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BEFORE THE
POSTAL REGULATORY COMMISSION
WASHINGTON, D.C. 20268–0001

PERIODIC REPORTING (PROPOSAL ONE)	Docket No. RM2017-5

RESPONSES OF THE UNITED STATES POSTAL SERVICE
TO QUESTIONS 1-4 OF CHAIRMAN'S INFORMATION REQUEST NO. 1
(July 11, 2017)

The United States Postal Service hereby provides its responses to Questions 1-4 of Chairman's Information Request No. 1, issued June 27, 2017. The questions are stated verbatim and followed by the response.

Respectfully submitted,

UNITED STATES POSTAL SERVICE

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1. Please refer to Table A in Proposal One at 7, which shows Proposal One's impact on volume and revenue for Insured, Cash on Delivery (COD), and Registered Mail.[1] The Postal Service states that PC Postage and meter pieces constituted only 7 percent of total COD revenue, piece, and weight (RPW) volume in FY 2016. *Id.* at 6-7. However, if Proposal One were implemented, the portion of PC Postage and meter COD pieces would be over 51 percent of the total COD RPW volume.[2] Table A also shows an almost 46 percent increase in revenue per piece, from $7.20 to $10.50. Proposal One at 7. Please fully explain the changes in characteristics of the PC Postage and meter volumes between the Origin Destination Information System (ODIS)-RPW sampling volumes and the proposed census data volumes that would produce such a large increase in revenue per piece for the PC Postage and metered COD pieces.

RESPONSE:

Because it is not practical to count all of the mail, the ODIS-RPW system uses probability sampling techniques based on statistical principles to measure the characteristics of the total mail volume by examining only a small fraction of that volume. The sampling process is divided into two stages. In the first stage, statistical tests are randomly selected for each delivery day and each geographic area. In the second stage, a data collector samples the selected mailstream by applying a random start and a mailpiece skip to randomly select pieces for recording. (More information about the sample design is provided in the response to question 2 of this Information Request.)

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[1] Petition of the United States Postal Service Requesting Initiation of a Proceeding to Consider a Proposed Change in Analytical Principles (Proposal One), June 7, 2017 (Petition). Proposal One is an attachment to the Petition (Proposal One).

[2] United States Postal Service Public Cost and Revenue Analysis Fiscal Year 2016 Finance (CR Analysis) shows total COD volume for FY 2016 at 202,000. CR Analysis at 5. Table A indicates that Proposal One would have detected 186,000 additional PC postage and meter COD pieces for a total of 200,000 PC postage and meter COD pieces. Proposal One at 7. This increased volume of PC postage and meter COD pieces would represent 51 percent of the adjusted COD volume of 388,000 (202,000 + 186,000).

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The ODIS-RPW sampling strategy was designed to produce reliable estimates for each class and subclass of mail, and every extra service, at the quarterly level. However, like any sampling system, it tends to produce an underestimate for very rare items. As COD has dropped in volume, the odds of the data collector coming across a COD mailpiece during sampling have decreased. In FY16, data collectors recorded fewer than 20 pieces per quarter nationwide.

In addition to the difficulties in mailpiece selection, COD sample data are difficult to process because they do not necessarily provide all of the rate ingredients needed to properly classify the extra service revenue. Specifically, revenue for the parent piece, COD service, and any other extra services is usually combined into one or more indicia on the mailpiece. Revenue and Volume Reporting has employed different approaches to disaggregate the parent and extra service revenue from these sample pieces, including using tracking information from the extra service and parcel barcodes, and a subtraction process to derive parent postage from the mailpiece characteristics. These approaches have been somewhat successful, but the most reliable data are from the source postage system, as detailed in our proposal.

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2. The Postal Service states that the proposed change would substantially improve the cost coverage of COD due to the additional revenue recognized using census data. Proposal One at 5. This additional revenue is due to the almost doubling of volume for COD. While this additional volume would increase revenues, the Postal Service assumes that there will be no change in the costs for COD, despite the increase in volume. As the table below shows, while the revenue per piece for COD changes slightly, the cost per piece is cut in half, doubling the cost coverage in FY 2016 from 41.1 percent to 81.6 percent.

Comparison of Proposal One Estimated COD Volume, Revenue, & Cost - FY 2016

	Revenue ($ Millions)	Cost ($ Millions)	Volume (000)	Rev/Pc	Cost/Pc	Coverage
Current FY 2016	2.0	4.9	201	10.095	24.582	41.1%
Proposed FY 2016	4.0	4.9	388	10.394	12.735	81.6%

Source: *Current FY 2016 - Docket ACR2016, Library Reference USPS-FY16-1,* FY 2016 Cost and Revenue Analysis at 2 and 5.
Proposed FY 2016 - Current FY 2016 plus Differences from Table A, Proposal One, Docket No. RM2017-5

Since both the ODIS-RPW and the In-Office Cost System (IOCS) are statistical sampling systems, please detail the differences in the systems regarding coefficients of variance, sample sizes, and confidence intervals for COD and discuss the accuracy of IOCS given the magnitude of the change in volume due to the proposed switch to census data.

RESPONSE:

Regarding ODIS-RPW, the most recent full system documentation was presented in the last omnibus rate case, Docket No. R2006-1. Specifically provided in that case was the testimony of witness Pafford, USPS-T-3, and the ODIS-RPW system documentation, USPS-LR-L-14. Since that time, the sample design has remained relatively unchanged, other than introducing digital sampling for a portion of letter mail exit points. That design change was implemented in FY2015 and FY2016 following Docket Nos. RM2015-11

(Proposal Three, approved by Order No. 2593) and RM2016-1 (Proposal Eleven, approved by Order No. 2901). The ODIS-RPW utilizes a stratified multi-stage sample design, with the primary sampling unit the mail exit point, or MEP-day. These are letter, flat or parcel sampling units at destination delivery units (mostly post offices) for a delivery day. There are approximately 2,900 sampling strata that exist in approximately 200 geographic sampling areas corresponding to a processing plant. There are approximately 32,000 MEP-days selected each quarter, and that sample size has remained consistent since the R2006-1 rate case. Confidence intervals for major mail classes/products were provided for the R2006-1 rate case and those have maintained relatively constant as well, except for products related to letter MEP testing that have improved (coefficients of variation improved) with the introduction of digital letter mail testing. However, better estimates of COD extra services cannot practically be obtained from changes in sampling procedures, given the very small number of COD transactions relatively to the population of pieces. Each quarter there are approximately 1.5 million mail pieces sampled in ODIS-RPW out of a population of over 38 billion delivery pieces. However, the number of COD extra service counts reported in RPW per quarter is typically less than 20.

The IOCS sample design is completely different, with the only similarity being some overlap in data collectors conducting both ODIS-RPW and IOCS tests. The coefficients of variance (CVs) for the IOCS estimates of COD costs in FY2016 were 33 percent for

mail processing, and 49 percent for window[3]. Out of the 575,203 tallies, there were only 8 COD tallies. Confidence intervals for costs, excluding piggybacks, were $0 to $828K for mail processing and $33K to $1,434K for window. Although the IOCS-based estimate for cost segment 3 increased considerably from $0.434K in FY15 to $1.864K in FY16, the change is not statistically significant.

The IOCS CVs of cost estimates are not affected by a change in RPWs estimate of volume and revenue, but they would be affected by changes in total COD-handling workhours, which are strongly correlated with the true volume. However, volumes would have to increase by more than one order of magnitude in order to reduce IOCS-based CVs down to 10 percent.

[3] USPS-FY16-37, workbook "IOCS PRC CV Summary Public TtI.xlsx".

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3. The Postal Service states that the PC Postage and meter volumes constitute a small share of the total volumes for Insurance, COD, and Registered Mail at 5 percent, 7 percent, and 10 percent, respectively. Proposal One at 6-7.

a. Please confirm that under the proposed methodology the volume shares of PC Postage and meters for Insurance, COD, and Registered Mail will be 7 percent, 52 percent, and 13 percent, respectively.[4]

b. What are the current proportions of total volume for Insurance, COD, and Registered Mail that are determined from the ODIS-RPW statistical sampling system?

c. What will the proportions of total volume be for Insurance, COD, and Registered Mail that are derived from the ODIS-RPW statistical sampling system under Proposal One?

d. What proportion of the total volume of all classes and special services will be estimated using ODIS-RPW after implementation of Proposal One?

RESPONSE:

a. Confirmed except for the volume share for Insurance. That share is 7.6 percent, which rounds up to 8 percent.

b. The current shares of total volume for Insurance, COD, and Registered Mail that are determined from the ODIS-RPW statistical sampling system are 5 percent, 13 percent, and 11 percent, respectively.

c. Under Proposal One, the new shares of total volume for Insurance, COD, and Registered Mail that would be determined from the ODIS-RPW statistical sampling system are 0 percent (0.3 percent), 3 percent, and 1 percent, respectively.

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[4] These volume shares are derived by adding the differences in Table A of Proposal One to the CR Analysis volumes for Insurance, COD, and Registered Mail and dividing the proposed volumes from Table A by the adjusted CR Analysis volumes.

d. 6 percent.

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4. As more volume and revenue data collection moves from the ODIS-RPW statistical sampling regime to the use of census data, what are the implications, if any, for the accuracy of the remaining pieces that will still be estimated based on the ODIS-RPW statistical sampling? Will the statistical sampling data become more accurate or less accurate?

RESPONSE:

There are no implications. The accuracy of the sampling data will remain the same. This proposal does not seek to change the sample design or the sample size of the ODIS-RPW system. Instead, it seeks to use census information in lieu of sampling data. The accuracy of the remaining pieces remains untouched, as data collectors for the sample continue to do the exact same thing, and record the exact same information for all of the pieces they sample. The impact of Proposal One would simply be that less of that recorded information ends up being used in RPW, replaced instead by census data.