

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

Before Commissioners:

Robert G. Taub, Chairman;  
Nanci E. Langley, Vice Chairman;  
Mark Acton; and  
Tony Hammond

Periodic Reporting  
(Proposal Two)

Docket No. RM2018-5

ORDER APPROVING IN PART PROPOSAL TWO

(Issued January 8, 2019)

I. INTRODUCTION

On May 25, 2018, the Postal Service filed a petition pursuant to 39 C.F.R. § 3050.11, requesting that the Commission initiate a rulemaking proceeding to consider changes to analytical principles relating to periodic reports.<sup>1</sup> The Petition identified the proposed changes filed in this docket as Proposal Two. Proposal Two introduces new sampling and weighting procedures for the city carrier portion of the In-Office Cost System (IOCS). Petition at 1. For the reasons discussed below, the Commission approves Proposal Two in part.

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<sup>1</sup> Petition of the United States Postal Service for the Initiation of a Proceeding to Consider Proposed Changes in Analytical Principles (Proposal Two), May 25, 2018 (Petition). Accompanying the Petition were workpapers and a non-public annex. See Notice of Filing of USPS-RM2018-5/1 and USPS-RM2018-5/NP1 and Application for Nonpublic Treatment, May 25, 2018.

## II. PROCEDURAL HISTORY

On June 1, 2018, the Commission issued a notice establishing this proceeding, inviting comments on Proposal Two, and appointing a Public Representative.<sup>2</sup> On June 13, 2018, the Public Representative filed a motion for issuance of an information request, pursuant to 39 C.F.R. § 3007.3(c).<sup>3</sup> On June 18, 2018, Chairman's Information Request No. 1 was issued.<sup>4</sup> On June 15, 2018, United Parcel Service, Inc. (UPS) filed its own motion for issuance of an information request.<sup>5</sup> The Commission granted UPS's motion for issuance of information request on June 27, 2018.<sup>6</sup> Also on June 27, 2018, Chairman's Information Request No. 2 was issued.<sup>7</sup> The Postal Service responded to CHIR No. 1 on June 29, 2018,<sup>8</sup> and to CHIR No. 2 on July 5, 2018.<sup>9</sup>

On July 5, 2018, the Postal Service filed an alternative version of non-public unit cost impacts in furtherance of an informal agreement between Amazon.com Services, Inc. (Amazon) and UPS, with an application for non-public treatment.<sup>10</sup> On July 6, 2018, the Public Representative filed another motion for issuance of an information request.<sup>11</sup>

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<sup>2</sup> Notice of Proposed Rulemaking on Analytical Principles Used In Periodic Reporting (Proposal Two), June 1, 2018 (Order No. 4630).

<sup>3</sup> Public Representative Motion for Issuance of Information Request, June 13, 2018.

<sup>4</sup> Chairman's Information Request No. 1, June 18, 2018 (CHIR No. 1).

<sup>5</sup> Motion of United Parcel Service, Inc. for Issuance of Information Request to the United States Postal Service, June 15, 2018.

<sup>6</sup> Order Granting Motion for Issuance of Information Request, June 27, 2018 (Order No. 4680).

<sup>7</sup> Chairman's Information Request No. 2, June 27, 2018 (CHIR No. 2).

<sup>8</sup> Responses of the United States Postal Service to Questions 1-19 of Chairman's Information Request No. 1, June 29, 2018 (Responses to CHIR No. 1). Accompanying the responses were both public and non-public material related to CHIR No. 1. See Notice of Filing of USPS-RM2018-5/2 and USPS-RM2018-5/NP2 and Application for Nonpublic Treatment, June 29, 2018.

<sup>9</sup> Responses of the United States Postal Service to Questions 1-8 of Chairman's Information Request No. 2, July 5, 2018 (Responses to CHIR No. 2). Accompanying the responses was non-public material related to CHIR No. 2. See Notice of Filing of USPS-RM2018-5/NP3 and Application for Nonpublic Treatment, July 5, 2018.

<sup>10</sup> Notice of Filing of USPS-RM2018-5/NP3 and Application for Nonpublic Treatment, July 5, 2018; Motion of the United States Postal Service to Adjust Procedural Schedule, July 5, 2018, at 2-3.

<sup>11</sup> Public Representative's Second Motion for Issuance of Information Request, July 6, 2018.

The Postal Service made an informal response to the request on July 9, 2018.<sup>12</sup> On July 11, 2018, the Postal Service provided underlying datasets without geographic indicators in furtherance of its informal agreement with Amazon and UPS, and filed notice of its library reference with an application for non-public treatment.<sup>13</sup>

On July 16, 2018, Chairman's Information Request No. 3 was issued<sup>14</sup> On July 18, 2018, the Postal Service provided an additional alternative version of the non-public unit cost impacts in furtherance of its informal agreement with Amazon and UPS and filed notice of its library reference, with an application for non-public treatment.<sup>15</sup> The Postal Service responded to CHIR No. 3 on July 23, 2018.<sup>16</sup>

On July 26, 2018, the Commission received comments from UPS<sup>17</sup> and from the Public Representative.<sup>18</sup> On August 2, 2018, the Postal Service filed a motion seeking leave to file reply comments.<sup>19</sup> On August 8, 2018, the Commission issued Order

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<sup>12</sup> Informal Response of the United States Postal Service to Question Posed by the Public Representative, July 9, 2018 (Postal Service Informal Response).

<sup>13</sup> Notice of Filing of USPS-RM2018-5/NP4 and Application for Nonpublic Treatment, July 11, 2018; Motion of the United States Postal Service to Adjust Procedural Schedule, July 5, 2018, at 2-3 (Motion to Adjust Procedural Schedule). The Motion to Adjust Procedural Schedule was granted extending the deadline to July 26, 2018. See Order Granting Motion to Adjust Procedural Schedule, July 9, 2018 (Order No. 4700).

<sup>14</sup> Chairman's Information Request No. 3 and Notice of Filing Under Seal, July 16, 2018 (CHIR No. 3).

<sup>15</sup> Notice of Filing of USPS-RM2018-5/NP5 and Application for Nonpublic Treatment, July 18, 2018.

<sup>16</sup> Responses of the United States Postal Service to Questions 1-11 of Chairman's Information Request No. 3, July 23, 2018 (Responses to CHIR No. 3). Accompanying the responses were both public and non-public material related to CHIR No. 3. See Notice of Filing of USPS-RM2018-5/3 and USPS-RM2018-5/NP6 and Application for Nonpublic Treatment, July 23, 2018.

<sup>17</sup> Comments of United Parcel Service, Inc. on Notice of Proposed Rulemaking on Analytical Principles Used in Periodic Reporting (Proposal Two), July 26, 2018 (UPS Comments).

<sup>18</sup> Comments of the Public Representative, July 26, 2018 (PR Comments).

<sup>19</sup> Motion of the United States Postal Service for Leave to File Reply Comments Regarding Proposal Two, August 2, 2018. Accompanying the motion were the Postal Service's reply comments. See Reply Comments of the United States Postal Service Regarding Proposal Two, August 2, 2018 (Postal Service Reply Comments). The Postal Service also filed Library Reference USPS-RM2018-5/4, August 2, 2018, with its reply comments.

No. 4748, which permitted any interested party to file reply comments.<sup>20</sup> The Public Representative filed reply comments on August 15, 2018.<sup>21</sup>

On August 29, 2018, Chairman's Information Request No. 4 was issued.<sup>22</sup> The Postal Service filed responses to CHIR No. 4 on September 5, 2018, and September 7, 2018.<sup>23</sup>

### III. PROPOSAL TWO

*Background.* Proposal Two introduces new sampling and weighting procedures for the city carrier portion of the IOCS. The current IOCS design uses a multi-stage probability sample to randomly select city carriers. After the random selection, the IOCS design uses an interval of time from each selected carrier's tour to create a "reading" that represents a "snapshot" of work activity in a sampled interval.<sup>24</sup> The current design collects data for city carriers at many times and in many locations. To accomplish this, the Postal Service conducts most city carrier readings by telephone. The Postal Service states that the availability of clock ring data from the Time and Attendance Collection System (TACS) and Delivery Operations Information System

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<sup>20</sup> Order Granting Motion for Leave to File Reply Comments, August 8, 2018 (Order No. 4748).

<sup>21</sup> Public Representative Reply Comments, August 15, 2018 (PR Reply Comments).

<sup>22</sup> Chairman's Information Request No. 4 and Notice of Filing Under Seal, August 29, 2018 (CHIR No. 4).

<sup>23</sup> Responses of the United States Postal Service to Questions 1-13, 15-17 of Chairman's Information Request No. 4, September 5, 2018 (September 5 Responses to CHIR No. 4). Accompanying these responses was non-public information related to CHIR No. 4. See Notice of Filing of USPS-RM2018-5/NP7 and Application for Nonpublic Treatment, September 5, 2018. The Postal Service filed its response to CHIR No. 4, question 14 on September 7, 2018, along with a motion for late acceptance. See Response of the United States Postal Service to Question 14 of Chairman's Information Request No. 4, September 7, 2018 (September 7 Response to CHIR No. 4); Motion of the United States Postal Service for Late Acceptance of the Response to Question 14 of Chairman's Information Request No. 4, September 7, 2018 (Motion). The Motion is granted.

<sup>24</sup> Petition, Proposal Two at 1. The Postal Service currently uses cost estimates from the IOCS to develop total accrued costs for both city carrier in-office and street time. See Docket No. ACR2017, Library Reference USPS-FY17-37, December 29, 2017, PDF file "USPS-FY17-37.Preface.pdf," at 2-3.

(DOIS) data allows for a change to the current sampling design. Petition, Proposal Two at 1-2.

*Proposal.* The Postal Service seeks to change the IOCS sample design for city carriers to a cluster sampling approach. The new design would use TACS workhours to weight sampling data by zone for morning readings and to provide cost controls for city carriers by time of day (distinguishing morning from afternoon) and day of week group (distinguishing Sundays/holidays from weekdays/Saturdays).<sup>25</sup> In the mornings, an IOCS data collector would conduct on-site clustered city carrier readings, rather than readings by telephone in sampled delivery zones.<sup>26</sup> For large zones with six or more routes (sampling mode 1), the Postal Service proposes to randomly select a maximum of six carriers in the morning to represent the zone. An on-site IOCS data collector would take morning readings once every 30 minutes on the same six carriers.<sup>27</sup> For small zones with five or fewer city carriers working in the selected zone (sampling mode 2), the Postal Service proposes to take morning readings by an on-site data collector on all carriers once every 15 minutes.<sup>28</sup> For afternoon samples (sampling mode 3), the Postal Service proposes to conduct all readings by telephone, and cluster the readings into 1-hour intervals.<sup>29</sup>

For morning readings, the data from each test are scaled to reflect the corresponding DOIS workhours for the tested zone. *Id.* at 7. The Postal Service proposes to use DOIS and TACS data for the sampled zone to weight the readings for

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<sup>25</sup> *Id.* at 2-4. The Postal Service asserts that the proposal adopts the approach suggested by the Commission in Order No. 4399 for developing route group weighting factors by CAG when there were “empty cells” within the combination of route group and city carrier craft group. *Id.* at 12. See Docket No. RM2017-9, Order on Analytical Principles Used in Periodic Reporting (Proposal Five), February 6, 2018 (Order No. 4399).

<sup>26</sup> *Id.* at 2-4. “Zone is defined by both ZIP Code and finance number.” *Id.* at 4, n.5.

<sup>27</sup> *Id.* at 5. All morning readings would begin when carriers begin their workdays and would continue through 11:00 a.m. *Id.* at 6.

<sup>28</sup> *Id.* at 6. The Postal Service plans to synchronize IOCS-Cluster readings with City Carrier Cost System (CCCS) tests when a data collector is already scheduled to be at a delivery unit. *Id.*

<sup>29</sup> *Id.* at 6-7. The Postal Service proposes to conduct all afternoon readings between 11:00 a.m. and 7:00 p.m. *Id.* at 6.

each test relative to other tests within the same Cost Ascertainment Group (CAG) strata, and to post-stratify readings by route group (letter route and Special Purpose Routes (SPR)) and city carrier craft group (full-time; part-time/transitional). *Id.* at 4, 7.

For afternoon readings, 30 carriers would be randomly selected from IOCS panel offices across the district and then grouped by office finance number. *Id.* at 7. The Postal Service proposes to scale all afternoon readings to the total hours in the afternoon, citing “insufficient afternoon tallies” [to estimate afternoon costs by CAG separately] and asserts that “no significant difference is expected because carriers from all CAGS are overwhelmingly on the street and not on the premises handling mail.” *Id.*

The Postal Service also proposes to use TACS to “provide control totals for the portion of supervisor costs incurred by employees whose base craft is carrier, but who have clocked as supervisor.” *Id.* at 4. Proposal Two also deviates from the current IOCS in that the Postal Service would not conduct IOCS-Cluster city carrier readings on Sundays and holidays.<sup>30</sup>

To evaluate and present estimated costs, the Petition shows the effect of attributing all Sunday/holiday costs to the Parcel Select product, which it states constitutes most of the volume delivered on Sundays and holidays. *Id.* at 9.

*Rationale and impact.* The Postal Service states that the primary objective of Proposal Two is to replace telephone readings with on-site readings, particularly during times when carriers are on the premises and handling mail. *Id.* at 1.

The Postal Service avers that the IOCS Cluster system will collect twice as much on-premises data as the current IOCS design, but will not require additional data collection resources. *Id.* at 8. The Postal Service also states that “[t]he new design improves data quality by obtaining far more data from on-site rather than telephone readings, while simultaneously improving data collection efficiency.” *Id.* at 1.

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<sup>30</sup> Instead, the Postal Service states that it will develop city carrier control totals for Sundays/holidays from TACS hours and distribute costs using scanning data from Product Tracking and Reporting (PTR). *Id.* at 5, 9.

Among the benefits the Postal Service attributes to the proposal are: the ability to scan barcodes, the ability of on-site data collectors to recognize less common or more obscure mailpiece markings, and that data collectors will not have other duties impacting responses. *Id.* at 10. The Postal Service states that the proposal will result in an increased percentage of direct tallies, and a decrease in tallies for support and administrative activities, training, and mixed mail. *Id.* at 12. The Postal Service states that the proposal will capture more tallies in the parking area, which may make it possible to distribute mixed mail tallies separately from in-facility tallies. *Id.* at 13. The Postal Service states that Proposal Two could potentially improve the mixed mail distribution to direct mail product costs because the inside facility and parking area locations have different activities and handle different mail. *Id.*

According to the Postal Service, pilot data for Proposal Two indicate significant shifts in product costs. The Postal Service notes a decrease in attributable costs for First-Class Mail letters, and increases in costs for parcel-shaped products, carrier route bundled products, Periodicals, and International Mail. *Id.* at 14-15. The Postal Service states that differences in product costs are most likely due to the use of on-site data collectors in lieu of telephone respondents. *Id.* at 15. The Postal Service also notes a 9.1 percent increase in costs associated with supervising city carriers (an estimated \$56.8 million increase in city carrier piggyback costs) under the Proposal Two methodology.<sup>31</sup>

As compared to the current methodology, the Postal Service's impact table shows an overall increase of approximately \$257.9 million in total volume variable costs, which is the net result of a \$318.5 million increase in total domestic competitive mail and

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<sup>31</sup> *Id.* at 14. See Library Reference USPS-RM2018-5/1, May 25, 2018, folders "Public"/"Workbooks," Excel file "FY17.PB CityRevisedCluster.xlsx," tab "City Carriers," cell BK 59. The Postal Service revised its initial calculation of the costs associated with supervising city carriers, which resulted in an overall 8.53 percent increase rather than the 9.1 figure initially estimated in its Petition. See September 7 Response to CHIR No. 4, question 14 and the accompanying Excel file "Prop2.CHIR4.Q14.a\_calcSupvCost.xlsx," tab "SupervisorCostImpact.xlsx," cell "H13."

services costs and a decrease of \$72.8 million in total domestic market dominant mail and services.<sup>32</sup>

#### IV. CHAIRMAN'S INFORMATION REQUESTS

Four Chairman's information requests were issued in this docket. CHIR No. 1 requested the input data used to calculate the Proposal Two and current methodology cost estimates, the clarification on the sampling and selection methodology, and the measures used to determine data quality and data collection and sampling efficiency. See CHIR No. 1. CHIR No. 2 requested the SAS programs and input data used to calculate attributable costs for city carriers and city carriers acting as supervisors on Sundays and holidays, and asked about the impact on the negotiated service agreement (NSA) Sunday and holiday adjustments in the Annual Compliance Report (ACR). See CHIR No. 2. CHIR No. 3 requested additional information on how carriers working a zone are identified, under what circumstances city carriers would not be sampled, the proposed number of tests by craft, sampling mode and CAG, as well as the reasons for the decrease in city carrier in-office mixed mail, support/administrative and training costs. Additionally, CHIR No. 3 asked about attributing Sunday and holiday costs to Parcel Select for purposes of evaluating and presenting the estimated impact on costs. See CHIR No. 3.

CHIR No. 4 asked about the relationship between the proposed methodological changes, the amount of originating volume, the CAG group and types of offices, as well as the low number of CAG group B office readings, realigned offices, oversampling, and the methodology for identifying and sampling SPR carriers. In addition, CHIR No. 4 asked about the cause(s) of the relatively large increase in walking letter routes street time, the decrease in motor letter routes street time under the Proposal Two methodology, the accuracy of the current IOCS-estimated Sunday and holiday costs,

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<sup>32</sup> Petition, Proposal Two at 16. The Postal Service conducted the IOCS-Cluster sampling in parallel with the current IOCS-methodology.

city carrier supervisor costs and requested the coefficients of variation (CVs) for competitive products. Finally, CHIR No. 4 requested the workpapers and related documentation for the Postal Service's current adjustment to the final Cost and Revenue Analysis (CRA) ACR report that attributes NSA-related Sunday-specific costs that would otherwise be included in institutional costs. See CHIR No. 4.

## V. COMMENTS

The Commission received initial comments from UPS and the Public Representative. The Postal Service and Public Representative filed reply comments.

*UPS Comments.* UPS generally supports Proposal Two because "it appears to improve the efficiency of data collection and the accuracy of cost attribution." UPS Comments at 1. However, it states that its analysis is not complete due to the "limitations of TACS data," as well as the "opacity of the Negotiated Service Agreements ("NSA") adjustment." *Id.* UPS urges the Commission to consider ways to balance the need for confidentiality with the need of interested parties for access to information to evaluate whether competitive product costing procedures comply with regulatory requirements. *Id.* at 11.

UPS considers the proposal a "step forward," and suggests that under the proposal, the Postal Service will collect more accurate cost data. *Id.* at 3. UPS states that the increased costing accuracy "has the laudable effect of increasing the attribution of costs to products." *Id.* at 4. UPS notes that the proposed sampling method captured more than \$250 million in attributable costs than the current sampling method, including a \$318 million increase in competitive product volume variable costs and a \$75 million decrease in domestic market dominant volume variable costs. *Id.* at 4-5. UPS further contends that most of this impact is due to the current sampling method under-reporting competitive products costs during in-office activity. *Id.* at 5. UPS states that the 18 percent increase in competitive products in-office direct labor costs under the IOCS-Cluster is a "strong indication of bias in the existing method." *Id.* UPS states that under the current method, data collection duties are a secondary task for Postal Service

personnel, leading to an overestimation of institutional and market dominant costs and an understatement of attributable costs, including for competitive products. *Id.* at 5-6.

UPS considers TACS data more reliable than the IOCS readings used currently, but cautions that TACS clocking behavior is inconsistent and potentially inaccurate. *Id.* at 7-8.

*Public Representative Comments.* The Public Representative states that she cannot conclude that the proposed IOCS-Cluster sampling design improves the quality, accuracy or completeness over the current methodology. PR Comments at 18. However, she does support the use of TACS workhours to estimate city carrier costs accrued on Sundays and holidays but suggests further study before attributing those costs to products. *Id.*

The Public Representative agrees that on-site tests should improve the accuracy of readings, but raises concerns about the statistical methodology for Proposal Two, and sampling modes 1 (morning readings in large zones) and 3 (afternoon readings) in particular. *Id.* at 6-13.

The Public Representative states that the proposed methodology of sampling mode 1 does not follow major principles of statistical sampling. *Id.* at 11. She “strongly disagrees” with the Postal Service’s assertion that ‘minimizing the number of carriers sampled’ has many advantages.” *Id.* at 8 (footnote omitted). She states that by choosing only six carriers in large zones, the collected data sample may not be representative. *Id.* at 11. She advances that “surveying different carriers would allow for better representation of carriers (by CAG and craft) and their activities in a tested zone.” *Id.* at 10.

The Public Representative states that, unlike the proposed IOCS-Cluster, the current methodology satisfies sampling principles because the Postal Service stratifies post offices or plants by CAG, then stratifies employees by craft within CAG, which helps ensure that the overall population is adequately represented. *Id.* at 11-12. She suggests that the proposal’s post-stratification of the collected data is inconsistent with common sampling practice, and may not completely remove bias, as the sample in

large zones may not reflect the population of carriers. *Id.* at 11. She surmises that “by applying route group weighting factors, the Postal Service attempts to compensate for ‘empty cells’ (when there are ‘no tallies within the combination of route group,’ craft group and CAG).” *Id.* However, she attributes the existence of empty cells to the Postal Service’s non-compliance with principles of sampling when it selects carriers for observation and times of readings. *Id.* at 12. She suggests that the Postal Service modify Proposal Two to determine the correct sample size for large zones for a representative sample. *Id.*

The Public Representative states that for sampling mode 2 (morning readings in small zones), because the number of selected carriers is usually equal to the overall number of carriers in a zone, the sample should better represent the population of carriers in a small zone than sampling mode 1 for a large zone. *Id.* at 13.

For afternoon tests (sampling mode 3), the Public Representative states that the decision to randomly select 30 carriers is also driven by operational reasons and as a result, raises questions about the representativeness of the data. *Id.* She notes a significant decrease in the number of non-stop afternoon readings and insufficient afternoon tallies by CAG, craft and route type, and is “concerned that aggregation of data results in lower precision of cost estimates.” *Id.* at 13-14.

The Public Representative states that because the data sample under Proposal Two may not be representative, bootstrapping cannot be a valid method to estimate CVs and variances. *Id.* at 15.

The Public Representative states that a review of the percentages of parcels and other mail products on Sundays and holidays does not support the Postal Service’s attribution of all Sunday/holiday costs to Parcel Select. *Id.* at 16-17. She urges further study into city carrier costs for Sundays/holidays. *Id.* at 18.

*Postal Service Reply Comments.* The Postal Service responds to the Public Representative’s concerns about the sample’s representativeness, stating that no sample will be perfectly reflective of carriers in the sampled zone. However, it asserts that random selection “will not systematically over- or under-represent various

characteristics of the carrier populations.” Postal Service Reply Comments at 3. The Postal Service notes that under IOCS-Cluster sampling, CVs for most product cost estimates improved, and CVs for other estimates were acceptably low, indicating ample homogeneity within zones.<sup>33</sup> The Postal Service states that if the “objective were to obtain measures of the breadth of workload within each office,” increasing the number of carriers subsampled in each zone would be important. *Id.* at 4. Further, the Postal Service suggests that if carriers within a cluster (large zone) are very similar, it may be a waste of time and money to sample all carriers in a zone. *Id.* at 5.

The Postal Service points to the smaller CVs and the similar morning letter routes average cost-per-tally across most CAGs that it asserts are “quite homogenous across the CAGs,” to support its assertion that the “IOCS-Cluster samples CAGs adequately.” *Id.* at 5-6. Regarding the Public Representative’s concern about “empty cells,” the Postal Service states that this occurs primarily where there are no tallies for SPR for either craft subgroup or CAG, and there are nonzero workhours in TACS. *Id.* at 7. Therefore, the Postal Service states that the Public Representative’s reservations are not a “valid basis for concern” because it typically only occurs for “smaller CAGs.” *Id.*

The Postal Service states that while sampling mode 3 greatly reduces the number of non-stop afternoon tallies, the CV for the estimate of street time cost is still an acceptable 0.5 percent. *Id.* at 2.

The Postal Service refutes the Public Representative’s argument that bootstrapping is not a valid method for estimating CVs, asserting that sampling mode 1 is representative of the carrier populations, and therefore bootstrapping is appropriate. The Postal Service defends the subsampling of only six carriers in large zones as “a statistically valid design” and an improvement over non-Cluster IOCS. *Id.* at 9.

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<sup>33</sup> *Id.* at 5. The Postal Service filed CVs for cost estimates in Library Reference USPS-RM2018-5/4.

Regarding the Public Representative's concern about Sunday and holiday cost attribution, the Postal Service suggests that the magnitude of additional accuracy in cost estimates is not sufficient to challenge the acceptance of Proposal Two. *Id.* at 10.

In response to UPS's comments about clocking behaviors in TACS, the Postal Service states it is following the Commission's suggestion in Order. No. 4399, which it describes as treating all carrier Sunday and holiday workhours as "SPR even if clocked to letter routes or to supervisor MODS operation codes."<sup>34</sup> Therefore, "contrary to what UPS implies, there will be no impact due to any misclocking on Sundays." Postal Service Reply Comments at 2.

*Public Representative Reply Comments.* The Public Representative disagrees with the suggestion that the random selection of only six carriers in the morning in large zones ensures that the samples will be representative of carriers for the sampled zone. PR Reply Comments at 2. In particular, she cautions that for zones with a substantial number of routes (50-74), data obtained from a sample of six carriers on six routes, would be unlikely to reflect the actual mail mix for the entire population of carriers in the zone. *Id.* at 2-3. Furthermore, she notes that the impact on office and street costs of different products is "not only substantial, but also inconsistent in Q4 of FY 2017 and Q1 of FY 2018." *Id.* at 3. She attributes this impact to sampling issues, concluding, "there is no valid justification for the major change in costs for different products" resulting from the proposal. *Id.*

Based on the Postal Service's revised filing, the Public Representative concludes that the proposed use of Sunday/holiday scan data from the PTR to distribute Sunday

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<sup>34</sup> *Id.* at 2. In Order No. 4399, the Commission recommended that the Postal Service include an explicit step in its processing code to correct the appropriate Sunday-logged city carrier workhours that should be grouped with the SPR group workhours rather than the letter route group workhours, based upon the day on which the workhours were logged. Further, it also recommended that the Postal Service consider whether some of the training workhours logged on Sunday should be grouped with the SPR group workhours, rather than the letter route group workhours. See Order No. 4399 at 18.

and holiday costs is an improvement over the current methodology.<sup>35</sup> However, she states that the final Sunday/holiday adjustment is “neither well [ ] documented nor transparent” and suggests that the Postal Service should ensure that Sunday/holiday data are accurate. PR Reply Comments at 5.

## VI. COMMISSION ANALYSIS

In evaluating proposed changes to analytical principles applied in periodic reports, the Commission must determine whether a proposal improves the quality, accuracy, or completeness of the data or its resulting analysis. 39 U.S.C. § 3654(e); 39 C.F.R. § 3050.11(a). Pursuant to this standard, the Commission approves Proposal Two in part. The Commission approves the use of TACS workhours to develop Sunday and holiday city carrier costs, the use of the PTR scan data as a distribution key for Sunday/holiday city carrier costs and the city carrier sampling mode 2 (morning readings in small zones) as the completeness or overall accuracy of these data will likely be improved. As discussed below, the Commission denies the proposed city carrier supervisor methodology component of Proposal Two because the completeness of the overall city carrier supervisor data will likely not be improved.<sup>36</sup> The Commission also denies the city carrier afternoon readings and morning readings in large zones

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<sup>35</sup> *Id.* at 5. The newly revised Sunday/holiday costs developed using the actual PTR scan data to distribute costs to products and incorporating the final adjustment were filed with the Postal Service's Reply Comments in Library Reference USPS-RM2018-5/NP5. As noted in the Petition, all city carrier Sunday/holiday costs were distributed to the Parcel Select product for the initial evaluation of the IOCS-Cluster proposal. Petition, Proposal Two at 9.

<sup>36</sup> The Postal Service states it plans to treat city carriers acting as supervisors on Sundays and holidays as “SPR” costs. See September 5 Responses to CHIR No. 4, question 4.b.; Postal Service Reply Comments at 2; n.2; Library Reference USPS-RM2018-5/1, folders “Public/Workbook,” Excel file “Prop.2.IOCS.Cluster.Impact\_Public.xlsx,” tab “SupervisorCostImpact,” cell “A50,” note “Costs for carriers on Sunday including carriers acting as supervisors, attributed 100 percent to Parcel Select.” However, given the sum of the Sunday/holiday costs identified as Sunday/holiday costs for city carriers and “city carriers acting as supervisors” in the IOCS-Cluster SAS data sets (activity codes ‘6720’ and ‘7720’, respectively), “city carriers acting as supervisors” on Sundays and holiday costs were not included in the total Sunday/holiday costs in the cost segment 6 and 7 workbooks, *i.e.*, Library Reference USPS-RM2018-5/1, folders “Public/Workbooks,” Excel files “CS06&7-FY17Q4IOCSClusterv2.xlsx,” and “CS06&7-FY17Q4IOCSClusterv2.xlsx,” tabs “Output to CRA,” cells “H58.”

components of Proposal Two. Based on the information provided, and without information on the additional changes advanced by the Postal Service,<sup>37</sup> the Commission is unable to determine the impact and whether the overall quality, accuracy or completeness of the data will be improved by these aspects of the proposal.<sup>38</sup>

*Sunday and Holiday City Carrier Costs.* Using TACS workhours to create cost control totals and a product distribution key developed from operational PTR scan data specific to Sundays and holidays is likely to be more accurate than the current distribution keys for both city carrier office and street time.<sup>39</sup> The use of the PTR data as a distribution key for distributing city carrier Sunday/holiday costs to products is accepted in this proceeding and does not require a separate additional proposal.<sup>40</sup> The Postal Service states that “because the Carrier Cost systems do not sample Sunday-specific routes, products delivered on those routes are not included within the [current] street distribution key for cost segment CS07.”<sup>41</sup> The Postal Service also does

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<sup>37</sup> The Postal Service proposed a correction for not sampling carriers in proportion to carriers eligible for sampling in the afternoon, and proposed eliminating the current historical CAG A/B offices cost adjustments. However, the Postal Service did not provide the methodology documentation, data, input files, programs, workpapers, and sufficient background information necessary to evaluate these changes.

<sup>38</sup> See September 5 Responses to CHIR No. 4, questions 2.a.-2.b., 7.b., 7.d.

<sup>39</sup> In its Responses to CHIR No. 1, question 18.b., the Postal Service states that:

Occasionally, carriers [also] deliver non-parcels on Sundays and holidays, including mailpieces that are not parcel-shaped and that do not have an IMpb barcode. However, the volumes of such non-parcel delivery are thought to be very small, and occur primarily during peak season. Because these non-parcel pieces do not have barcodes that are scanned by carriers, data on the share of overall mail volume is unavailable.

<sup>40</sup> In the Postal Service’s Reply Comments, it proposes that since it incorporated the PTR distribution in Library Reference USPS-RM2018-5/NP5, “the Commission has had an opportunity to review this material, it could accept that procedure in this docket along with Proposal Two, rather than require a separate additional proposal.” Postal Service Reply Comments at 9-10.

<sup>41</sup> Responses to CHIR No. 2, question 4.a. The current city carrier street time distribution key does not include routes sampled on Sundays or holidays, *i. e.*, the CCCSs first stage sample is a stratified random sample of route-days using possible delivery dates (every Monday through Saturday, excluding holidays). See Docket No. ACR2017, Library Reference USPS-FY17-34, December 29, 2017, PDF file “USPS-FY17-34\_CCCS\_Preface.pdf,” at 4, 17.

not recommend using the Sunday/holiday IOCS “tallies for the purposes of developing separate costs for Sundays and holidays.”<sup>42</sup>

Under the current IOCS methodology, the Postal Service states that “[t]he rate of cancellation of scheduled readings for carriers is five times higher on Sunday than for weekdays or Saturdays. This may be partly due to the difficulty of finding a person who can act as a respondent on Sundays.” Responses to CHIR No. 2, question 6. Further, under the current methodology, “there are delays in incorporating new employees, such as newly hired City Carrier Assistants (CCAs).” September 5 Responses to CHIR No. 4, question 12.b. Given that CCAs are used in higher proportion on Sundays compared to weekdays, the Postal Service states that “there is some underweighting of accrued Sunday carrier costs” under the current methodology. *Id.* The Commission agrees with the Postal Service that “Proposal Two would offer a methodology to separate out Sunday / [h]oliday costs from the larger pool of SPR street costs....” Responses to CHIR No. 2, question 6. The proposed city carrier Sunday/holiday methodology will likely improve the completeness and accuracy of Sunday/holiday city carrier costs by creating one cost pool and using a distribution key more specific to Sunday/holiday delivered mail.

The Commission directs the Postal Service not to combine the Sunday/holiday data as it proposes, but to provide additional and specific documentation in its workbooks and IOCS SAS datasets.<sup>43</sup> Specifically, the Commission directs the Postal Service to include component 49 (Sunday/holiday city carrier costs), also shown separately from component 46 (total Delivery Activities), 47 (Delivery Activities), and 48 (Product Specific Delivery Activities), in the ACR cost segment 6 and 7 workbooks, and

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<sup>42</sup> Responses to CHIR No. 2, question 6. Under the current methodology, Sunday and holiday street time would be divided into cost pools, including both delivery and collection. *Id.* The current SPR street time cost methodology is from Docket No. R97-1, USPS-T-19. Responses to CHIR No. 2, question 6, n.12.

<sup>43</sup> The Postal Service proposes that “[t]he Sunday/[h]oliday component 49 will be added into the total Delivery Activities component 46, along with component 47 Delivery Activities and component 48 Product Specific Delivery Activities.” Responses to CHIR No. 2, question 5.c.i.

to provide a new worksheet tab in the ACR workbook that presents the PTR scan data distribution key. Additionally, the Commission directs the Postal Service to include the Sunday and holiday developed city carrier attributable costs in the ACR IOCS SAS datasets (including the following variables by CAG-group and time group (morning and afternoon): base craft group, craft group, workhours, workhour proportion, total dollar, total CAG workhours, attributable cost, and fiscal year quarter.

*IOCS-Cluster City Carrier Morning Readings in Small Zones.* The Commission approves the proposed methodology for city carrier morning readings in small zones if the Postal Service can develop a morning cost control total.<sup>44</sup> Maximizing the use of the CCCS data collector already on-site to collect IOCS city carrier data will likely improve the accuracy of the data over those provided by a telephone respondent. It is also potentially a more efficient way to collect more complete on-site data from more geographically disperse offices.

The Postal Service indicates that Proposal Two will improve data quality:

[B]y the use of on-site data collectors, particularly when carriers are in the office and handling mail. On-site data collectors can scan barcodes on pieces, and therefore have the benefit that the data collection instrument can warn if the barcode is inconsistent with the apparent markings, providing an opportunity to improve the quality of recorded data.

Responses to CHIR No. 1, question 17. Accordingly, the Commission approves the proposed methodology for city carrier morning readings in small zones if the Postal Service can develop a morning cost control total, as it represents an improvement in the quality, accuracy, and completeness of the data and resulting analysis.

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<sup>44</sup> The morning sampling modes are dependent on each other because the morning control total dollars “are developed from TACS for all morning hours, not separately for large and small zones.” September 5 Responses to CHIR No. 4, question 3.b. However, the Postal Service states that “[i]t may be possible to combine DOIS with TACS data to develop separate control totals for these two zone groups.” *Id.*

*IOCS-Cluster City Carrier Morning Readings in Large Zones.*<sup>45</sup> The Commission does not approve the city carrier morning readings in large zones component of Proposal Two. The Postal Service suggests an additional change to the weighting of costs affecting primarily larger offices<sup>46</sup> and has yet to implement the CAG cost realignments.<sup>47</sup> Additionally, under the IOCS-Cluster methodology the precision of the cost estimate would decrease for some mail products. Combined with the large decrease in estimated costs for First-Class Single-Piece and Presort letters, it is unclear if the accuracy of cost estimates for these products would also decrease.<sup>48</sup>

As shown in Table 1, there are relatively large differences between the estimated costs using the current and proposed methodology for some products. Such differences may be due to the quality of the data collected, to the change in sampling methodology, the historical CAG A/B realignment, or the lack of annual CAG realignment adjustments yet to be implemented. The information provided by the Postal Service does not demonstrate the basis for each of the current CAG realignments and historical CAG A/B adjustments, nor does it show the basis for each proposed change or adjustment to these aspects of the current methodology. The effects of the proposed

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<sup>45</sup> Under the IOCS-Cluster methodology, the bulk of city carrier morning costs are estimated by city carrier readings conducted in large zones.

<sup>46</sup> The Postal Service states “that the CAGs of IOCS-Cluster tallies were not aligned with the historical adjustment of costs between CAGs A and B” offices and proposes that “[t]he Commission may wish to consider removing this aspect of the current methodology.” September 5 Responses to CHIR No. 4, questions 7.b., 7.d. See Docket No. MC96-3, Response of United States Postal Service Witness Patelunas to Interrogatories of United Parcel Service (UPS/USPS-T5-1-14), August 9, 1996, Attachment UPS/USPS-T5-5, at 1-2.

<sup>47</sup> It is unknown how the CAG group realignment costs would be implemented under the Proposal Two methodology. In the past, it appears that specific sampling rates by CAG and craft groups were used, under the Proposal Two methodology, no specific sampling rates by CAG and craft group are provided. See Docket No. R97-1, Supplemental Testimony of Carl G. Degen on Behalf of the United States Postal Service, November 12, 1997, Table 4 Sampling Rates by CAG and Employee Craft.

<sup>48</sup> The Postal Service states that the CVs for almost every cost estimate under the Proposal Two methodology are smaller than the current methodology with the exception of the estimated costs for city carrier street time, First-Class Single-Piece and Presort letters and First-Class Single-Piece flats. Postal Service Reply Comments at 2. The Postal Service states that “[t]hese products had the largest decreases in their shares of direct tallies, which reduce the precision of their cost estimates, but those estimates are still amply precise.” *Id.*

CAG-related adjustments on city carrier in-office direct labor cost and the impact of the inclusion or exclusion of any large offices (in these CAG groups) from the proposed sample design cannot be determined based on the information provided.

**Table 1**  
**Comparison of Select IOCS Estimated City Carrier In-Office Direct Labor Costs, FY 2017, Quarter 4 and FY 2018, Quarter 1 Combined**

Mail Product	In-Office Direct Labor Costs (in thousands \$)	
	Current Methodology	Proposed Methodology
First-Class Single-Piece Letters	\$161,111	\$97,965
First-Class Presort Letters	\$150,919	\$125,391
Total Periodicals	\$102,181	\$142,163
Marketing Mail Carrier Route	\$138,637	\$182,106
Marketing Mail Letters	\$162,116	\$189,824
Marketing Mail Flats	\$173,891	\$158,804

Source: Proposal Two cost estimates, Library Reference USPS-RM2018-5/4, Excel file "CV\_pub\_Cluster Comparison.xlsx," and current methodology estimates, Library Reference USPS-RM2018-5/2, June 29, 2018, folder "PublicWorkbooks\_CHIR1," Excel files "I\_Forms\_FY17Q4-CurrentwithProp5.xlsm," and "I\_Forms\_FY18Q1-CurrentwithProp5.xlsm," tabs "I-CS06.0.2.2 Input."

In both the current and the proposed methodology, the mixed mail to direct mail in-office direct labor cost distribution is based on the type of direct mail handled in those offices in that CAG-group.<sup>49</sup> However, under the IOCS-Cluster, the Postal Service states it does not (need to) stratify (by CAG-level of office for example) because "carrier activities and mail handled do not vary greatly by zone, so there is little benefit to stratification in this case."<sup>50</sup> The Postal Service explains that "[a]s a facility size classification based on originating revenue, CAG generally will be imperfectly correlated

<sup>49</sup> See Docket No. R2006-1, Library Reference USPS-LR-L-9, May 3, 2006, PDF file "USPS-LR-L-9\_R2006-1\_IOCS.pdf," at 56-57; Library Reference USPS-RM2018-5/1, folder "SAS" program "CLCARM.".

<sup>50</sup> Responses to CHIR No. 1, question 11.a. The Postal Service states that "[s]tratifcation can improve sampling when primary sampling units (PSUs) are heterogeneous, and can help ensure that subcategories of PSUs receive an adequate number of samples." *Id.* Under the current methodology, the IOCS stratifies by employee craft and by CAG-group level of the office. See Docket No. ACR2017, Library Reference USPS-FY17-37, PDF file "USPS-FY17-37.Preface.pdf," at 3.

with other mail volume measures, as well as non-volume workload drivers in specific work functions such as city delivery.”<sup>51</sup> As shown in Table 2, under the current methodology, estimated city carrier in-office direct labor costs for certain products vary by CAG-level of the sampled offices.<sup>52</sup>

**Table 2**  
**Current Methodology, Select Estimated City Carrier In-Office Direct Labor Costs for Offices in CAG Groups A, B, and C, FY 2017**

Product	In-Office Direct Labor Cost Grouped by Office CAG (\$)		
	Offices in CAG Group A	Offices in CAG Group B	Offices in CAG Group C
First-Class Single-Piece Letters	\$77,308,096	\$60,623,861	\$62,091,183
First-Class Presort Letters	\$87,913,493	\$60,489,899	\$53,999,020
Periodicals	\$38,316,875	\$39,270,008	\$50,090,783
Marketing Mail Carrier Route	\$40,134,645	\$59,541,832	\$55,347,914
Marketing Mail Flats	\$60,972,041	\$70,047,192	\$84,075,541
Marketing Mail Letters	\$74,618,905	\$64,426,851	\$64,978,125

Source: Commission analysis of Docket No. ACR2017, Library Reference USPS-FY17-37, folder “Data,” SAS dataset, “prcpub17.sas7bdat” using variable “F264” to categorize by adjusted CAG group product costs (used in the mixed mail to direct mail distribution program).

The Postal Service states that the increase in the relative proportion of in-office direct mail handling tallies may be due to on-site data collectors being not as time restricted “as carrier supervisors who have primary duties in addition to their role as

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<sup>51</sup> September 5 Responses to CHIR No. 4, question 6. The Glossary of Postal Terms states that an office CAG-level is based on the number of revenue units and that the revenue units are used to categorize post offices by size. See United States Postal Service, Publication 32 - Glossary of Postal Terms, available at: [http://about.usps.com/publications/pub32/pub32\\_terms.htm](http://about.usps.com/publications/pub32/pub32_terms.htm); September 5 Responses to CHIR No. 4, question 5.

<sup>52</sup> The FY 2017 data shown in Table 2 are adjusted for the historical adjustments of costs between CAGs A and B offices and annual CAG realignments of the sampled offices.

telephone respondents.” Petition, Proposal Two at 13. Further, it suggests that the increase in parcel direct tallies in the parking lot may also be due to the on-site data collector taking the time to go out to the parking area, whereas a telephone respondent may not want or be able to obtain a parcel from the parking area and return it back to the carrier after the telephone reading.<sup>53</sup>

To explain the decrease in support and administrative tallies under the Proposal Two methodology, the Postal Service asserts that in offices with multiple zones, carriers who are performing general administrative work, working on union business or new carriers in training [or new carriers not assigned to a specific zone] may not be included among the list eligible for sampling.<sup>54</sup> Based on an analysis of the FY 2017 IOCS SAS data, many offices sampled under the current methodology are multi-zone offices.<sup>55</sup> As such, it may be that IOCS-Cluster under-attributes other morning in-office support and overhead in-office activity costs for large, multi-zone offices.<sup>56</sup>

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<sup>53</sup> *Id.* The Postal Service states that “[t]he reason that only six carriers are subsampled is primarily due to the introduction of sampling in the parking area.” Responses to CHIR No. 3, question 3. The Postal Service also states this is a “compromise among multiple constraints and objectives” and that “sufficient time must be provided so that the data collector can find the sampled employee, obtain a mailpiece and record data.” Responses to CHIR No. 1, question 12.

<sup>54</sup> Responses to CHIR No. 3, questions 1.b.-1.c., 9.a.-9.d. This is not an issue for smaller offices covering only a single zone because the Postal Service states that all carriers including the newly hired undergoing training, working on union business and assigned to perform general administrative duties would be assigned to the test zone and included in the list of carriers eligible for sampling. Responses to CHIR No. 3, questions 1.a.-1.c., 9.a.-9.d.

<sup>55</sup> This is based on a cross tabulation of the IOCS finance number variable (“F2”) of the offices sampled under the current methodology and the unique ZIP Codes (IOCS variable “Q16B02B”) of the sampled city carriers’ routes and the number of different unique route ZIP codes within that office. See Docket No. ACR2017, Library Reference USPS-FY17-37, folder “Data,” SAS dataset “prcpub17.sas7bdat,” and Excel file “IOCSDataDictionaryFY17.xls.”

<sup>56</sup> For the combined FY 2017, Quarter 4 and FY 2018, Quarter 1 period, under the current methodology, city carrier checking the vehicle/training costs (IOCS codes 6430 and 6519) are estimated at approximately \$241.3 million compared to \$125.0 million under the proposed methodology. See Library Reference USPS-RM2018-5/1, folder “Workbooks,” Excel files “CS06&7-FY17Q4-CurrentwithProp5.xlsx,” “CS06&7-FY17Q4IOCSClusterv2.xlsx,” “CS06&7-FY18Q1-CurrentwithProp5.xlsx,” “CS06&7-FY18Q1IOCSClusterv2.xlsx,” tabs “Input IOCS,” cells “M20.” Likewise, for this same period, city carrier in-office overhead costs under the current methodology are estimated at approximately \$235.2 million versus \$170.2 million under the proposed methodology. *Id.*, tabs “Output to CRA,” cells “S8.”

The Postal Service's explanations for the possible increase in total direct-mail handlings and parcel-shaped handlings are plausible. However, there is no specific explanation for the large decrease in the share of direct tallies for First-Class Single-Piece Letters/Flats and Presort Letters. Postal Service Reply Comments at 2. It is unclear whether these changes are due to the sampling methodology, the large reduction and type of some offices sampled, the exclusion of the certainty strata,<sup>57</sup> the historical CAG A/B offices adjustment, and/or the proposed CAG realignments and adjustments (yet to be implemented). See September 5 Responses to CHIR No. 4, questions 7.f.-7.h.

The Postal Service asserts that “[t]he proposed approach obtains sufficient tallies even for small offices.” Petition, Proposal Two at 11. However, in the fourth quarter of FY 2017 no part-time carrier costs in CAG D offices were identified under the IOCS-Cluster morning readings as involving an SPR route.<sup>58</sup> If the Postal Service proposes a similar sampling procedure in the future, it should consider additional sampling measures to identify offices with higher city carrier SPR workhours given that these types of workhours are either underreported or not reported in the DOIS workhours.<sup>59</sup>

In this proceeding, the Postal Service has not adequately justified the proposal to use zones under the IOCS-Cluster as the first stage primary sampling units to estimate city carrier morning activity/time, rather than offices under the current IOCS.<sup>60</sup> Not all city carriers are assigned to a route, therefore some city carrier in-office activities are

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<sup>57</sup> The current methodology includes a “certainty strata of mail processing facilities [ ], NDCs, and certain large customer service finance numbers.” See Docket No. ACR2015, Responses of the United States Postal Service to Questions 1-15 of Chairman’s Information Request No. 14, February 23, 2016, question 5 (Docket No. ACR2015, Responses to CHIR No. 14); September 5 Responses to CHIR No. 4, question 7.a.

<sup>58</sup> The current IOCS methodology sampled part-time city carriers from CAG-D offices in the morning that were identified as SPR route in FY 2017, Quarter 4.

<sup>59</sup> See Responses to CHIR No. 1, question 3.a.; Postal Service Reply Comments at 6-7.

<sup>60</sup> The Postal Service states that “an IOCS estimate of the proportion of city carrier cost **while in the office** is used to split accrued costs between segments 6 and 7.” (Emphasis added) See Docket No. ACR2017, Library Reference USPS-FY17-37, PDF file “USPS-FY17-37.Preface.pdf,” at 2-3; Docket No. ACR2017, Library Reference USPS-FY17-34, PDF file “USPS-FY17-34\_CCCS\_Preface.pdf,” at 3.

excluded in multi-zone offices, and in-office work may not be associated with a single specific zone.<sup>61</sup> For this reason, sampling offices rather than delivery zones, for large/multizone offices in particular, appears to be a more complete primary sampling unit for all in-office city carrier activity costs.<sup>62</sup>

*Accuracy and Completeness of the IOCS-Cluster City Carrier Afternoon Sampling Methodology.* For both the current IOCS and the proposed IOCS-Cluster, the proportion of total accrued city carrier costs allocated to street time cost is estimated by the IOCS.<sup>63</sup> As shown in Table 3, there are large differences between city carrier motorized and walking letter routes street time costs estimated under the current and proposed methodology. Based on the proposed methodology, motorized city carrier letter route street time cost is about \$225 million less and walking letter route street time cost is about \$214 million greater than those estimated under the current methodology.

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<sup>61</sup> The Postal Service states that “a facility that serves as the entry office of record for a large mail printer would likely be credited with significant amounts of revenue representing volumes that would largely be processed and delivered elsewhere.” September 5 Responses to CHIR No. 4, question 6.

<sup>62</sup> The Commission does not share the same concern as the Public Representative related to selecting only six carriers for morning readings in large zones because under the current methodology, the majority of sampled FY 2017 city carriers’ route ZIP Codes show less than six unique route numbers (within that ZIP Code) were sampled on a quarterly basis. Commission analysis of Docket ACR2017, Library Reference USPS-FY17-37, folder “Data,” SAS dataset “prcpub17.sas7bdat.” Based on the ZIP Code of the sampled city carrier’s route (current methodology IOCS question “Q16B02B”) and the unique carrier route number within that ZIP Code (current methodology IOCS question “Q16B02A”) and the time the reading was conducted (current methodology IOCS variable “Q05-Actual Reading Time”). See Docket ACR2017, Library Reference USPS-FY17-37, Excel file “IOCSDataDictionaryFY17.xls” (FY 2017 IOCS Data Dictionary).

<sup>63</sup> The Postal Service states that “an IOCS estimate of the proportion of city carrier cost while in the office is used to split accrued costs between segments 6 [in-office] and 7 [street].” See Docket No. ACR2017, Library Reference USPS-FY17-37, PDF file “USPS-FY17-37.Preface.pdf,” at 2-3.

**Table 3**  
**City Carrier Letter Route Street Time Cost by Type of Route-Current and Proposed Methodology, FY 2017, Quarter 4 and FY 2018, Quarter 1 Combined**

Type of Letter Route <sup>1</sup>	Estimated Letter Route Street Time Cost \$ in thousands		Methodology Difference \$ in thousands
	Current Methodology	Proposal Two Methodology	
Walking	\$4,295,091	\$4,508,742	+\$213,651
Motorized	\$1,538,694	\$1,313,834	-\$224,860
Total	\$5,833,785	\$5,822,577	

<sup>1</sup> "Walking" letter routes are defined as park and loop and foot routes (IOCS codes 71, 75, 78, 80, 83) and "motorized" letter routes are defined as curb and motorized routes (IOCS codes 73, 77, 82). See IOCS Data Dictionary in Docket No. ACR2017, Library Reference USPS-FY17-37, FY 2017 IOCS Data Dictionary variable "F260."  
Source: Commission analysis of SAS data sets provided in Library Reference USPS-RM2018-5/2, ZIP file "Prop2.ChIR1.Q1.Public.zip," folder "Prop2.ChIR1.Q1.Public.zip," SAS data sets "NCprcpub17Q4Prop5.sas7bdat," "NCprcpub18Q1Prop5.sas7bdat," and folder "IOCS-ClusterDataset\_Public\_ChIR1.zip," SAS dataset "CLprcpub17q418q1\_ChIR1.sas7bdat." The Postal Service conducted both the current and proposed IOCS methodology in FY 2017, Quarter 4 and FY 2018, Quarter 1.

The Postal Service states there are two reasons for the differences in letter route street time costs estimated under the proposed methodology. September 5 Responses to CHIR No. 4, question 2.a. First, the number of eligible carriers in the panel<sup>64</sup> offices was not accounted for in the proposed afternoon sampling methodology, which contributes to the decrease in motorized letter route street time costs and the increase in walking letter route street time costs.<sup>65</sup> Second, "current IOCS re-aligns the CAGs of

<sup>64</sup> The Postal Service state, "[t]he panel of offices sampled by IOCS within a fiscal year is a subset of the finance numbers summarized in the 'Office Frame.'" The Office Frame is the number of [offices by CAG] finance numbers that have at least one employee eligible for sampling by IOCS. See Docket No. ACR2015, Responses to CHIR No. 14, questions 4.a.-4.b.

<sup>65</sup> September 5 Responses to CHIR No. 4, question 2.a. Under the proposed methodology, in the afternoon, when city carrier street time costs accrue primarily, "sampling is only conducted at IOCS panel offices" by telephone (clustered in one-hour time blocks within a district) and the number of city carriers sampled is the same regardless of the size of the office. *Id.* Under the current methodology, sampled carriers from large offices make up a higher proportion of total city carrier readings as compared to smaller offices. See Docket No. ACR2017, Library Reference USPS-FY17-37, PDF file "USPS-FY17-37.Preface.pdf," "Table 3: Number of Readings, Craft by CAG Group" at 5.

offices depending on whether they were historically included in the CAG A or B panel before 1992.” September 5 Responses to CHIR No. 4, question 2.a.

To correct for not sampling in proportion to eligible carriers in the afternoon, the Postal Service proposes an additional adjustment to the initially developed IOCS-Cluster reading weights, *i.e.*, adjusting the relative weights (rather than changing the sample design) of the readings to reflect the differences in the proportions of carriers eligible for sampling.<sup>66</sup> Additionally, the Postal Service recommends that the historical CAG A/B adjustment to the cost weights be eliminated. September 5 Responses to CHIR No. 4, question 2.a.

Under the current methodology, there are separate sampling rates of the city carrier craft groups in offices by CAG and the rate differs by the CAG group of the sampled office to account for the differences in the proportions of employees in panel offices compared to the frame.<sup>67</sup> However, under the proposed methodology, the Postal Service states that there are “insufficient” afternoon readings to be able to estimate afternoon costs specific to offices by all CAG groups and certain route types.<sup>68</sup> The Postal Service asserts that since “97 percent of the estimated costs in the afternoon are

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<sup>66</sup> September 5 Responses to CHIR No. 4, question 2.a. The Postal Service states that it uses a panel of IOCS offices [from the current IOCS methodology sample offices] since afternoon telephone respondents must be familiar with IOCS. *Id.* However, it is not clear whether/how the proposed additional weight adjustment takes into account the number of sampled offices within that CAG-group. See Docket No. ACR2015, Responses to CHIR No. 14, question 4.a.

<sup>67</sup> Postal Service Reply Comments at 5-6. See Docket No. ACR2017, Library Reference USPS-FY17-37, PDF file “USPS-FY17-37.Preface, Table 2 at 5.

<sup>68</sup> Responses to CHIR No. 1, questions 5.a.-5.b.; Responses to CHIR No. 3, question 5.a. Under the IOCS-Cluster, there are an insufficient number of afternoon readings to estimate costs reliably for part-time city carriers working route types 71 (business foot route), 80 (mixed foot route) and 89 (relay route). Responses to CHIR No. 1, question 5.a. Route types are defined in the IOCS data dictionary under the variable “F260” on page 22 IOCS data dictionary. See Docket No. ACR2017, Library Reference USPS-FY17-37, FY 2017 IOCS Data Dictionary. Under the current methodology, there is a sufficient number of afternoon readings “to estimate costs by CAG, route type and craft subgroup,” given an overall total of 30,000 afternoon readings and city carriers in smaller panel offices have a much higher probability of selection as compared to large panel offices. Responses to CHIR No. 1, question 5.b. However, the Postal Service states that a “continuation of the current methodology only for the afternoon would use excessive data collection resources relative to their benefit.” September 5 Responses to CHIR No. 4, question 3.a.

on the street rather than in-office, little accuracy is lost by not attempting to estimate [in the IOCS-Cluster] these costs separately by CAG.” Responses to CHIR No. 1, question 5.b. Further, it maintains that despite the reduced number of afternoon readings, “telephone readings can continue to be an adequately reliable (as well as cost-efficient) approach.” Petition, Proposal Two at 11.

In Order No. 4399, the Commission noted that under the current IOCS methodology, city carrier activities such as checking the vehicle, handling mixed mail, leaving/returning/loading the vehicle, training, clocking in and out, and break time costs would be expected to vary given the differing number of city carriers and types of routes.<sup>69</sup> Under the proposed IOCS-Cluster methodology, the estimated costs of these activities is substantially lower than under the current methodology.<sup>70</sup> It is unclear whether this represents an improvement in accuracy, or a reduction in accuracy due to a much smaller afternoon sample size that was not done in proportion to eligible carriers. As a result, the impact and accuracy of the proposed afternoon reading weight adjustments is unclear.

*City Carrier Supervisor Costs.* The Commission denies the proposed methodology for city carrier supervisor costs under Proposal Two. For afternoon city carrier supervisor costs, the city carrier afternoon readings do not sample in proportion to the number of actual carriers eligible for sampling by CAG-level of the office group.

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<sup>69</sup> Order No. 4399 at 16-17, 20. For example, under the Docket No. ACR2017 methodology, in FY 2017, higher “checking the vehicle...” (IOCS activity code 6430) city carrier costs were estimated in those offices with higher motorized letter route street time costs particularly in CAG A, B and C offices. Commission analysis of Docket No. ACR2017, Library Reference USPS-FY17-37, folder “Data,” SAS dataset “prcpub17.sas7bdat.”

<sup>70</sup> Under the current methodology, city carrier break time activity cost (IOCS code 6521) is estimated at approximately \$160.9 million versus \$111.6 million under the proposed methodology, leaving/returning/loading the vehicle (IOCS code 6422) is estimated at approximately \$136.2 versus \$109.5 million under the proposed and clocking in and out (IOCS code 6522) is estimated at approximately \$79.7 million versus \$28.1 million under the proposed (combined FY 2017, Quarter 4 and FY 2018, Quarter 1 period). See Library Reference USPS-RM2018-5/1, folder “Workbooks,” Excel files “CS06&7-FY17Q4-CurrentwithProp5.xlsx,” “CS06&7-FY17Q4IOCSClusterv2.xlsx,” “CS06&7-FY18Q1-CurrentwithProp5.xlsx,” “CS06&7-FY18Q1IOCSClusterv2.xlsx,” tabs “Input CS6;” see *supra* n.55.

As a result, it is not apparent how completely the proposed methodology could identify “carriers acting as supervisors.”<sup>71</sup> Additionally, because the proposed city carrier afternoon sampling methodology has the same sampling rate, fewer city carrier afternoon samples would be obtained from smaller offices overall as compared to the current methodology. The Postal Service’s proposed correction for the city carrier afternoon costs (to weight the sampled city carrier reading to reflect the number of city carriers eligible for sampling) may not resolve or correct for under-identified city carriers acting as supervisors.

Given that the Postal Service states there are insufficient afternoon tallies to estimate afternoon city carrier costs by CAG-level, it is possible that there would be insufficient tallies to estimate city carrier supervisor costs that vary by the CAG-group of the offices sampled. As shown in Table 4, under the current methodology, costs of city carriers acting as supervisors vary by CAG-group of the sampled offices.

**Table 4**  
**Current Methodology, City Carriers Acting as Supervisors, FY 2017**

Office CAG-Group	Estimated Costs <sup>1</sup> (in thousands \$)
CAG-Group A Offices	\$100,936
CAG-Group B Offices	\$122,785
CAG-Group C Offices	\$88,389
CAG-Group D Offices	\$71,634
CAG-Group E Offices	\$53,228
CAG-Group F Offices	\$26,875
CAG-Group G/H Offices	\$3,063
Total	\$466,910

<sup>1</sup> Commission analysis of Docket No. ACR2017, Library Reference USPS-FY17-37, folder “Data,” SAS dataset, “prcpub17.sas7bdat.” City carriers acting as supervisor are identified using the payroll data city carrier roster designation (IOCS variable F5) that are ultimately coded as “Supervisors” in IOCS question/variable F257 and Q14. Office CAG-group shown in Table 4 is the adjusted/realigned CAG group of the sampled office listed in IOCS variable “F264.”

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<sup>71</sup> See September 5 Responses to CHIR No. 4, question 2.a. Under the current methodology, the IOCS samples larger offices much more than smaller offices.

Unlike city carriers who may be “overwhelmingly on the street” in the afternoon, city carriers acting as supervisors are likely to have more than one type of activity and may be supervising more than one type of employee. Petition, Proposal Two at 7.

The Postal Service describes its methodology for selecting six city carriers in a large zone as: “using a hashing function applied to their Employee Identification Number, which acts as a pseudo-random number generator. The subsampling does not depend on their craft group or roster designation.” Responses to CHIR No. 3, questions 2.a.-2.b. The Postal Service states that “[o]n average, this approach will select [city carrier] craft groups in proportion to their number within the zone.”<sup>72</sup> However, the IOCS-Cluster primary selection methodology is not explicitly targeted towards obtaining city carriers acting as supervisors. Because the sampling list for a morning reading zone is a single zone for that finance number office and afternoon city carrier readings are not sufficient to estimate afternoon city carrier activities costs by office CAG-group, these employees may not be identified in multi-zone offices.

The Postal Service states that “[t]he intent in Proposal Two is only to replace the subset of supervisor readings conducted on employees who are originally carriers.” September 7 Response to CHIR No. 4, question 14.d. However, by not sampling city carriers in proportion to eligible carriers in the afternoon, sampling fewer offices and fewer days in the same office, and not fully identifying carriers acting as supervisors who come in early,<sup>73</sup> the proposal would make it more likely that those costs for city

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<sup>72</sup> *Id.* This method did not result in any part-time carriers being sampled/selected in CAG D offices in the morning identified as working an SPR route in FY 2017, Quarter 4 in the IOCS-Cluster. Commission analysis of Library Reference USPS-RM2018-5/2, folder “Prop2.ChIR1.Q1.Public,” SAS datasets “NCprcpub17Q4Prop5.sas7bdat,” “NCprcpub18Q1Prop5.sas7bdat,” and folder “IOCS-ClusterDataset-Public\_ChIR1,” SAS dataset “CLprcpub17q418q1\_ChIR1.sas7bdat.”

<sup>73</sup> Data collectors arrive at the delivery unit before all carriers clock in in order to set up their sampling pool with assistance from the delivery supervisor. They begin conducting readings once the first carrier clocks in for work. An exception can occur when the first carrier clocks in much earlier than the others, for example, if that carrier will be acting as a supervisor and begins working hours before the normal time for carriers to begin.” Responses to CHIR No. 3, question 8.b.

carriers acting as supervisors would be less often identified and/or complete under the proposed methodology.<sup>74</sup>

The Commission also denies the Sunday/holiday “city carriers acting as supervisors” methodology because the IOCS-Cluster would not conduct readings on Sundays/holidays, and the current methodology uses the IOCS readings to develop the relative share of costs associated with direct supervision of multiple crafts.<sup>75</sup> The Postal Service states that:

If a carrier is acting as a supervisor, the IOCS data collector will record the employee as a supervisor rather than carrier. In general, the carrier will be clocked into LDC 20. One exception to this may occur on Sundays, where City Carrier Assistants may, in fact, be acting as a supervisor, but not clock into LDC 20.

Responses to CHIR No. 3, questions 10.a.-10.b. The Postal Service has not provided persuasive information in this proceeding to explain why its proposed methodology for carriers acting as supervisors on Sundays/holidays improves the accuracy, completeness, or quality of the data or results over the current methodology.

## VII. ORDERING PARAGRAPHS

*It is ordered:*

1. The Commission approves the use of Time and Attendance Collection System (TACS) workhours to develop Sunday and holiday city carrier costs.

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<sup>74</sup> The Postal Service states that under the current methodology:

[M]ost supervisor readings are obtained from employees who are supervisors in the payroll file. Only a relatively small fraction are from carriers who have carrier roster designations in the payroll file (field F5), but who are acting as a supervisor at the time of the reading and are recorded with a final roster designation (field F257 ) of supervisor.

September 7 Response to CHIR No. 4, question 14.d.

<sup>75</sup> See USPS Periodic Report, July 2, 2018, Rule 39 C.F.R. Section 3050.60(f) Report for FY 2017, Word file “CS02-17.docx.”

2. The Commission approves the use of the Product Tracking and Reporting (PTR) scan data to distribute city carrier Sunday/holiday costs to products, consistent with the reporting requirements directed in the body of this order.
3. The Commission approves the city carrier sampling mode 2 (morning readings in small zones), if the Postal Service can develop a morning cost control total.
4. The Commission denies the proposed city carrier supervisor methodology component, city carrier sampling mode 1 (morning readings in large zones), and city carrier sampling mode 3 (afternoon readings) of Proposal Two.

By the Commission.

Stacy L. Ruble  
Secretary