

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

PERIODIC REPORTING
(PROPOSAL TWO)

Docket No. RM2020-7

REPLY COMMENTS OF THE UNITED STATES POSTAL SERVICE
REGARDING PROPOSAL TWO
(May 29, 2020)

Initial comments in this docket were filed on May 22, 2020 by the Public Representative. The Public Representative does not appear to oppose Proposal Two, but offers criticisms and alternatives that require response. The Postal Service hereby offers its reply comments.¹ As explained below, nothing presented by the Public Representative should deter the Commission from full implementation of Proposal Two.

A. Introduction

The Postal Service appreciates the Public Representative's (PR) careful review of Proposal Two and his support of that proposal. For example, the PR states:²

The Public Representative respectfully submits the following comments on the Postal Service's Proposal to update city carrier variabilities. He agrees the task is timely, and commends the Postal Service on developing a method which is relatively simple to implement and is likely to be reasonably accurate.

¹ A separate motion has been submitted by the Postal Service today seeking leave to file these reply comments.

² See, Public Representative Comments on Proposal Two, Docket No. RM2020-7, May 22, 2020 at 1.

However, the Public Representative raises a concern about one of the motivations that lie behind the Postal Service's initiation of Proposal Two. Investigation into the source of the PR's concern, though, reveals that it is based upon a number of computational errors. As demonstrated below, correcting those errors and accurately implementing the PR's analysis reverses the PR's results and produces an outcome that strengthens the original Postal Service position.

In addition, the PR proposes a slightly modified version of Proposal Two in which CCCS collection volumes are used to update the mean of volumes estimated from customer's receptacles. The PR's own analysis demonstrates that the proposed modification would not make a material difference in the calculated city carrier delivery costs per piece.³ Given that the modification runs the risk of inserting unknown error into the calculation of updated product costs, the PR's analysis demonstrates that the Postal Service was indeed prudent to exclude updating collection-from-customer volumes. Moreover, the PR's claims about the implications for other studies of not using CCCS to update the collection mean volumes are wide of the mark and reflect a misunderstanding of the Postal Service's caution.

B. The Public Representative's Concern about One of the Motivations for Proposal Two is Based upon Computational Errors Made in Implementing His Proposed Analysis.

The Postal Service explained that one of the motivations for developing Proposal Two came from comparing the unit street costs for flats delivered in FSS and non-FSS

³ *Id.* at Table 9, Page 18.

zones, and noticing that the difference was sufficiently large to be counter-intuitive:⁴

This gap in unit costs is surprising because such a gap does not exist for the marginal delivery times on which the costs are based. In the established city carrier cost model, the marginal delivery time for an FSS piece (5.2 seconds) is just 1.86 times the marginal time for a cased piece (2.8 seconds)

The large differences in unit costs led to an investigation of why the difference was arising, and the Postal Service discovered it occurred because of shifts in the relative volumes of mail delivered on letter routes. Because calculated variabilities depend upon volumes, the Postal Service explained that shifts in relative volumes justify investigating possibilities for updating the associated variabilities to reflect the shifts. The PR accepts this justification.⁵ Nonetheless, he takes issue with the Postal Service motivation for investigating and updating the variabilities.

Specifically, the PR is concerned that what he terms “non-delivery” costs could be contaminating the comparison of unit street time costs between FSS and non-FSS zones:⁶

Table 1 in the Bradley Report data is drawn from the “the FSS Delivery Model File,” FSSDeliveryModel19.New v2.xlsx, which shows unit street delivery costs of several flats products which destinate in FSS Zones and non-FSS Zones. However, unit street time costs shown in Table 1 include SPR, Regular Delivery Support, and Blue Box Collection costs. All of these costs should be excluded from the calculation of unit delivery cost, since they are not included

⁴ Bradley Report, attached to Proposal Two Petition (April 7, 2020), at 2.

⁵ See, Public Representative Comments on Proposal Two, Docket No. RM2020-7, May 22, 2020 at 2: “[The Public Representative] maintains it is sufficient to update city carrier variabilities when relative volume shares notably change, and agrees they should be updated.”

⁶ *Id.* at 1.

in the Regular Delivery Cost Pool, nor is the time associated with these activities used to determine regular city carrier regular shape delivery variabilities. [Footnote omitted.]

The Public Representative apparently believes that removing these costs from the calculation of unit street time costs will cause the difference in unit costs between FSS zones and non-FSS zones to disappear. But given that SPR carriers deliver almost no Periodicals flats, Marketing Mail flats, or Carrier Route flats, and given also that extremely small amounts of these types of mail are deposited in collection boxes, the Postal Service found the Public Representative's claim to be surprising. The costs associated with SPR delivery and collection from blue boxes contribute virtually nothing to the unit costs for the types of mail being analyzed, so it is very unlikely that removing them from the overall street time unit costs could cause the relative unit costs to change substantially.

In addition, street support costs, the last type of costs to which the Public Representative objects, are a small fraction of delivery costs and are apportioned across products in approximate proportion to their delivery costs. Thus, removing these costs from the calculation of unit costs also could not make a material difference in the relative FSS zone / non-FSS zone unit costs. The unit costs for the various activities raised by the PR are provided in Table 1 below.⁷

⁷ These unit costs are calculated in the Excel workbook entitled "FSS Model FY19.Unit Cost By Function.xlsx," which is electronically attached to these Comments.

Table 1
Unit Costs for the Activities Identified by the PR as Non-Delivery

Mail Type	Letter Route General Collections (Regular Collection Points)	Letter Route Delivery Activities Support	Letter Route In-Office Support Burdened on Street	SPR Delivery Activities	SPR Delivery Activities Support	SPR In-Office Support Burdened on Street
Periodical Flats FSS	\$0.00000	\$0.00725	\$0.00418	\$0.00000	\$0.00000	\$0.00000
Periodical Flats non-FSS	\$0.00000	\$0.00219	\$0.00126	\$0.00000	\$0.00000	\$0.00000
USPS Marketing Mail Flats FSS	\$0.00000	\$0.00757	\$0.00436	\$0.00004	\$0.00001	\$0.00000
USPS Marketing Mail Flats non-FSS	\$0.00000	\$0.00227	\$0.00131	\$0.00004	\$0.00001	\$0.00000
Carrier Route Flats FSS	\$0.00000	\$0.00725	\$0.00418	\$0.00000	\$0.00000	\$0.00000
Carrier Route Flats non-FSS	\$0.00000	\$0.00251	\$0.00144	\$0.00000	\$0.00000	\$0.00000

Table 1 shows that the unit cost for these activities are extremely small. In addition, inspection of the street support costs for FSS and non-FSS products in Table 1 reveals that they have similar ratios to the unit street costs for FSS and non-FSS products. For example, the ratio of Letter Route Delivery Activities Support for FSS to non-FSS Periodicals Flats is 3.31 ($\$0.00725/\0.00219) while the ratio of FSS to non-FSS Periodicals Flats for all street costs is similar at 3.38 ($\$0.1069/\0.0316). Consequently, removing these support costs from the calculation of overall street time costs will not affect the overall street time ratios. The same is true for the other support costs.

The foregoing analysis demonstrates that removing the costs highlighted by the Public Representative will not make the changes in the ratio of FSS to non-FSS costs that the PR found. The Postal Service thus investigated the calculations presented by the PR and identified a number of computational errors in the workbook used to make the calculation. For example, the PR's workbook entitled "PR FSSDeliveryModel.Unit

Delivery Costs.xlsx” reads in the “pure” delivery costs from the Excel workbook entitled “UDCInputs19.New v2.xlsx.” But as clearly explained in the preface to the Postal Service’s public folder, that workbook calculates the unit delivery cost inputs after the new variabilities are applied:⁸

The Excel workbook entitled, UDCInputs19.xlsx is part of the Delivery Model contained in USPS-FY19-19. It assembles the necessary cost and volume inputs for calculating unit delivery costs. The updated version, UDCInputs19.New.v2.xlsx, reads in the update volume variable cost from CS06&7-Public-FY19.New.xlsx and then calculates the volume variable costs by shape.

To evaluate whether the Postal Service’s motivation in investigating Proposal Two issues is persuasive, one must calculate the relative unit costs before the new variabilities are applied, using the Excel workbook entitled “UDCInputs19.xlsx.” Moreover, there appear to be cell reference errors in the PR workbook. For example, cell H4 on Tab City_Calcs in the PR workbook purports to read in cell F29 in Tab CS7Shape in UDCInputs19.New.v2.xlsx and presents a value of 20,135. But if one goes to cell F29 in Tab CS7Shape in that workbook, one sees that the actual value is 34,008.⁹ Because mistaken values like these occur early in the unit cost calculations, many subsequent calculations are also in error.

⁸ See, USPS-RM2020-7-1, Public Material Supporting Proposal Two, April 7, 2020, Preface at 2.

⁹ The PR did submit a workbook called UDCInputs19.New v2.xlsx but that appears to be an altered workbook of the same name as the original and is apparently the source for the erroneous 20,135 figure. The cell reference for that figure is given as CS06&7-NP-FY19.FY2019 PR Variabilities.xlsx, but no such workbook appears to have been submitted by the PR. Without sufficient documentation, it is difficult to pin all of the sources of error in the PR calculations. The key point is that the correct figure is 54,312, which is from the UDCInputs19.xlsx workbook based upon the volume variable costs in the established model before the new variabilities are applied.

In light of these errors, the Postal Service sought to correct the implementation of the PR's proposed analysis, removing SPR, collection box, and support costs from the calculation of city carrier unit street costs.¹⁰ The results are presented in Table 2 below, and those results show that the ratios of unit costs for FSS to non-FSS zones for what the PR defined as delivery costs are virtually the same as the ratios for all street time costs implied by the figures in Table 1 on page 2 of the Bradley Report.¹¹ Table 2 thus demonstrates that the differences between FSS and non/FSS street time unit costs come from differences in their "pure" delivery costs, affirming the Postal Service's original motivation for investigating Proposal Two. As originally stated, the differences in unit delivery costs for flats in FSS and non-FSS zones were not consistent with their relative marginal times from the CCSTS variability equation. The expressed motivation for pursuing Proposal Two is appropriate.¹²

¹⁰ This calculation is presented in the Excel workbook entitled "FSS Model FY19.PR Replication.xlsx, also attached to these Comments electronically. The costs at issue are removed from the total street time costs simply by setting their values equal to zero. This approach does not change any columns in the workbook and avoids creating cell reference errors.

¹¹ For convenience, the following table provides the ratios for both total street time cost and what the PR has defined as delivery cost.

Class, Shape, or Rate Category	Street Time Cost Ratios	"Delivery" Cost Ratios
Periodicals Flats	3.38	3.39
Bound Printed Matter Flats	1.69	1.70
USPS Marketing Mail Flats	3.40	3.41
Carrier Route Flats	2.81	2.80

¹² This correction also demonstrates that the PR's concerns about the Commission's acceptance of the Docket No. RM2015-7 regular delivery model have no basis. The Commission had the opportunity to contemporaneously review both the regular delivery model and the FSS model, and accepted them both.

Table 2
City Carrier Delivery Unit Cost

Class, Shape, or Rate Category	FSS Zones	Non-FSS Zones	Ratio
Periodicals Flats	\$0.0972	\$0.0287	3.39
Bound Printed Matter Flats	\$0.0687	\$0.0403	1.70
USPS Marketing Mail Flats	\$0.1004	\$0.0294	3.41
Carrier Route Flats	\$0.0975	\$0.0348	2.80

C. The Public Representative’s Proposed Modification of Proposal Two Adds Nothing Material and Potentially Injects Unknown Error.

In Proposal Two, the Postal Service recommends using the FY 2019 CCCS delivery volumes to update the delivery variabilities, but does not recommend using the FY 2019 CCCS collection volumes for the same purpose. The Postal Service chose this approach to ensure the accuracy of the delivery variability updates:¹³

The Postal Service is confident that the relationship between two ongoing systems, DOIS and CCCS is sufficiently stable through time, in no small part because a large portion of the volumes in both systems come from the same machine counts. This confidence justifies the use of current CCCS delivered volume data in performing regular updates, because they mimic changes in DOIS delivered volumes. In contrast, the relationship between the collection volumes used in the Docket No. RM2015-7 City Carriers Street Time special study and current CCCS collection volumes is unknown.

While admitting that the Postal Service’s approach has merit, the PR nonetheless recommends a modest modification of Proposal Two in which the CCCS collection

¹³ See, Responses of The United States Postal Service to Questions 1-2 Of Chairman’s Information Request No. 4, May 15, 2020 at Question 1.

volumes are used to update the collection volume mean from the CCSTS special collection volume study.¹⁴ This recommendation is based upon the PR's confidence that the manual portions of CCCS volumes, and CCCS volumes generally, are accurate.¹⁵ The Postal Service agrees that CCCS is accurate and appreciates the PR's strong endorsement of its accuracy.

But the accuracy of CCCS was never at question. The Postal Service's caution in considering the use of CCCS collection volumes was not based upon potential inaccuracies in CCCS or, for that matter, potential inaccuracies in the CCSTS special collection volume study. The Postal Service believes that both data collection efforts are sufficiently accurate for the purpose for which they are intended. But the fact that these are two reliable, statistically valid samples, does not mean they can be linked in the same way that CCCS delivery volumes, by shape, can be linked to DOIS delivery volumes.

The Public Representative's misapprehension of the Postal Service's caution led to a mistaken assertion about the implications of not using the FY 2019 CCCS data in updating the collection mean. The PR argues that the Postal Service is *implicitly* criticizing the CCSTS special collection study.¹⁶ That is an unfounded assertion. As indicated above, the Postal Service's caution has nothing to do with the reliability of the CCSTS special study, and the Postal Service *explicitly* asserts that that study was

¹⁴ See, Public Representative Comments on Proposal Two, Docket No. RM2020-7, May 22, 2020 at 13.

¹⁵ *Id.* at 14.

¹⁶ *Id.*

based on a statistically valid study and was reliable for estimating the delivery time variability equation.

Finally, the PR's analysis of the implications of using FY 2019 CCCS data to update the collection mean serves to confirm a key point made by the Postal Service in response to Question 1 in Chairman's Information Request 4: that including an update of collection volume would not even offer the prospect of potentially improving the accuracy of Proposal Two by a sufficient amount to justify the incorporation of possible error.¹⁷ The PR's analysis confirms that point by demonstrating that the original Proposal Two results and his modified results are extremely close.¹⁸ For example, the average absolute difference in product unit cost across the two methods is just \$0.0027. This similarity in results means that both methods appear to be comparably successful at correcting the misalignment in unit delivery costs that arose because of changes in relative delivery volumes. If the differences in the results were large, then a need might be perceived to weigh whether those large differences were due to the actual change in the delivery mean volume, or instead due to errors in updating the mean value. When the differences are small, as they are in this case, the prudent approach is to apply

¹⁷ See, Responses of The United States Postal Service to Questions 1-2 Of Chairman's Information Request No. 4, May 15, 2020 at Question 1.

¹⁸ There are a number of errors in the PR's Table 8, which attempts to show the differences in means, marginal times, and variabilities from including the updated collection mean. First, the differences in means for Sequenced mail and FSS mail are overstated because the PR subtracted the modified FSS mean from the original Sequenced mean, and subtracted the modified Sequenced mean from the original FSS mean. The actual difference in the Sequenced mean is 59.49, not -1,781.36 as reported in the table. Also, the actual difference in the FSS mean is 25.17, not the 1,866.02 reported in the table. Second, the Estimated Delivery Hours per ZIP Day has an actual value of 103.74, not the 0.672 reported in the table. Finally, the difference in the collection variability should be -0.787 percent, not -0.008 percent as reported in the table.

Proposal Two to correct the distortion in delivery unit costs, without incurring the risk of basing the results on potential error.

Conclusion

Notwithstanding arguments to the contrary by the Public Representative, for the reasons stated above, Proposal Two should be approved as submitted.

Respectfully submitted,

UNITED STATES POSTAL SERVICE

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May 29, 2020