0%	1,087	294	-2.6%
SD	96	150	-15.3%	127	200	-12.9%	191	300	-5.2%
TN	505	101	-28.5%	816	163	-17.2%	1,461	292	-7.2%
TX	1,367	70	-34.0%	3,336	171	-16.4%	5,769	296	-1.8%
UT	180	90	-35.6%	313	156	-26.0%	596	297	-4.6%
VA	463	72	-46.0%	1,106	173	-27.1%	2,149	336	-15.2%
VT	85	169	-24.2%	81	162	-24.5%	154	308	-11.1%
WA	449	83	-32.8%	960	178	-12.5%	1,688	313	-11.4%
WI	410	92	-39.8%	799	180	-17.7%	1,492	337	-3.8%
WV	110	75	-38.8%	249	169	-14.5%	386	263	3.1%
WY	44	99	-46.5%	66	151	-22.5%	124	281	-13.1%

Appendix C: Regional Volume Maps

Figure 15: First-Class Mail Single-Piece Volume per Adult Resident by Region, 2015

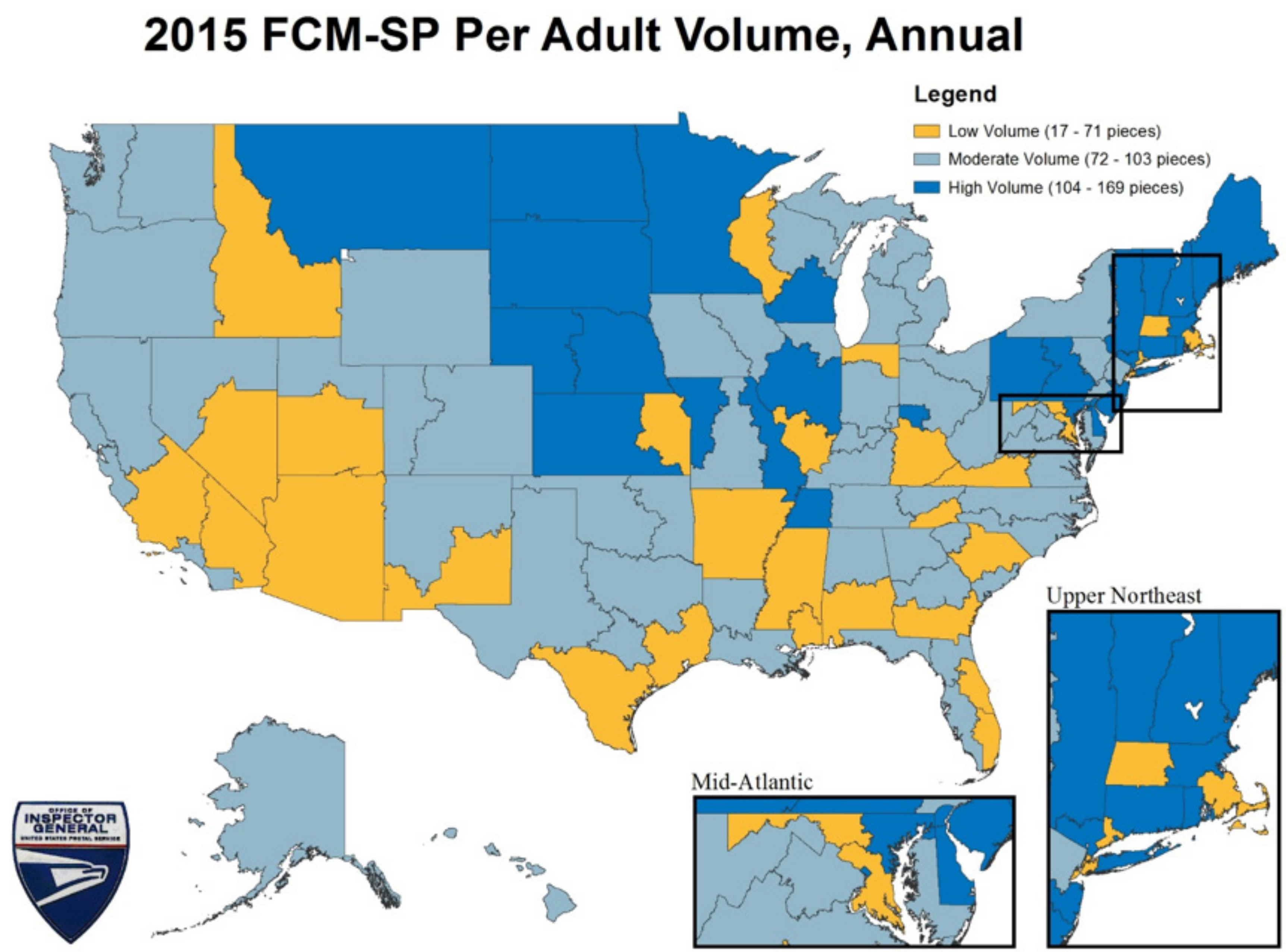

Figure 16: First-Class Mail Presort Volume per Adult Resident by Region, 2015

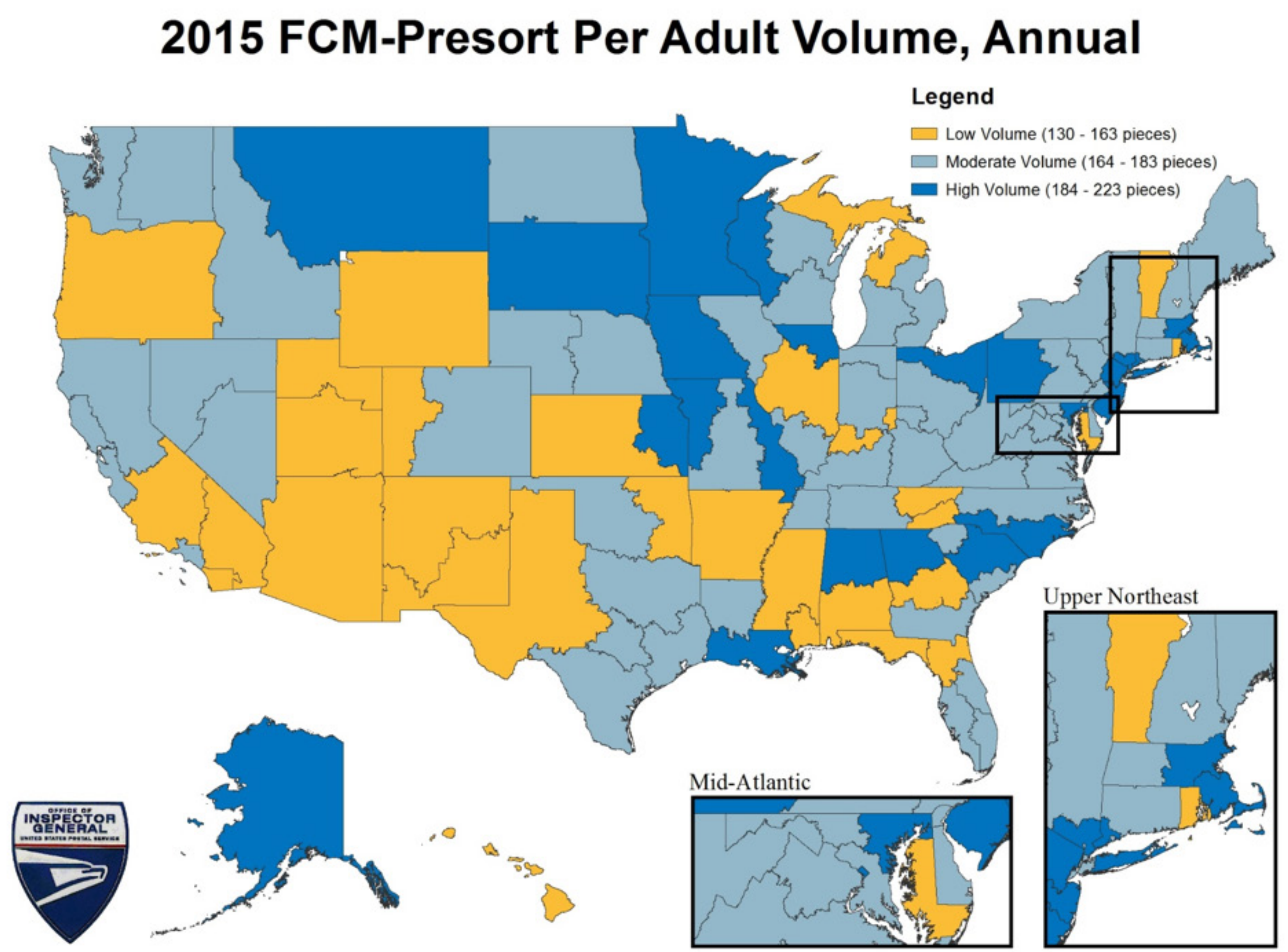

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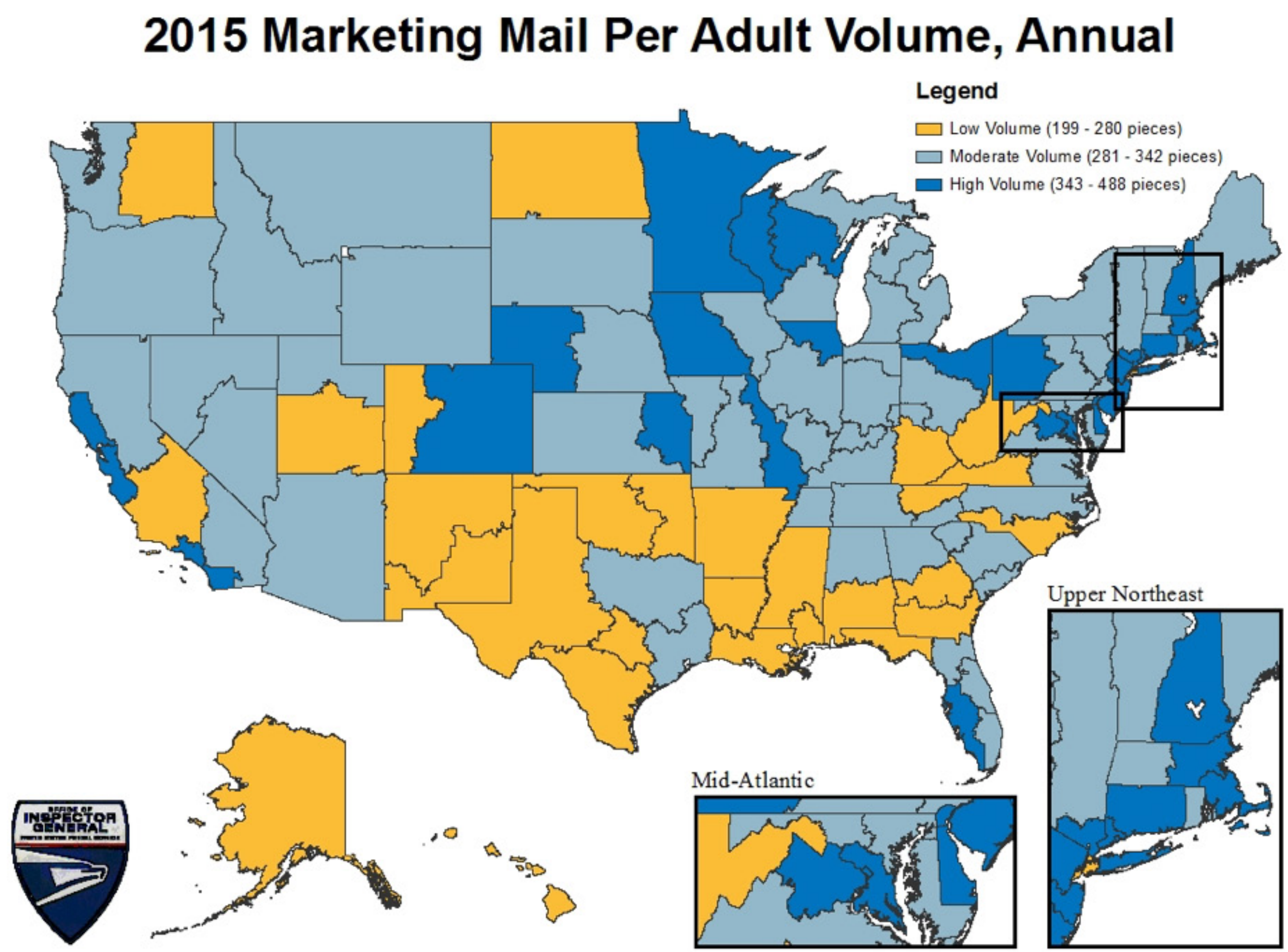
Figure 17: Marketing Mail Volume per Adult Resident by Region, 2015



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Appendix D: Management's Comments

DAVID E. WILLIAMS
CHIEF OPERATING OFFICER
AND EXECUTIVE VICE PRESIDENT

UNITED STATES
POSTAL SERVICE

April 14, 2017

CHRISTOPHER BACKLEY
ACTING DIRECTOR, RARC CENTRAL
RISK ANALYSIS RESEARCH CENTER

SUBJECT: What's up with the Mail? How Mail Use is Changing Across the United States

The United States Postal Service appreciates the work done by the Office of the Inspector General on "What's up with the Mail? How Mail Use is Changing Across the United States".

We appreciate that you acknowledge that the United States Postal Service delivers nearly half of the world's mail and has taken aggressive steps to reduce our processing network in response to post Great Recession of 2008 volumes, while having some very distinct challenges regarding geography and business constraints.

The Postal Service agrees with your statement that our financial viability depends on the demand of our products and services. To that extent, we continue to identify and implement strategies that will increase the value of mail to our customers. We have leveraged our last mile business advantage to significantly grow our package volume. We have introduced a very successful marketing mail product Every Door Direct Mail EDDM that has resulted in over 800 million mail pieces each of the past two years. In addition, this summer we will fully implement Informed Delivery that allows residential customers to digitally preview their incoming mail.

Again thank you for the report and the opportunity to respond.

David E. Williams

Attachment

475 L'ENFANT PLAZA SW
WASHINGTON DC 20260-0061
WWW.USPS.COM

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UNITED STATES POSTAL SERVICE

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adoulaveris@uspsoig.gov