

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

PERIODIC REPORTING
(PROPOSAL EIGHT)

Docket No. RM2024-2

PETITION OF THE UNITED STATES POSTAL SERVICE FOR THE
INITIATION OF A PROCEEDING TO CONSIDER PROPOSED CHANGES
IN ANALYTICAL PRINCIPLES (PROPOSAL EIGHT)
(November 21, 2023)

Pursuant to 39 C.F.R. § 3050.11, the Postal Service requests that the Commission initiate a rulemaking proceeding to consider a proposal to change analytical principles relating to the Postal Service's periodic reports. The proposal, to update the methodology for the calculation of rural carrier attributable costs to account for the new rural carrier route evaluation system, is labeled Proposal Eight and is discussed in detail in the attached text.

Respectfully submitted,

UNITED STATES POSTAL SERVICE

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Proposal Eight: Update the Calculation of Attributable Rural Carrier Costs

Objective:

The objective of this proposal is to update the calculation of rural carrier attributable costs by revising the established costing methodology to account for the new rural carrier route evaluation system.

Background

In May 2023, the Postal Service began using a new route evaluation system to compensate rural carriers. The new system, called the Rural Route Evaluated Compensation System (RRECS) is an automated system that uses scientifically derived time standards and ongoing data capture processes to calculate the daily evaluated time for each rural carrier route. Because it replaces the previous evaluation system, RRECS plays an essential role in determining compensation for rural carriers. Rural carrier compensation is based upon the evaluated time for their routes and RRECS is the foundation for determining each route's evaluated time.

The replacement of the previous method of route evaluation with RRECS is a sufficiently large change in cost incurrence to stimulate investigation into whether a revision of the rural carrier costing methodology is needed. In its general approach, RRECS is similar to the previous evaluation method in that it sets time standards for the different rural carrier activities, collects data on the factors that drive those activities, and combines these two types of information to determine the evaluated time for each rural route. However, RRECS is materially different from the previous system in some important ways.

First, it presents a far more detailed classification of daily carrier activities. It thus has the potential for identifying new linkages between rural carrier volumes and rural carrier costs. Second, RRECS has developed refined and different time standards for individual rural carrier activities. Instead of using negotiated standards, RRECS uses engineering and statistical methods to establish those standards. To the degree that RRECS produces different standards than the previous system, for the same activities, it will imply different volume variable costs. Third, RRECS uses current data to determine the various counts that are applied to the time standards to determine evaluated time. This means that RRECS reflects the current mix of volumes and route characteristics. In contrast, the established methodology relies upon a special study, the Rural Mail Count, to capture those counts. The last Rural Mail Count was done in 2018, so the established methodology reflects the mix of mail at that time.

Because of these changes, it is quite likely that the actual relationship between rural carrier costs and volumes has changed and a revision of the established methodology is required to accurately measure attributable rural carrier costs. The established methodology is still conceptually sound for calculating rural carrier attributable costs, but its implementation must be revised to account for the differences that RRECS makes in the mechanisms through which rural carrier are compensated. These new mechanisms not only change the calculation of carrier compensation, but also capture the current relationship between volume and rural carrier cost.

Proposal

The proposal is summarized below, but a full discussion of the research supporting the proposal is provided in the public version of a report by Professor Michael D. Bradley, electronically attached to this Petition as a separate pdf file. Also provided separately under seal in USPS-RM2024-2-NP1, are a non-public version of Professor Bradley's report, the RRECS raw data, the analysis data set, the SAS programs and Excel workbooks required for calculating rural carrier volume variable costs by product, and the non-public version of the impact of the new analysis on unit product costs. Provided in USPS-RM2024-2-1 is the public version of the impact of the new analysis on unit product costs.

Because RRECS is the measurement system that links actual volumes to actual rural carrier compensation, it is appropriate to use data from RRECS to measure the variability of rural carrier costs and to distribute attributable costs to products. To that end, as soon as RRECS was implemented in May 2023, the Postal Service produced a RRECS data set containing the information used to determine the evaluated time on each rural route, which is the same information required to attribute rural carrier costs to the products that cause them to arise. The RRECS data set covers all active rural routes and includes all of the variables required for calculating rural carrier attributable costs.

In the established methodology, the process of calculating volume variable costs starts with the identification of which of the various evaluation factors are volume variable and which are not volume variable. Next, the time, or evaluation allowance, for each factor is calculated as the product of the factor and its associated count. The

overall variability is then calculated as the ratio of the sum of the volume variable evaluation allowances to the sum of all allowances. This variability is then used to calculate each year's volume variable cost, by multiplying it by the current year's accrued cost. Each evaluation allowance's volume variable cost is calculated as the product of current year's total volume variable cost and the evaluation allowance's proportion of total volume variable allowance time. In the final step, the volume variable costs for each activity are then distributed to the products that are handled in that activity.

Although the established methodology has a solid causal basis, its actual implementation is dated. The Form 4241 negotiated evaluation factors, historically applied to determine rural carrier evaluated time, are no longer used, so the current set of rural carrier volume variable cost calculations do not embody the way rural carrier costs are incurred. Because the previous evaluation system has been replaced by RRECS, the established methodology must be updated to ensure it replicates the current relationships between volume and rural carrier cost.

The current implementation of the established methodology is also dated because it relies upon volumes from the 2018 Rural Mail Count. There have been material volume shifts since that count took place, and it is appropriate to update the costing methodology to account for those volume shifts. Updating the established methodology to reflect the current evaluation system also provides certain advantages for the calculation of attributable costs. First, RRECS captures volume from ongoing Postal Service operational data systems, so there is no longer a need to perform a Rural Mail Count. As a result, the calculation of volume variable rural mail costs no

longer depends upon a special volume study, but is based upon ongoing operational data. The volume counts will automatically be updated each year, so the attributable cost calculation will always be adjusted to reflect any current changes in volume.

Second, RRECS provides a more detailed description of carrier activities and reflects the way rural carrier operations are currently being performed. It covers all rural routes and the RRECS data set incorporates the calculation of evaluated time for each one of those routes. It thus provides a more accurate basis for calculating attributable rural carrier costs.

RRECS has three types of variables that are used in calculating volume variable rural carrier costs. First, it has a set of time standards, which are the scientifically derived evaluation times specified for each carrier action. For example, there is a time standard which establishes the time credit carriers get for delivering a parcel to the door. Second, RRECS has units, which are a count of the activity which causes the carrier to incur time. Units include counts like the number of pieces cased, the number of trays handled, the number of boxes served, or the number of feet driven on the route. Third, RRECS has time sequences, which are a measure of the time spent in a specific activity like casing letters, delivering parcels to the door, or refueling the vehicle. For nearly all the time sequences, the calculated time is the product of the time standard for the activity and the number of units for the activity.¹

¹ There are three activities that are sufficiently heterogenous across routes so that effective time standards could not be established. For these three activities, - loading the vehicle, deviations for Priority Mail Express deliveries, and end of shift activities - the actual time the carrier spends in the activity is recorded on the carrier's Mobile Delivery Device (MDD).

Integrating the RRECS data and structure into the established methodology requires identifying the RRECS sequences that are volume variable. That identification requires examining the relationship between volume and evaluated time for each of the different sequences that make up the carrier's day.

The identification process requires examining, for each sequence, the relationship between the cost driver (measured by the sequence's unit) and the sequence's evaluated time. This involves understanding how the sequence's unit and standard come together to define the evaluated time. Second, the process involves examining the relationship between volume and the sequence's unit. Sometimes this relationship is straightforward, because the sequence's unit is a measure of volume, so the linkage is direct. In other cases, the linkage is indirect, and the process requires additional analysis of how changes in volume do, or do not, affect the unit. If the unit is volume-related, then the associated sequence is volume variable. A sequence is volume variable because both the linkage between volume and its unit and the linkage between its unit and sequence time are in force. A change in volume causes a change in the number of units, which in turn causes a change in the sequence's evaluated time. If the unit is not volume dependent, but is driven by a non-volume factor, then the associated sequence is not volume variable.

There are ninety-eight sequences and subsequences that make up the carrier's day. Following the established methodology means that each one has to be examined to determine if the evaluated time is volume variable. Across those sequences and subsequences, there are forty-eight which are one hundred percent volume variable,

sixteen which are partially volume variable, and thirty-four which are not volume variable.

Examples of sequences that are one hundred percent volume variable are times for casing the various types of mail, gathering, organizing, and delivering parcels, and verifying addresses. Examples of sequences that are not volume variable are times for activities that occur once every day and take the same amount of time regardless of the volume delivered on the route. These include activities like setting up the scanner, inspecting the vehicle, or stopping at traffic control points. An example of a sequence that is partial volume variable is the time for loading the vehicle, which is subject to economies of density.

The overall variability for rural carrier labor time is calculated as the ratio of total volume variable evaluated time to total evaluated time. In the established methodology, using the historic Form 4241 evaluation factors and the 2018 Rural Mail Count volumes, the overall variability for labor time is 39.0 percent. Under RRECS using 2023 data, the labor time variability is 47.2 percent.²

The increase in variability occurs for a number of reasons. First, under RRECS, box time is volume variable, whereas under the established methodology it is not. This is important because total box time is a large time sequence in RRECS and applying a variability to it makes it the largest volume variable sequence. Second, under RRECS

² Rural carriers who use their own vehicles receive an Equipment Maintenance Allowance (EMA), which is not volume variable in either the established methodology or under RRECS. In FY 2022, the EMA was just over \$644 million. The existence of the EMA reduces the overall rural carrier variability in the established methodology to 36 percent and the overall variability under RRECS to 44.2 percent.

rural carriers get explicit credit for verifying the addresses of mail as it is delivered. Because this activity occurs at every box that receives mail on the route, carriers get this time credit for all mail delivered directly to boxes. Verifying addresses is the second largest volume variable sequence, yet in the established methodology, this time is implicit in the non-volume variable box time.

Third, RRECS takes a much more detailed examination of the activities rural carriers perform in the office and on the street, which leads it to identifying higher time standards for handling mail. This change results in more rural carrier time being associated with products. This is highlighted by the fact that RRECS includes extensive detail on the handling and delivery of parcels. Carriers get time credit not only for the delivery of parcels to the door or mailbox, but also for preliminary parcel-related work like organizing their parcels in the office and preparing parcels at the vehicle for deliveries to the door. With the growth in parcel volumes, these additional parcel-related activities represent the third through fifth largest volume variable time sequences.

The last step in the costing process is the distribution of volume variable costs to the products that cause them. This requires aligning RRECS-based cost pools with the distribution keys from the Rural Carrier Cost System (RCCS). This is done by matching the volume types driving cost in RRECS to the various volume types that make up the distribution keys in RCCS. In some cases, this requires combining RRECS cost pools that share a common RCCS distribution key, and in others it requires subdividing an RRECS cost pool into shape-specific sub-pools that match RCCS distribution keys. Moreover, in conjunction with other aspects of the effort to realign rural carrier costing with RRECS, also proposed are minor modifications to the RCCS distribution keys.

These RCCS modifications are beyond the scope of Professor Bradley's research, so details regarding this portion of Proposal Eight are provided in an Appendix appearing at the end of this document, with supporting material provided in USPS-RM2024-2-NP1, Revised RCCS Workbook Directory.

Impact

When the Postal Service switched to RRECS for compensating rural carriers, it changed the way it incurs cost on rural routes. Those changes, along with changes in volume since 2018, caused changes in volume variable rural carrier costs, which are presented in Table 1, below. Most notable in Table 1 is the large increase in volume variable costs for both Package Services and Competitive products. These increases reflect both the higher parcel-shaped volumes recorded in RRECS, as compared to the 2018 Rural Mail Count, and the fact that RRECS identifies a higher carrier time per parcel than was negotiated under the previous Form 4241-based system.

Table 1: Assessing the Impact of RRECS on FY 2022 Volume Variable Costs by Product Groups (Thousands of Dollars)

Product	Existing VV Cost	RRECS VV Cost	Difference	% Change
Total First-Class Mail	540,481	557,808	17,327	3.2%
Total USPS Marketing Mail	1,319,505	1,300,303	-19,202	-1.5%
Total Periodicals	183,189	145,762	-37,427	-20.4%
Total Package Services	56,896	96,490	39,594	69.6%
Total Domestic Market Dominant Mail	2,109,345	2,114,648	5,303	0.3%
Total Domestic Market Dominant Services	211,099	124,964	-86,135	-40.8%
Total Domestic Competitive Mail and Services	1,194,671	2,081,115	886,444	74.2%
Total International Mail and Services	38,035	35,601	-2,434	-6.4%
Total Vol Var & Prod Spec	3,553,150	4,354,724	801,574	22.6%

Source: RRECS Public Unit Cost Impact.xlsx

It is also informative to examine the changes in overall unit volume variable cost for various products as a result of the RRECS implementation and data update. The unit cost changes, including piggybacks, are presented in Table 2 below. There is relatively little change in any First-Class Mail products, as the reduction in the volume of letters is offset by a higher unit time for letters. Except for parcels, Marketing Mail products also have relatively small changes in their unit costs, although flat shaped products do experience a decline in cost because of the decline in rural carrier flats volume. Periodicals unit costs also declined because of the decline in rural route flats

volume. Because RRECS shows a material lower volume of flats on rural routes, the unit cost per RPW piece falls, when compared to the unit cost from the established methodology that relies upon flat volumes from the 2018 Rural Mail Count.

Package Services unit costs rise due to higher parcel volumes and higher evaluated times per parcel in RRECS. The same is true for Competitive products. Finally, the unit costs for special services fall because of both lower volumes and lower unit times in RRECS. In sum, the impact analysis demonstrates that the proposed costing methodology produces volume variable and unit costs consistent with the changes in volume since 2018 and the change in the route evaluation structure brought on by RRECS.

Table 2: Changes in Unit Costs Due to Switch to RRECS

PRODUCT	Established Unit Cost	RRECS Unit Cost	Unit Cost Change	% Change in Unit Cost
Single-Piece Letters	\$0.36	\$0.36	\$0.00	-0.81%
Single-Piece Cards	\$0.35	\$0.35	\$0.00	-0.41%
Presort Letters	\$0.14	\$0.14	\$0.00	1.47%
Presort Cards	\$0.10	\$0.10	\$0.00	2.08%
Flats	\$1.34	\$1.32	-\$0.01	-1.02%
Total First-Class Mail	\$0.22	\$0.22	\$0.00	0.19%
High Density and Saturation Letters	\$0.09	\$0.10	\$0.00	2.08%
High Density and Saturation Flats/Parcels	\$0.14	\$0.14	-\$0.01	-3.86%
Every Door Direct Mail-Retail	\$0.08	\$0.08	\$0.00	3.29%
Carrier Route	\$0.30	\$0.29	-\$0.01	-3.89%
Letters	\$0.12	\$0.12	\$0.00	1.99%
Flats	\$0.72	\$0.71	-\$0.01	-1.73%
Parcels	\$2.04	\$2.08	\$0.04	2.15%
Total USPS Marketing Mail	\$0.16	\$0.16	\$0.00	-0.22%
In County	\$0.24	\$0.23	-\$0.01	-5.54%
Outside County	\$0.49	\$0.48	-\$0.01	-2.70%
Total Periodicals	\$0.46	\$0.45	-\$0.01	-2.89%
Package Services				
Bound Printed Matter Flats	\$0.70	\$0.68	-\$0.01	-1.97%
Bound Printed Matter Parcels	\$1.14	\$1.34	\$0.20	17.56%
Media/Library Mail	\$4.63	\$4.70	\$0.06	1.34%
Total Package Services	\$1.77	\$1.87	\$0.10	5.72%
Total Domestic Competitive Products	\$2.79	\$2.95	\$0.16	5.71%

Source: RRECS Public Unit Cost Impact.xlsx

APPENDIX: RCCS DISTRIBUTION KEY MODIFICATIONS

The purpose of the Rural Carrier Cost System (RCCS) is to provide product distributions for the cost pools defined for carrier compensation. Because compensation provided under RRECS differs from the previous methodology under the Rural Mail Count, corresponding modifications are proposed for the RCCS summaries, as detailed in workbook RCCS_Matrix_FY22_RRECS.xlsx (“matrix”), which is being submitted as part of USPS-RM2024-2-NP1, in the Revised RCCS Workbook Directory. The modifications are related to the shape of the mail piece, the presence of delivery barcodes, and the delivery location. These modifications would result in the addition of new distribution keys, the removals of obsolete distribution keys, and in changes in the assignment of mail pieces to the distribution keys.

In RRECS, pieces with delivery barcodes that are to be scanned by the carrier upon delivery are treated as packages, even if their physical shape is letter or flat rather than parcel.³ In the proposed RCCS matrix, products that always have delivery barcodes are moved into package-related delivery keys when they were originally assigned to a letter or flat delivery key due to their physical shape.⁴

³ Delivery barcodes include Intelligent Mail parcel barcodes (IMpb) that are applied on domestic parcel products, S10 barcodes (Universal Postal Union (UPU) Standard 10) that are applied on international packages and certain Priority Mail Express pieces, and Certified barcodes that are applied on domestic letters and flats). These are collectively referred to as packages in order to include letters and flats with delivery barcodes.

⁴ This affects the products First-Class Package Service, Priority Mail, Priority Mail Express, Parcel Select, Bound Printed Matter Parcels, Media and Library, USPS Retail Ground, USPS Marketing Mail Parcels, Inbound Parcel Post, Inbound International Expedited Services.

Conversely, pieces without delivery barcodes are treated as letters or flats, even when their physical shape is a parcel.⁵ Products that never have delivery barcodes, such as Marketing Mail letters or flats, are moved out of the parcel delivery key to the Other Flats delivery key even if they previously were assigned to the Parcels delivery key. Some products, such as Inbound Letter Post and USPS Mail, may have pieces in both the package and non-package categories. In these cases, pieces previously in the parcels and in the tracking distribution keys are distributed to the new package-related delivery keys, while non-barcoded non-parcel-shaped pieces remain in their original letter or flat distribution key.

Unlike the previous evaluation system, RRECS credits to carriers different amounts of time depending on the location of the delivery, with more credit for deliveries to the door compared with deliveries to the parcel locker or mailbox. RRECS uses the carrier scan data from PTR to determine the delivery location. To better match RRECS, RCCS will be modified to replace the current parcels and tracking distribution keys with separate keys, for parcels delivered to the door, mailbox, and locker. It also will use PTR delivery event data to determine the appropriate distribution key for each parcel. Specifically, PTR is queried with the delivery barcodes recorded by data collectors during RCCS tests on a route-day to obtain the delivery location. Note that not every parcel recorded during RCCS tests has a delivery barcode recorded, and not all delivery locations could be identified from PTR. Therefore, the RCCS volume estimates for a

⁵ Exceptions are parcels that are unscannable, possibly due to damaged barcodes. Carriers have a capability on their scanners to record the delivery location for unscannable parcels, but this location data cannot be matched to the parcels recorded by data collectors during RCCS tests.

product's packages are assigned to the three delivery location delivery keys in the same proportions as the PTR delivery location data for that product.⁶

Because RRECS only provides credit to a carrier for one delivery scan for each parcel per day, RCCS similarly only uses a single delivery scan event from the test day even when there are multiple credited scans on the same day.⁷ The scan that is selected is the one that provides the largest amount of credit to the carrier, i.e., deliveries to the door dominate over deliveries to parcel locker or to mailbox.

There is an exception to the above procedures for Priority Mail Express (PME), which are treated separately by RRECS. PME pieces that are recorded in RCCS as requiring a signature are always assigned to door delivery, while PME pieces that do not require a signature are assigned to a delivery location in proportion to PTR delivery event data. Note that RCCS/PTR does not identify PME that receives the separate Express Deviation delivery credit; this is determined in later procedures.

Additional changes to the RCCS distribution keys reflect other changes in rural carrier compensation with RRECS. There will no longer be separate compensation for tracking, therefore the distribution keys for tracking and for tracking by shape are removed. There is now only a single distribution key for Postage Due (PDU), so the previously separate data for postage due parcels (PDUPar) distribution are merged with

⁶ There are two exceptions. The first is Free Mail. Because none of the Free Mail packages have barcodes that could be matched to PTR data, delivery locations are assigned based on the data for all products. The second exception involves Marketing Mail parcels that are not boxholder. Due to small sample sizes, the PTR data for all of the Marketing Mail parcel rate categories are combined together and each category is assigned in identical proportions to the delivery location distribution keys.

⁷ For example, a carrier may attempt but fail to deliver early in the day because there was no access to a secure location at the time, but deliver successfully later in the day.

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all other postage due data, and the PDUPar distribution key is removed. Under RRECS, boxholder mail can now only apply to letters and flats; boxholder mail that was previously parcel-shaped is now combined with boxholder flats, and the parcel-shape boxholder distribution key (BoxH_Parcel) is removed.

Workbook RCCS_Matrix_FY22_RRECS.xlsx develops the changes from the RCCS Matrix filed in Docket No. ACR2022 to the proposed Matrix corresponding to the application of RRECS compensation. Sheet RCCS_Matrix_YTD_FY22 has the original RCCS matrix that was filed in ACR2022. It also has the data based on PTR scan data for delivery locations (columns AK:AM). Sheet RCCSMatrix_RRECSv1 adds new distribution keys for the three RRECS delivery locations (columns AD:AF) and shows the calculations that transform the original data to distribution keys for RRECS. Sheet RCCSMatrix_RRECSv1Diff shows the differences between the RRECS and previous distribution keys. Finally, sheet RCCSMatrix_RRECS_SimulateACR shows the final matrix as it is provided under this proposal.