

UNITED STATES OF AMERICA  
POSTAL REGULATORY COMMISSION  
WASHINGTON, DC 20268-0001

Before Commissioners:

Ruth Y. Goldway, Chairman;  
Tony L. Hammond, Vice Chairman;  
Mark Acton;  
Dan G. Blair; and  
Nanci E. Langley

Modification of Analytic Principles  
Used in Periodic Reporting (Proposal Two)

Docket No. RM2010-10

Public Representative Comments in Response to Order No. 482

August 31, 2010

On June 30, 2010, the Commission issued Order No. 482 requesting comments on the Postal Service's Proposal Two to make changes in the analytical methods approved for use in periodic reporting. Proposal Two has two parts: Proposal 2-A and Proposal 2-B. Comments on the two parts are addressed separately below.

### **Proposal 2-A**

Proposal 2-A proposes to reduce by 20% the sample size it uses to collect Origin-Destination Information System/Revenue Pieces and Weight (ODIS/RPW) data beginning in the first quarter of FY 2011, which means that the Postal Service seeks to have the Commission reconsider its decision in Order No. 396 to not approve an identical proposal submitted in June 2009. Out of the current annual full sample of 128,000 tests the Postal Service proposes to eliminate 25,600 tests. Through this reduction in sample size the Postal Service posits it will save approximately \$6 million annually in data collection costs. The Postal Service maintains that the reduction in accuracy (precision) of some product estimates of volume, revenue, cost per piece, and cost coverage is slight. Tables 1 and 2 in Proposal 2-A show the expected impact of the proposed sample size reduction on the coefficients of variation (CVs) using FY2009 data for volume, revenue, cost per piece, and cost coverage for the major categories of single-piece mail.

Generally, two types of cost considerations exist in selecting an appropriate sample size within the sampling process and they include a.) data collection costs, and b.) costs incurred when the estimate is erroneous. Ideally, the sample size should minimize the total costs of sampling including both types of cost considerations. The

Postal Service estimates that the annual savings in data collection costs from a 20% reduction in sample size is \$6 million. In estimating sampling error costs, it is desirable to achieve a balance between the chances of making an error, and the costs of those errors. In the case of Proposal 2-A, that would include achieving a balance between making an error in the estimation of volume, revenue, cost per piece, and cost coverage, and the costs of those errors to the Postal Service and mailers. This is what the Postal Service has attempted to do to some degree. The Postal Service uses a Coefficient of Variation (CV) comparison analysis to shed light on possibilities for a balance between the chances of making an error and the costs of those errors for the estimation of volume, revenue, cost per piece, and cost coverage for the major classes of single-piece mail. Again, the Public Representative maintains that the Postal Service missed the opportunity using the same data they have presented to expand their analyses for more useful decision-making information.

This analysis uses interchangeably the terms “confidence” and “reliability”, as well as “tolerable error”, “precision”, and “accuracy”, even though it is recognized that the terms are not completely synonymous, and furthermore, are used in different phases of the sampling design process. The sampling process includes a *planning phase* and an *analytical/conclusions phase*. But in the case of Proposal 2-A the analysis uses past (FY2009 samples) samples from an analytical/conclusions phase, as well as presumably random reductions in past samples for planning purposes.

Proposal 2-A gives 128,000 as the total number of ODIS-RPW tests conducted annually, but 128,000 is unfortunately not further sub-divided into the major categories of single-piece mail in the Postal Service’s analysis. Thus, it is unknown how many of

the 128,000 tests are in each of the “Full” sample single-piece mail categories, and how many of the 128,000 minus 25,600 tests are in each of the “20% Reduction” sample categories. However, the analysis does present units-free CVs for each category for volume, revenue, cost per piece, and cost coverage. The Postal Service’s CVs are reproduced in the first 4 columns of Tables 1-10 of this analysis and are located at the end of these comments.

As can be seen in all categories of single-piece mail the CVs increase, or stay the same in a few cases, when the sample size is reduced. The Postal Service notes that precision goes down (CVs increase) slightly for some categories of single-piece mail. It is to be expected that if sample size is reduced the precision of the estimates calculated from the sample will decrease. The Postal Service asserts that this decrease is slight, but in actuality it depends on how confident the analyst wants to be with the calculated sample estimates as well as how much error the analyst is willing to tolerate in the sample estimates. Again, Proposal 2-A does not present the impact of a 20% reduction in sample size in monetary terms for errors in volume, revenue, cost per piece, and cost coverage estimates, so there is no new information given in this area.

The CVs calculated by the Postal Service do, however, offer some analytical possibilities involving the calculation of the minimum sample size required at various “confidence” (reliability target) and “precision” level combinations for the FY2009 “Full” and “20% Reduction” samples in this new version of the proposal for the major categories of single-piece mail for volume, revenue, cost per piece, and cost coverage estimates. The following formula is used to calculate minimum sample sizes using the CVs and the results are shown in Tables 1-6:

$$\text{Sample size} = ((\text{CV})^{2*}(\text{reliability target})^2) / (\text{tolerable error})^2$$

As again expected, to remain within the same confidence (reliability) and precision combination the minimum sample size needed for the CVs given by the Postal Service for the 20% Reduction cases must increase. The CVs for the 20% Reduction samples are higher, and the minimum sample size required to stay within the same reliability target and precision level, must increase. In the absence of information on the actual number of tests in each category and since CVs are units-free, the actual numbers for the minimum sample sizes in the tables are not meaningful in *absolute* terms only the *relative* differences between the sample sizes have meaning in this analysis.

The Postal Service also states that the greatest impact of the sample size reduction is in the First-Class Mail categories, so additional analysis (sensitivity tests) presented in Tables 7-10, is discussed only for the four First-Class Mail categories. A 95% confidence interval and a 95% precision level is assumed as a starting point for the sensitivity tests. This means that using the minimum sample size required in a sample-based study will give the analyst 95% confidence that the calculated estimate will be the true estimate as well as represent the analysts' willingness to accept 5% error (95% precision) in the estimates. In Tables 7 and 8, the level of precision is decreased from the starting point combination (base case for comparison), while the confidence interval remains at 95%. In Tables 9 and 10, the confidence interval decreases while the level of precision remains at 95%. In all 4 tables (Tables 7-10), the Full sample size values in

columns (9) and (11) for the first 4 First-Class Mail categories for the base case, are compared to the lesser confidence (reliability) or precision combinations to the left in the table to find where it best fits in the reduced sample size columns. The results of all the comparisons are presented in Table A below:

Table A

| <b>Sensitivity Test Results on the Reliability and Precision of the Reduced Sample Estimates for both FY2008 and FY2009 Data (taken from Tables 7-10)</b>               |                                  |        |                |               |                         |        |                |               |                                    |        |                |               |                         |        |                |               |
|---|----------------------------------|--------|----------------|---------------|-------------------------|--------|----------------|---------------|------------------------------------|--------|----------------|---------------|-------------------------|--------|----------------|---------------|
| Note: Shaded/highlighted cells indicate either no change or a further decrease in precision and/or reliability moving from FY2008 (RM2009-5) to FY2009 (RM2010-10) Data |                                  |        |                |               |                         |        |                |               |                                    |        |                |               |                         |        |                |               |
|   | Percentage Decrease in Precision |        |                |               |                         |        |                |               | Percentage Decrease in Reliability |        |                |               |                         |        |                |               |
|   | FY2008 Data (RM2009-5)           |        |                |               | FY2009 Data (RM2010-10) |        |                |               | FY2008 Data (RM2009-5)             |        |                |               | FY2009 Data (RM2010-10) |        |                |               |
|   | Revenue                          | Volume | Cost per Piece | Cost Coverage | Revenue                 | Volume | Cost per Piece | Cost Coverage | Revenue                            | Volume | Cost per Piece | Cost Coverage | Revenue                 | Volume | Cost per Piece | Cost Coverage |
| <b>First-Class Single-Piece Letters</b>   | 0-1%                             | 1-2%   | 0-1%           | 0-1%          | 1-2%                    | 1-2%   | 0-1%           | 0-1%          | 4-5%                               | 4-5%   | 3-4%           | 3-4%          | 7%                      | 6-7%   | 3-4%           | 0-1%          |
| <b>First-Class Single-Piece Cards</b>   | 0-1%                             | 0-1%   | 0-1%           | 0-1%          | 1-2%                    | 1-2%   | 0-1%           | 0-1%          | 0-1%                               | 0-1%   | 0-1%           | 0-1%          | 6-7%                    | 6-7%   | 3-4%           | 0-1%          |
| <b>First-Class Flats</b>  | 0-1%                             | 0-1%   | 0-1%           | 0-1%          | 0-1%                    | 0-1%   | 0-1%           | 0-1%          | 0-1%                               | 0-1%   | 0-1%           | 0-1%          | 4-5%                    | 4-5%   | 0-1%           | 0-1%          |
| <b>First-Class Parcel</b>   | 0-1%                             | 0-1%   | 0-1%           | 0-1%          | 0-1%                    | 0-1%   | 0-1%           | 0-1%          | 4-5%                               | 4-5%   | 0-1%           | 0-1%          | 4-5%                    | 4-5%   | 0-1%           | 0-1%          |

In Tables 7 and 8, the Full sample sizes in columns (9) and (11) are compared and found to best fit within the reliability-precision combination to the left as presented in Table A above for the FY2009 data used this year and compared with last year's proposal that used FY2008 data, for all of the First-Class Mail categories analyzed for volume, revenue, cost per piece, and cost coverage. It is obvious that the precision decreases stay the same or go down even more in all 4 First-Class Mail categories just by using the newer data. More specifically precision decreases actually doubled for

First-Class Single-Piece letters and cards, and stayed the same for First-Class flats and parcels just moving from the use of FY2008 data to FY2009 data.

Tables 9 and 10, the Full sample sizes in columns (9) and (11) are also compared and found to best fit within the reliability-precision combination to the left as presented in Table A above for the FY2009 data used this year and compared with last year's proposal that used FY2008 data, for all of the First-Class Mail categories analyzed for volume, revenue, cost per piece, and cost coverage. It is shown in Table A above that reliability decreases go down significantly in all 4 First-Class Mail categories using the newer data except for cost coverage for First-Class Single-Piece letters. On average for First-Class Single-Piece volume and revenue, reliability decreased from 3 percent (FY2008 data) to 6 percent (FY2009 data) from the base case. The Public Representative recommends that the Commission continue to not accept Proposal 2-A.

## **Proposal 2-B**

In order to evaluate Proposal 2-B, the Public Representative presents the options presented in Proposal Two as well as the option that is currently used (Option C):

- A. ODIS-RPW Sampling Option with a 20% reduction in tests (Proposal 2-A).
  - $128,000 - 25,600 = 102,400$  tests.
  - Sampling frame is the Mail Exit Point (MEP).
  - Stratified by shape into letters, flats, and parcels.
  - Sampling frame is reduced and outside the sampling frame is not measured.
  
- B. ODIS-RPW Sampling Option with a 10% reduction in tests (Proposal 2-B), but where the 10% is sampled using a different frame unit (USPS says no reduction).
  - For 3 Quarters:  $96,000 \times 10\% = 9,600$  tests [note 9,600 is larger than the 9,000 the USPS is proposing so this is already a reduction].

- For the 10% (special study) the sampling frame is the Delivery Unit.
- For the 10% (special study) it is not-stratified by shape (letters, flats, and parcels are all lumped together).
- Outside the frame is not measured.

C. ODIS-RPW Sampling Option with no reduction in tests (Current ODIS-RPW sampling (Option C)).

- 128,000 tests.
- Sampling frame is the Mail Exit Point (MEP).
- Stratified by shape into letters, flats, and parcels.
- Sampling frame is not reduced and outside the frame is not measured.

The Postal Service wishes to allocate 10 percent of the ODIS-RPW sample size to a special study that will utilize an alternative sampling frame based on the delivery unit. Delivery units include city/rural carriers, box sections, and firms. The current sampling frame unit is the Mail Exit Point (MEP). The data collectors currently sample dedicated letter and flat trays at the MEP. Delivery Point Sequence (DPS) letter trays represent over 90 percent of all letter mail. The Postal Service is also implementing Flats Sequencing System (FSS) which can bring DPS flat trays to the MEP sampling frame as well. The MEP is a letter, flat or parcel stream in a post office, station, branch, or associate office arriving prior to distribution to the city/rural carriers, box section, and firms. As DPS trays arrive very close to the carriers' departure from the station, the MEP testing window is narrowing, so the Postal Service wants to change the sampling test frame for the proposed 10 percent special study to the Delivery Unit presumably widening the testing window. However, at the Delivery Unit the letter, flat, and parcel shapes are combined when sampled. RM20010-10, Responses to CHIR No. 1, Q1-E, pp. 2-3.

The Public Representative presents the following comments regarding Proposal Two-B.

**1. Estimates and precision levels could possibly be worse than those reported in Proposal 2-A**

The Postal Service states that:

“If the Commission were to approve only Proposal Two-B this would imply that the estimates and precision levels would be no worse than that reported in Proposal Two-A. This is because the effective sample reduction would be ten percent; which is less than the twenty-percent reduction”. RM2010-10, Proposal Two-B, Pg. 3

Proposal 2-B (Option B above) is a new (alternate) sampling design and the sample size needed to enable statistical judgments that are accurate and reliable can change with the sampling design. Option B is not stratified for the 10 percent alternate sampling where letters, flat, and parcel shapes are combined at the frame unit, while Option C, the current ODIS-RPW sampling design, is stratified by shape. Option B and Option C from the above list are two different sampling designs that may require different sampling sizes to achieve the same level of precision and reliability for the estimates.

**2. Switching from a stratified to a non-stratified by shape sampling design may bring into question the representativeness of the sample to the population**

If the Postal Service is going to move toward a non-stratified sampling design that does not separate by shape, that calls into question the representativeness of the sample to the population. This can introduce the problem of frame bias to the RPW estimates.

**3. If the mail mix at Mail Exit Points (MEPs) is different than the mail mix at Delivery Units other sampling design considerations may be needed**

If the mail mix at Mail Exit Points (MEPs) is different than the mail mix at Delivery Units especially if PO Box mail will eventually need to be separated from carrier mail other sampling design considerations may be needed for accurate and representative estimates.

Since no information is presented with Proposal 2-B on the mail mix at MEPs versus Delivery Units, as an example the Public Representative used In-Office Cost System (IOCS) observation data to possibly gain some insights. The number of automated and manual incoming secondary observations to be distributed to carriers and PO Boxes was extracted by day of the week for four years and the results are presented in Table 11. In this example the numbers show that roughly 38% of in office activity that was being distributed for delivery was going to PO Boxes. An obvious question: is this true for both the MEP frame unit and the Delivery Unit? If one frame unit has a higher percentage of mail being distributed to carriers than the other frame unit this will bring into the sampling design another consideration that should be addressed for accuracy and representativeness of RPW estimates. Similar types of questions should be explored by the Postal Service when making changes to sampling designs.

Experimenting with new alternate sampling designs that can reduce costs and improve the accuracy and representativeness of ODIS-RPW estimates is a good

undertaking, but it should be well thought out. The Public Representative would encourage the Commission to be open to new alternate well thought out sampling designs, but not at the expense of precision, reliability, and representativeness. If the Commission accepts Proposal 2-B, the Public Representative recommends that it be on a temporary basis until the effects can be further evaluated.

Respectfully Submitted,

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| Table 1: Minimum Sample Size Required for 90% Confidence at Various Precision Levels for USPS Expected Coefficients of Variation (CVs) for ODIS-RPW Revenue and Volume Samples |  |               |             |               |   |               |             |               |  |               |             |               |  |               |             |               |
|--|--|---------------|-------------|---------------|---|---------------|-------------|---------------|--|---------------|-------------|---------------|--|---------------|-------------|---------------|
|  | 90% Confidence Level (or reliability target)                 |               |             |               |   |               |             |               |  |               |             |               |  |               |             |               |
|  | Coefficient of Variation (CV) from Table 1 in USPS RM2010-10 |               |             |               | Minimum Sample Size Required for 90% Precision (or 10% tolerable error) |               |             |               | Minimum Sample Size Required for 95% Precision (or 5% tolerable error) |               |             |               | Minimum Sample Size Required for 98% Precision (or 2% tolerable error) |               |             |               |
|  | Revenue  |               | Volume      |               | Revenue   |               | Volume      |               | Revenue  |               | Volume      |               | Revenue  |               | Volume      |               |
|  | Full Sample  | 20% Reduction | Full Sample | 20% Reduction | Full Sample   | 20% Reduction | Full Sample | 20% Reduction | Full Sample  | 20% Reduction | Full Sample | 20% Reduction | Full Sample  | 20% Reduction | Full Sample | 20% Reduction |
| First-Class Single-Piece Letters   | 0.26   | 0.32          | 0.36        | 0.44          | 18  | 28            | 35          | 52            | 71   | 111           | 140         | 210           | 447  | 693           | 877         | 1310          |
| First-Class Single-Piece Cards   | 1.39   | 1.67          | 1.43        | 1.72          | 523   | 755           | 553         | 801           | 2091   | 3019          | 2213        | 3202          | 13071  | 18867         | 13834       | 20014         |
| First-Class Flats  | 1.02   | 1.04          | 1.26        | 1.28          | 282   | 293           | 430         | 443           | 1126   | 1171          | 1718        | 1773          | 7038   | 7317          | 10740       | 11084         |
| First-Class Parcel   | 1.28   | 1.33          | 1.75        | 1.81          | 443   | 479           | 829         | 887           | 1773   | 1915          | 3315        | 3546          | 11084  | 11967         | 20718       | 22163         |
| Package Services Single Piece Parcel Post  | 0.94   | 0.97          | 1.03        | 1.07          | 239   | 255           | 287         | 310           | 956  | 1018          | 1148        | 1239          | 5978   | 6365          | 7177        | 7745          |
| Package Services Bound Printed Matter Flats  | 0.18   | 0.18          | 0.07        | 0.07          | 9   | 9             | 1           | 1             | 36   | 35            | 6           | 5             | 222  | 219           | 37          | 33            |
| Package Services Bound Printed Matter Parcels  | 0.18   | 0.19          | 0.09        | 0.09          | 9   | 10            | 2           | 2             | 35   | 39            | 9           | 9             | 219  | 244           | 55          | 55            |
| Package Services Media and Library Mail  | 0.63   | 0.65          | 0.60        | 0.62          | 107   | 114           | 97          | 104           | 430  | 457           | 390         | 416           | 2685   | 2858          | 2435        | 2600          |
| Priority Mail  | 0.39   | 0.40          | 1.01        | 1.05          | 41  | 43            | 276         | 298           | 165  | 173           | 1104        | 1193          | 1029   | 1082          | 6901        | 7458          |

| Table 2: Minimum Sample Size Required for 95% Confidence at Various Precision Levels for USPS Expected Coefficients of Variation (CVs) for ODIS-RPW Revenue and Volume Samples |  |               |             |               |   |               |             |               |  |               |             |               |  |               |             |               |
|--|--|---------------|-------------|---------------|---|---------------|-------------|---------------|--|---------------|-------------|---------------|--|---------------|-------------|---------------|
|  | 95% Confidence Level (or reliability target)                 |               |             |               |   |               |             |               |  |               |             |               |  |               |             |               |
|  | Coefficient of Variation (CV) from Table 1 in USPS RM2010-10 |               |             |               | Minimum Sample Size Required for 90% Precision (or 10% tolerable error) |               |             |               | Minimum Sample Size Required for 95% Precision (or 5% tolerable error) |               |             |               | Minimum Sample Size Required for 98% Precision (or 2% tolerable error) |               |             |               |
|  | Revenue  |               | Volume      |               | Revenue   |               | Volume      |               | Revenue  |               | Volume      |               | Revenue  |               | Volume      |               |
|  | Full Sample  | 20% Reduction | Full Sample | 20% Reduction | Full Sample   | 20% Reduction | Full Sample | 20% Reduction | Full Sample  | 20% Reduction | Full Sample | 20% Reduction | Full Sample  | 20% Reduction | Full Sample | 20% Reduction |
| First-Class Single-Piece Letters   | 0.26   | 0.32          | 0.36        | 0.44          | 25  | 39            | 50          | 74            | 101  | 157           | 199         | 297           | 634  | 983           | 1245        | 1859          |
| First-Class Single-Piece Cards   | 1.39   | 1.67          | 1.43        | 1.72          | 742   | 1071          | 786         | 1136          | 2969   | 4286          | 3142        | 4546          | 18556  | 26785         | 19639       | 28412         |
| First-Class Flats  | 1.02   | 1.04          | 1.26        | 1.28          | 400   | 416           | 610         | 629           | 1599   | 1662          | 2440        | 2518          | 9992   | 10388         | 15247       | 15735         |
| First-Class Parcel   | 1.28   | 1.33          | 1.75        | 1.81          | 629   | 680           | 1176        | 1259          | 2518   | 2718          | 4706        | 5034          | 15735  | 16989         | 29412       | 31464         |
| Package Services Single Piece Parcel Post  | 0.94   | 0.97          | 1.03        | 1.07          | 339   | 361           | 408         | 440           | 1358   | 1446          | 1630        | 1759          | 8486   | 9036          | 10189       | 10996         |
| Package Services Bound Printed Matter Flats  | 0.18   | 0.18          | 0.07        | 0.07          | 13  | 12            | 2           | 2             | 50   | 50            | 8           | 8             | 315  | 311           | 52          | 47            |
| Package Services Bound Printed Matter Parcels  | 0.18   | 0.19          | 0.09        | 0.09          | 12  | 14            | 3           | 3             | 50   | 55            | 12          | 12            | 311  | 347           | 78          | 78            |
| Package Services Media and Library Mail  | 0.63   | 0.65          | 0.60        | 0.62          | 152   | 162           | 138         | 148           | 610  | 649           | 553         | 591           | 3812   | 4058          | 3457        | 3692          |
| Priority Mail  | 0.39   | 0.40          | 1.01        | 1.05          | 58  | 61            | 392         | 424           | 234  | 246           | 1568        | 1694          | 1461   | 1537          | 9797        | 10588         |

| Table 3: Minimum Sample Size Required for 99% Confidence at Various Precision Levels for USPS Expected Coefficients of Variation (CVs) for ODIS-RPW Revenue and Volume Samples |  |               |             |               |   |               |             |               |  |               |             |               |  |               |             |               |
|--|--|---------------|-------------|---------------|---|---------------|-------------|---------------|--|---------------|-------------|---------------|--|---------------|-------------|---------------|
| 99% Confidence Level (or reliability target)   |  |               |             |               |   |               |             |               |  |               |             |               |  |               |             |               |
|  | Coefficient of Variation (CV) from Table 1 in USPS RM2010-10 |               |             |               | Minimum Sample Size Required for 90% Precision (or 10% tolerable error) |               |             |               | Minimum Sample Size Required for 95% Precision (or 5% tolerable error) |               |             |               | Minimum Sample Size Required for 98% Precision (or 2% tolerable error) |               |             |               |
|  | Revenue  |               | Volume      |               | Revenue   |               | Volume      |               | Revenue  |               | Volume      |               | Revenue  |               | Volume      |               |
|  | Full Sample  | 20% Reduction | Full Sample | 20% Reduction | Full Sample   | 20% Reduction | Full Sample | 20% Reduction | Full Sample  | 20% Reduction | Full Sample | 20% Reduction | Full Sample  | 20% Reduction | Full Sample | 20% Reduction |
| First-Class Single-Piece Letters   | 0.26   | 0.32          | 0.36        | 0.44          | 44  | 68            | 86          | 128           | 175  | 272           | 344         | 514           | 1095   | 1699          | 2150        | 3212          |
| First-Class Single-Piece Cards   | 1.39   | 1.67          | 1.43        | 1.72          | 1282  | 1851          | 1357        | 1963          | 5128   | 7403          | 5428        | 7853          | 32052  | 46266         | 33924       | 49078         |
| First-Class Flats  | 1.02   | 1.04          | 1.26        | 1.28          | 690   | 718           | 1053        | 1087          | 2762   | 2871          | 4214        | 4349          | 17260  | 17943         | 26337       | 27180         |
| First-Class Parcel   | 1.28   | 1.33          | 1.75        | 1.81          | 1087  | 1174          | 2032        | 2174          | 4349   | 4695          | 8129        | 8696          | 27180  | 29345         | 50805       | 54349         |
| Package Services Single Piece Parcel Post  | 0.94   | 0.97          | 1.03        | 1.07          | 586   | 624           | 704         | 760           | 2345   | 2497          | 2816        | 3039          | 14658  | 15609         | 17600       | 18993         |
| Package Services Bound Printed Matter Flats  | 0.18   | 0.18          | 0.07        | 0.07          | 22  | 21            | 4           | 3             | 87   | 86            | 15          | 13            | 544  | 537           | 91          | 81            |
| Package Services Bound Printed Matter Parcels  | 0.18   | 0.19          | 0.09        | 0.09          | 21  | 24            | 5           | 5             | 86   | 96            | 21          | 21            | 537  | 599           | 134         | 134           |
| Package Services Media and Library Mail  | 0.63   | 0.65          | 0.60        | 0.62          | 263   | 280           | 239         | 255           | 1053   | 1121          | 956         | 1020          | 6584   | 7009          | 5972        | 6377          |
| Priority Mail  | 0.39   | 0.40          | 1.01        | 1.05          | 101   | 106           | 677         | 732           | 404  | 425           | 2708        | 2926          | 2523   | 2654          | 16923       | 18290         |

| Table 4: Minimum Sample Size Required for 90% Confidence at Various Precision Levels for USPS Expected Coefficients of Variation (CVs) for ODIS-RPW Cost per Piece and Cost Coverage Samples |   |               |               |               |   |               |               |               |  |               |               |               |  |               |               |               |
|--|---|---------------|---------------|---------------|---|---------------|---------------|---------------|--|---------------|---------------|---------------|--|---------------|---------------|---------------|
| 90% Confidence Level (or reliability target)   |   |               |               |               |   |               |               |               |  |               |               |               |  |               |               |               |
|  | Coefficient of Variation from Table 2 in USPS RM2010-10 |               |               |               | Minimum Sample Size Required for 90% Precision (or 10% tolerable error) |               |               |               | Minimum Sample Size Required for 95% Precision (or 5% tolerable error) |               |               |               | Minimum Sample Size Required for 98% Precision (or 2% tolerable error) |               |               |               |
|  | Cost per Piece  |               | Cost Coverage |               | Cost per Piece  |               | Cost Coverage |               | Cost per Piece   |               | Cost Coverage |               | Cost per Piece   |               | Cost Coverage |               |
|  | Full Sample   | 20% Reduction | Full Sample   | 20% Reduction | Full Sample   | 20% Reduction | Full Sample   | 20% Reduction | Full Sample  | 20% Reduction | Full Sample   | 20% Reduction | Full Sample  | 20% Reduction | Full Sample   | 20% Reduction |
| First-Class Single-Piece Letters   | 0.74  | 0.78          | 0.70          | 0.72          | 148   | 165           | 133           | 140           | 593  | 659           | 530           | 561           | 3705   | 4116          | 3315          | 3507          |
| First-Class Single-Piece Cards   | 2.72  | 2.89          | 2.70          | 2.86          | 2002  | 2260          | 1973          | 2213          | 8008   | 9040          | 7891          | 8854          | 50051  | 56502         | 49317         | 55336         |
| First-Class Flats  | 1.74  | 1.75          | 1.57          | 1.58          | 819   | 829           | 667           | 676           | 3277   | 3315          | 2668          | 2702          | 20482  | 20718         | 16675         | 16888         |
| First-Class Parcel   | 2.41  | 2.45          | 2.09          | 2.12          | 1572  | 1624          | 1182          | 1216          | 6287   | 6497          | 4728          | 4865          | 39292  | 40607         | 29550         | 30405         |
| Package Services Single Piece Parcel Post  | 2.41  | 2.43          | 2.37          | 2.39          | 1572  | 1598          | 1520          | 1546          | 6287   | 6392          | 6080          | 6183          | 39292  | 39947         | 37999         | 38643         |
| Package Services Bound Printed Matter Flats  | 4.53  | 4.53          | 4.54          | 4.54          | 5553  | 5553          | 5578          | 5578          | 22212  | 22212         | 22310         | 22310         | 138825   | 138825        | 139439        | 139439        |
| Package Services Bound Printed Matter Parcels  | 2.50  | 2.50          | 2.51          | 2.51          | 1691  | 1691          | 1705          | 1705          | 6765   | 6765          | 6819          | 6819          | 42282  | 42282         | 42621         | 42621         |
| Package Services Media and Library Mail  | 2.57  | 2.58          | 2.58          | 2.58          | 1787  | 1801          | 1801          | 1801          | 7149   | 7205          | 7205          | 7205          | 44683  | 45031         | 45031         | 45031         |
| Priority Mail  | 1.35  | 1.38          | 0.98          | 0.98          | 493   | 515           | 260           | 260           | 1973   | 2061          | 1040          | 1040          | 12329  | 12883         | 6497          | 6497          |

| Table 5: Minimum Sample Size Required for 95% Confidence at Various Precision Levels for USPS Expected Coefficients of Variation (CVs) for ODIS-RPW Cost per Piece and Cost Coverage Samples |   |               |               |               |   |               |               |               |  |               |               |               |  |               |               |               |
|--|---|---------------|---------------|---------------|---|---------------|---------------|---------------|--|---------------|---------------|---------------|--|---------------|---------------|---------------|
|  | 95% Confidence Level (or reliability target)            |               |               |               |   |               |               |               |  |               |               |               |  |               |               |               |
|  | Coefficient of Variation from Table 2 in USPS RM2010-10 |               |               |               | Minimum Sample Size Required for 90% Precision (or 10% tolerable error) |               |               |               | Minimum Sample Size Required for 95% Precision (or 5% tolerable error) |               |               |               | Minimum Sample Size Required for 98% Precision (or 2% tolerable error) |               |               |               |
|  | Cost per Piece  |               | Cost Coverage |               | Cost per Piece  |               | Cost Coverage |               | Cost per Piece   |               | Cost Coverage |               | Cost per Piece   |               | Cost Coverage |               |
|  | Full Sample   | 20% Reduction | Full Sample   | 20% Reduction | Full Sample   | 20% Reduction | Full Sample   | 20% Reduction | Full Sample  | 20% Reduction | Full Sample   | 20% Reduction | Full Sample  | 20% Reduction | Full Sample   | 20% Reduction |
| First-Class Single-Piece Letters   | 0.74  | 0.78          | 0.70          | 0.72          | 210   | 234           | 188           | 199           | 841  | 935           | 753           | 797           | 5259   | 5843          | 4706          | 4979          |
| First-Class Single-Piece Cards   | 2.72  | 2.89          | 2.70          | 2.86          | 2842  | 3209          | 2801          | 3142          | 11369  | 12834         | 11202         | 12569         | 71054  | 80214         | 70013         | 78557         |
| First-Class Flats  | 1.74  | 1.75          | 1.57          | 1.58          | 1163  | 1176          | 947           | 959           | 4652   | 4706          | 3788          | 3836          | 29077  | 29412         | 23673         | 23975         |
| First-Class Parcel   | 2.41  | 2.45          | 2.09          | 2.12          | 2231  | 2306          | 1678          | 1727          | 8925   | 9224          | 6712          | 6906          | 55781  | 57648         | 41951         | 43164         |
| Package Services Single Piece Parcel Post  | 2.41  | 2.43          | 2.37          | 2.39          | 2231  | 2268          | 2158          | 2194          | 8925   | 9074          | 8631          | 8777          | 55781  | 56711         | 53945         | 54859         |
| Package Services Bound Printed Matter Flats  | 4.53  | 4.53          | 4.54          | 4.54          | 7883  | 7883          | 7918          | 7918          | 31533  | 31533         | 31673         | 31673         | 197083   | 197083        | 197954        | 197954        |
| Package Services Bound Printed Matter Parcels  | 2.50  | 2.50          | 2.51          | 2.51          | 2401  | 2401          | 2420          | 2420          | 9604   | 9604          | 9681          | 9681          | 60025  | 60025         | 60506         | 60506         |
| Package Services Media and Library Mail  | 2.57  | 2.58          | 2.58          | 2.58          | 2537  | 2557          | 2557          | 2557          | 10149  | 10228         | 10228         | 10228         | 63433  | 63928         | 63928         | 63928         |
| Priority Mail  | 1.35  | 1.38          | 0.98          | 0.98          | 700   | 732           | 369           | 369           | 2801   | 2926          | 1476          | 1476          | 17503  | 18290         | 9224          | 9224          |

| Table 6: Minimum Sample Size Required for 99% Confidence at Various Precision Levels for USPS Expected Coefficients of Variation (CVs) for ODIS-RPW Cost per Piece and Cost Coverage Samples |   |               |               |               |   |               |               |               |  |               |               |               |  |               |               |               |
|--|---|---------------|---------------|---------------|---|---------------|---------------|---------------|--|---------------|---------------|---------------|--|---------------|---------------|---------------|
|  | 99% Confidence Level (or reliability target)            |               |               |               |   |               |               |               |  |               |               |               |  |               |               |               |
|  | Coefficient of Variation from Table 2 in USPS RM2010-10 |               |               |               | Minimum Sample Size Required for 90% Precision (or 10% tolerable error) |               |               |               | Minimum Sample Size Required for 95% Precision (or 5% tolerable error) |               |               |               | Minimum Sample Size Required for 98% Precision (or 2% tolerable error) |               |               |               |
|  | Cost per Piece  |               | Cost Coverage |               | Cost per Piece  |               | Cost Coverage |               | Cost per Piece   |               | Cost Coverage |               | Cost per Piece   |               | Cost Coverage |               |
|  | Full Sample   | 20% Reduction | Full Sample   | 20% Reduction | Full Sample   | 20% Reduction | Full Sample   | 20% Reduction | Full Sample  | 20% Reduction | Full Sample   | 20% Reduction | Full Sample  | 20% Reduction | Full Sample   | 20% Reduction |
| First-Class Single-Piece Letters   | 0.74  | 0.78          | 0.70          | 0.72          | 363   | 404           | 325           | 344           | 1454   | 1615          | 1301          | 1376          | 9084   | 10093         | 8129          | 8600          |
| First-Class Single-Piece Cards   | 2.72  | 2.89          | 2.70          | 2.86          | 4909  | 5542          | 4837          | 5428          | 19638  | 22169         | 19350         | 21711         | 122735   | 138557        | 120937        | 135695        |
| First-Class Flats  | 1.74  | 1.75          | 1.57          | 1.58          | 2009  | 2032          | 1636          | 1657          | 8036   | 8129          | 6543          | 6626          | 50226  | 50805         | 40891         | 41414         |
| First-Class Parcel   | 2.41  | 2.45          | 2.09          | 2.12          | 3854  | 3983          | 2899          | 2982          | 15417  | 15932         | 11594         | 11930         | 96353  | 99578         | 72464         | 74560         |
| Package Services Single Piece Parcel Post  | 2.41  | 2.43          | 2.37          | 2.39          | 3854  | 3918          | 3727          | 3790          | 15417  | 15673         | 14909         | 15162         | 96353  | 97959         | 93181         | 94761         |
| Package Services Bound Printed Matter Flats  | 4.53  | 4.53          | 4.54          | 4.54          | 13617   | 13617         | 13677         | 13677         | 54469  | 54469         | 54710         | 54710         | 340430   | 340430        | 341935        | 341935        |
| Package Services Bound Printed Matter Parcels  | 2.50  | 2.50          | 2.51          | 2.51          | 4147  | 4147          | 4181          | 4181          | 16589  | 16589         | 16722         | 16722         | 103684   | 103684        | 104515        | 104515        |
| Package Services Media and Library Mail  | 2.57  | 2.58          | 2.58          | 2.58          | 4383  | 4417          | 4417          | 4417          | 17531  | 17668         | 17668         | 17668         | 109572   | 110426        | 110426        | 110426        |
| Priority Mail  | 1.35  | 1.38          | 0.98          | 0.98          | 1209  | 1264          | 637           | 637           | 4837   | 5055          | 2549          | 2549          | 30234  | 31593         | 15932         | 15932         |

| Table 7: Sensitivity Test - Minimum Sample Size Required for 95% Confidence at Various Precision Levels for USPS Expected Coefficients of Variation (CVs) for ODIS-RPW Revenue and Volume Samples |  |               |             |               |  |               |             |               |  |               |             |               |  |               |             |               |
|---|--|---------------|-------------|---------------|--|---------------|-------------|---------------|--|---------------|-------------|---------------|--|---------------|-------------|---------------|
|   |  |               |             | (1)           | (2)  | (3)           | (4)         | (5)           | (6)  | (7)           | (8)         | (9)           | (10)   | (11)          | (12)        |               |
| 95% Confidence Level (or reliability target)  |  |               |             |               |  |               |             |               |  |               |             |               |  |               |             |               |
|   | Coefficient of Variation (CV) from Table 1 in USPS RM2010-10 |               |             |               | Minimum Sample Size Required for 93% Precision (or 7% tolerable error) |               |             |               | Minimum Sample Size Required for 94% Precision (or 6% tolerable error) |               |             |               | Minimum Sample Size Required for 95% Precision (or 5% tolerable error) |               |             |               |
|   | Revenue  |               | Volume      |               | Revenue  |               | Volume      |               | Revenue  |               | Volume      |               | Revenue  |               | Volume      |               |
|   | Full Sample  | 20% Reduction | Full Sample | 20% Reduction | Full Sample  | 20% Reduction | Full Sample | 20% Reduction | Full Sample  | 20% Reduction | Full Sample | 20% Reduction | Full Sample  | 20% Reduction | Full Sample | 20% Reduction |
| First-Class Single-Piece Letters  | 0.26   | 0.32          | 0.36        | 0.44          | 52   | 80            | 102         | 152           | 70   | 109           | 138         | 207           | 101  | 157           | 199         | 297           |
| First-Class Single-Piece Cards  | 1.39   | 1.67          | 1.43        | 1.72          | 1515   | 2186          | 1603        | 2319          | 2062   | 2976          | 2182        | 3157          | 2969   | 4286          | 3142        | 4546          |
| First-Class Flats   | 1.02   | 1.04          | 1.26        | 1.28          | 816  | 848           | 1245        | 1285          | 1110   | 1154          | 1694        | 1748          | 1599   | 1662          | 2440        | 2518          |
| First-Class Parcel  | 1.28   | 1.33          | 1.75        | 1.81          | 1285   | 1387          | 2401        | 2568          | 1748   | 1888          | 3268        | 3496          | 2518   | 2718          | 4706        | 5034          |
| Package Services Single Piece Parcel Post   | 0.94   | 0.97          | 1.03        | 1.07          | 693  | 738           | 832         | 898           | 943  | 1004          | 1132        | 1222          | 1358   | 1446          | 1630        | 1759          |
| Package Services Bound Printed Matter Flats   | 0.18   | 0.18          | 0.07        | 0.07          | 26   | 25            | 4           | 4             | 35   | 35            | 6           | 5             | 50   | 50            | 8           | 8             |
| Package Services Bound Printed Matter Parcels   | 0.18   | 0.19          | 0.09        | 0.09          | 25   | 28            | 6           | 6             | 35   | 39            | 9           | 9             | 50   | 55            | 12          | 12            |
| Package Services Media and Library Mail   | 0.63   | 0.65          | 0.60        | 0.62          | 311  | 331           | 282         | 301           | 424  | 451           | 384         | 410           | 610  | 649           | 553         | 591           |
| Priority Mail   | 0.39   | 0.40          | 1.01        | 1.05          | 119  | 125           | 800         | 864           | 162  | 171           | 1089        | 1176          | 234  | 246           | 1568        | 1694          |

| Table 8: Sensitivity Test - Minimum Sample Size Required for 95% Confidence at Various Precision Levels for USPS Expected Coefficients of Variation (CVs) for ODIS-RPW Cost per Piece and Cost Coverage Samples |   |               |               |               |  |               |               |               |  |               |               |               |  |               |               |               |
|---|---|---------------|---------------|---------------|--|---------------|---------------|---------------|--|---------------|---------------|---------------|--|---------------|---------------|---------------|
|   |   |               |               | (1)           | (2)  | (3)           | (4)           | (5)           | (6)  | (7)           | (8)           | (9)           | (10)   | (11)          | (12)          |               |
| 95% Confidence Level (or reliability target)  |   |               |               |               |  |               |               |               |  |               |               |               |  |               |               |               |
|   | Coefficient of Variation from Table 2 in USPS RM2010-10 |               |               |               | Minimum Sample Size Required for 93% Precision (or 7% tolerable error) |               |               |               | Minimum Sample Size Required for 94% Precision (or 6% tolerable error) |               |               |               | Minimum Sample Size Required for 95% Precision (or 5% tolerable error) |               |               |               |
|   | Cost per Piece  |               | Cost Coverage |               | Cost per Piece   |               | Cost Coverage |               | Cost per Piece   |               | Cost Coverage |               | Cost per Piece   |               | Cost Coverage |               |
|   | Full Sample   | 20% Reduction | Full Sample   | 20% Reduction | Full Sample  | 20% Reduction | Full Sample   | 20% Reduction | Full Sample  | 20% Reduction | Full Sample   | 20% Reduction | Full Sample  | 20% Reduction | Full Sample   | 20% Reduction |
| First-Class Single-Piece Letters  | 0.74  | 0.78          | 0.70          | 0.72          | 429  | 477           | 384           | 406           | 584  | 649           | 523           | 553           | 841  | 935           | 753           | 797           |
| First-Class Single-Piece Cards  | 2.72  | 2.89          | 2.70          | 2.86          | 5800   | 6548          | 5715          | 6413          | 7895   | 8913          | 7779          | 8729          | 11369  | 12834         | 11202         | 12569         |
| First-Class Flats   | 1.74  | 1.75          | 1.57          | 1.58          | 2374   | 2401          | 1932          | 1957          | 3231   | 3268          | 2630          | 2664          | 4652   | 4706          | 3788          | 3836          |
| First-Class Parcel  | 2.41  | 2.45          | 2.09          | 2.12          | 4554   | 4706          | 3425          | 3524          | 6198   | 6405          | 4661          | 4796          | 8925   | 9224          | 6712          | 6906          |
| Package Services Single Piece Parcel Post   | 2.41  | 2.43          | 2.37          | 2.39          | 4554   | 4629          | 4404          | 4478          | 6198   | 6301          | 5994          | 6095          | 8925   | 9074          | 8631          | 8777          |
| Package Services Bound Printed Matter Flats   | 4.53  | 4.53          | 4.54          | 4.54          | 16088  | 16088         | 16159         | 16159         | 21898  | 21898         | 21995         | 21995         | 31533  | 31533         | 31673         | 31673         |
| Package Services Bound Printed Matter Parcels   | 2.50  | 2.50          | 2.51          | 2.51          | 4900   | 4900          | 4939          | 4939          | 6669   | 6669          | 6723          | 6723          | 9604   | 9604          | 9681          | 9681          |
| Package Services Media and Library Mail   | 2.57  | 2.58          | 2.58          | 2.58          | 5178   | 5219          | 5219          | 5219          | 7048   | 7103          | 7103          | 7103          | 10149  | 10228         | 10228         | 10228         |
| Priority Mail   | 1.35  | 1.38          | 0.98          | 0.98          | 1429   | 1493          | 753           | 753           | 1945   | 2032          | 1025          | 1025          | 2801   | 2926          | 1476          | 1476          |

| Table 9: Sensitivity Test - Minimum Sample Size Required for 95% Precision at Various Confidence Levels for USPS Expected Coefficients of Variation (CVs) for ODIS-RPW Revenue and Volume Samples |  |               |             |               |   |               |             |               |   |               |             |               |   |               |             |               |
|---|--|---------------|-------------|---------------|---|---------------|-------------|---------------|---|---------------|-------------|---------------|---|---------------|-------------|---------------|
|   | (1)  | (2)           | (3)         | (4)           | (5)   | (6)           | (7)         | (8)           | (9)   | (10)          | (11)        | (12)          |   |               |             |               |
|   | 95% Precision (or 5% tolerable error)                        |               |             |               |   |               |             |               |   |               |             |               |   |               |             |               |
|   | Coefficient of Variation (CV) from Table 1 in USPS RM2010-10 |               |             |               | Minimum Sample Size Required for 88% Confidence (or reliability target) |               |             |               | Minimum Sample Size Required for 90% Confidence (or reliability target) |               |             |               | Minimum Sample Size Required for 95% Confidence (or reliability target) |               |             |               |
|   | Revenue  |               | Volume      |               | Revenue   |               | Volume      |               | Revenue   |               | Volume      |               | Revenue   |               | Volume      |               |
|   | Full Sample  | 20% Reduction | Full Sample | 20% Reduction | Full Sample   | 20% Reduction | Full Sample | 20% Reduction | Full Sample   | 20% Reduction | Full Sample | 20% Reduction | Full Sample   | 20% Reduction | Full Sample | 20% Reduction |
| First-Class Single-Piece Letters  | 0.26   | 0.32          | 0.36        | 0.44          | 64  | 100           | 127         | 189           | 71  | 111           | 140         | 210           | 101   | 157           | 199         | 297           |
| First-Class Single-Piece Cards  | 1.39   | 1.67          | 1.43        | 1.72          | 1888  | 2725          | 1998        | 2891          | 2091  | 3019          | 2213        | 3202          | 2969  | 4286          | 3142        | 4546          |
| First-Class Flats   | 1.02   | 1.04          | 1.26        | 1.28          | 1017  | 1057          | 1551        | 1601          | 1126  | 1171          | 1718        | 1773          | 1599  | 1662          | 2440        | 2518          |
| First-Class Parcel  | 1.28   | 1.33          | 1.75        | 1.81          | 1601  | 1729          | 2993        | 3201          | 1773  | 1915          | 3315        | 3546          | 2518  | 2718          | 4706        | 5034          |
| Package Services Single Piece Parcel Post   | 0.94   | 0.97          | 1.03        | 1.07          | 863   | 919           | 1037        | 1119          | 956   | 1018          | 1148        | 1239          | 1358  | 1446          | 1630        | 1759          |
| Package Services Bound Printed Matter Flats   | 0.18   | 0.18          | 0.07        | 0.07          | 32  | 32            | 5           | 5             | 36  | 35            | 6           | 5             | 50  | 50            | 8           | 8             |
| Package Services Bound Printed Matter Parcels   | 0.18   | 0.19          | 0.09        | 0.09          | 32  | 35            | 8           | 8             | 35  | 39            | 9           | 9             | 50  | 55            | 12          | 12            |
| Package Services Media and Library Mail   | 0.63   | 0.65          | 0.60        | 0.62          | 388   | 413           | 352         | 376           | 430   | 457           | 390         | 416           | 610   | 649           | 553         | 591           |
| Priority Mail   | 0.39   | 0.40          | 1.01        | 1.05          | 149   | 156           | 997         | 1077          | 165   | 173           | 1104        | 1193          | 234   | 246           | 1568        | 1694          |

| Table 10: Sensitivity Test - Minimum Sample Size Required for 95% Precision at Various Confidence Levels for USPS Expected Coefficients of Variation (CVs) for ODIS-RPW Cost per Piece and Cost Coverage Samples |   |               |               |               |   |               |               |               |   |               |               |               |   |               |               |               |
|--|---|---------------|---------------|---------------|---|---------------|---------------|---------------|---|---------------|---------------|---------------|---|---------------|---------------|---------------|
|  | (1)   | (2)           | (3)           | (4)           | (5)   | (6)           | (7)           | (8)           | (9)   | (10)          | (11)          | (12)          |   |               |               |               |
|  | 95% Precision (or 5% tolerable error)                   |               |               |               |   |               |               |               |   |               |               |               |   |               |               |               |
|  | Coefficient of Variation from Table 2 in USPS RM2010-10 |               |               |               | Minimum Sample Size Required for 91% Confidence (or reliability target) |               |               |               | Minimum Sample Size Required for 94% Confidence (or reliability target) |               |               |               | Minimum Sample Size Required for 95% Confidence (or reliability target) |               |               |               |
|  | Cost per Piece  |               | Cost Coverage |               | Cost per Piece  |               | Cost Coverage |               | Cost per Piece  |               | Cost Coverage |               | Cost per Piece  |               | Cost Coverage |               |
|  | Full Sample   | 20% Reduction | Full Sample   | 20% Reduction | Full Sample   | 20% Reduction | Full Sample   | 20% Reduction | Full Sample   | 20% Reduction | Full Sample   | 20% Reduction | Full Sample   | 20% Reduction | Full Sample   | 20% Reduction |
| First-Class Single-Piece Letters   | 0.74  | 0.78          | 0.70          | 0.72          | 639   | 710           | 572           | 605           | 788   | 876           | 705           | 746           | 841   | 935           | 753           | 797           |
| First-Class Single-Piece Cards   | 2.72  | 2.89          | 2.70          | 2.86          | 8633  | 9746          | 8507          | 9545          | 10650   | 12022         | 10494         | 11774         | 11369   | 12834         | 11202         | 12569         |
| First-Class Flats  | 1.74  | 1.75          | 1.57          | 1.58          | 3533  | 3574          | 2876          | 2913          | 4358  | 4408          | 3548          | 3593          | 4652  | 4706          | 3788          | 3836          |
| First-Class Parcel   | 2.41  | 2.45          | 2.09          | 2.12          | 6778  | 7004          | 5097          | 5245          | 8360  | 8640          | 6288          | 6469          | 8925  | 9224          | 6712          | 6906          |
| Package Services Single Piece Parcel Post  | 2.41  | 2.43          | 2.37          | 2.39          | 6778  | 6890          | 6554          | 6665          | 8360  | 8500          | 8085          | 8222          | 8925  | 9074          | 8631          | 8777          |
| Package Services Bound Printed Matter Flats  | 4.53  | 4.53          | 4.54          | 4.54          | 23946   | 23946         | 24052         | 24052         | 29539   | 29539         | 29669         | 29669         | 31533   | 31533         | 31673         | 31673         |
| Package Services Bound Printed Matter Parcels  | 2.50  | 2.50          | 2.51          | 2.51          | 7293  | 7293          | 7352          | 7352          | 8997  | 8997          | 9069          | 9069          | 9604  | 9604          | 9681          | 9681          |
| Package Services Media and Library Mail  | 2.57  | 2.58          | 2.58          | 2.58          | 7707  | 7767          | 7767          | 7767          | 9507  | 9582          | 9582          | 9582          | 10149   | 10228         | 10228         | 10228         |
| Priority Mail  | 1.35  | 1.38          | 0.98          | 0.98          | 2127  | 2222          | 1121          | 1121          | 2623  | 2741          | 1382          | 1382          | 2801  | 2926          | 1476          | 1476          |

**Table 11: Automated and Manual Incoming Secondary Distribution using Past In-Office Cost System (IOCS) Data**

(Number of observations randomly selected for each day of the week out of roughly 700,000 observations annually)

Note: Carriers and POBox may not add to the MEP due to the IOCS data collector's categorization of the observation

|  | Saturday    | Sunday     | Monday      | Tuesday     | Wednesday   | Thursday    | Friday      | Mean        |
|--|-------------|------------|-------------|-------------|-------------|-------------|-------------|-------------|
| <b>Mail Exit Point (MEP) for Distribution to Carriers and POBox:</b> |             |            |             |             |             |             |             |             |
| <b>2005</b>  | 2625        | 276        | 4035        | 4106        | 4033        | 4018        | 4124        | <b>3317</b> |
| <b>2007</b>  | 2508        | 294        | 3630        | 3827        | 3738        | 3795        | 3697        | <b>3070</b> |
| <b>2008</b>  | 2326        | 264        | 3301        | 3363        | 3302        | 3469        | 3401        | <b>2775</b> |
| <b>2009</b>  | 1980        | 219        | 3113        | 3004        | 3143        | 3011        | 3162        | <b>2519</b> |
| <b>Mean</b>  | <b>2360</b> | <b>263</b> | <b>3520</b> | <b>3575</b> | <b>3554</b> | <b>3573</b> | <b>3596</b> |             |
| <b>Alternate Distribution to Carriers only:</b>                      |             |            |             |             |             |             |             |             |
| <b>2005</b>  | 2049        | 234        | 3157        | 3139        | 3187        | 3177        | 3196        | <b>2591</b> |
| <b>2007</b>  | 1973        | 239        | 2816        | 2984        | 2919        | 2928        | 2821        | <b>2383</b> |
| <b>2008</b>  | 1786        | 218        | 2498        | 2602        | 2541        | 2617        | 2615        | <b>2125</b> |
| <b>2009</b>  | 1487        | 188        | 2291        | 2260        | 2356        | 2236        | 2360        | <b>1883</b> |
| <b>Mean</b>  | <b>1824</b> | <b>220</b> | <b>2691</b> | <b>2746</b> | <b>2751</b> | <b>2740</b> | <b>2748</b> |             |
| <b>Alternate Distribution to POBox Only:</b>                         |             |            |             |             |             |             |             |             |
| <b>2005</b>  | 778         | 58         | 1209        | 1292        | 1214        | 1166        | 1291        | <b>1001</b> |
| <b>2007</b>  | 793         | 76         | 1198        | 1289        | 1238        | 1242        | 1243        | <b>1011</b> |
| <b>2008</b>  | 763         | 65         | 1143        | 1144        | 1121        | 1200        | 1163        | <b>943</b>  |
| <b>2009</b>  | 755         | 51         | 1198        | 1128        | 1198        | 1143        | 1201        | <b>953</b>  |
| <b>Mean</b>  | <b>772</b>  | <b>63</b>  | <b>1187</b> | <b>1213</b> | <b>1193</b> | <b>1188</b> | <b>1225</b> |             |
| <b>POB to Carrier Ratio</b>  | 0.3797      | 0.2479     | 0.3830      | 0.4116      | 0.3809      | 0.3670      | 0.4039      | 0.3863      |
| <b>Carriers to MEP Ratio</b>   | 0.7806      | 0.8478     | 0.7824      | 0.7645      | 0.7902      | 0.7907      | 0.7750      | 0.7813      |
| <b>POB to MEP Ratio</b>  | 0.2964      | 0.2101     | 0.2996      | 0.3147      | 0.3010      | 0.2902      | 0.3130      | 0.3018      |