

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

PERIODIC REPORTING
(PROPOSAL TEN)

Docket No. RM2020-2

**RESPONSES OF THE UNITED STATES POSTAL SERVICE
TO QUESTIONS 1-7 OF CHAIRMAN'S INFORMATION REQUEST NO. 2**
(January 29, 2020)

The United States Postal Service hereby provides its response to the above listed questions of Chairman's Information Request No. 2, issued January 17, 2019. The questions are stated verbatim and followed by the response.

Respectfully submitted,

UNITED STATES POSTAL SERVICE

By its attorney:

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1. Aside from obtaining the data electronically as opposed to manually, please confirm that the measurement of Workload Service Credits (WSCs) in Proposal Ten uses the same methodology currently employed by the Postal Service and as also described in the testimony of Dr. Nai-Chi Wang as part of Docket No. R84-1.¹ If not, please explain any other differences.

RESPONSE:

Confirmed.

¹ See Docket No. R84-1, Direct Testimony of Nai-Chi Wang on Behalf of the United States Postal Service, November 10, 1983, at 17, Figure B.

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2. Please refer to Chairman's Information Request (CHIR) No. 1, question 3 and the Postal Service's responses to question 3.² In response to question 3.b., the Postal Service states that Postmaster "[s]alary increases above [the] minimum [salary] are determined by longevity and merit, and are not dependent on WSCs." See Responses to CHIR No. 1, question 3.b. The Postal Service also states that it "considered only WSC as the explanatory variable in the logistic equations. . . because WSCs solely determine a Post Office's EAS grade." *Id.* question 3.c.
- a. Please confirm that the minimum salary of a Postmaster is determined solely by a post office's WSCs and resulting EAS grade.
 - b. Please confirm that salary increases awarded to a Postmaster above the minimum salary for each EAS grade is based solely on longevity and merit of the Postmaster and are independent of both the WSCs earned and volume of mail processed by the Postmaster's associated post office. If confirmed, please confirm that the costs associated with salary increases awarded based on merit and longevity are included as part of the Postal Service's institutional costs.
 - c. Please confirm that a Postmaster's salary is the sum of:
 - i. The minimum salary applicable to the EAS grade of the post office with which a Postmaster is associated.
 - ii. Any salary increases awarded to a Postmaster based on longevity and merit.
 - d. If any of questions 2.a. through 2.c. are not confirmed, please explain.

RESPONSE:

- a. Confirmed.

² Chairman's Information Request No. 1, December 19, 2019, question 3.a. (CHIR No. 1); Responses of the United States Postal Service to Question 1-5 of Chairman's Information Request No. 1, January 2, 2020, question 3.a. (Response to CHIR No. 1).

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b. Confirmed that increases in postmaster compensation for merit and/or longevity is not based upon WSCs. Not confirmed that all merit and/or longevity compensation costs are included as part of the Postal Service's institutional costs. Only the non-volume-variable part of these costs are included in institutional costs.

c. Confirmed.

d. In Docket No. R84-1, the Postal Service proposed treating the salary increments based upon longevity and/or merit as institutional costs on the basis that they are not determined by WSCs.³ However, in that Docket, the Commission rejected the Postal Service's proposed approach and directed the Postal Service to apply the estimated variability to both the minimum (base) salary and any additional salary due to merit and/or longevity:⁴

Consistent with the Commission treatment of longevity and merit pay for other cost segments, we treat Postmaster longevity and merit pay as variable to the same extent as base salary.

The Postal Service has not proposed changing this established methodology in the current proceeding, and thus continues to apply the variability to longevity

³ See, Docket No. R84-1, Direct Testimony of Nai-Chi Wang on Behalf of the United States Postal Service, November 10, 1983, at 33-34.

⁴ See, Docket No. R84-1, Opinion and Recommended Decision, at page 247, paragraph 3296.

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and merit pay as well as the minimum salary. As a result, only the non-volume variable portion of longevity and merit pay is included in institutional costs.

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3. Please refer to the Summary Description of USPS Development of Costs by Segments and Components.⁵ "Accrued cost" in the Postmaster cost segment is defined as:

"Postmaster costs for EAS-23 and below offices and EAS-24 and above offices are recorded in the same general ledger accounts in USPS-FY18-5, tab 'seg 1'. Accrued costs for both components are developed by first apportioning the jointly recorded costs based on respective salary proportions. These salary proportions are calculated from the number of postmaster positions at each EAS grade in both components and actual salaries for those grades. Postmaster relief and replacement costs are then added to complete the development of accrued costs for both components."⁶

- a. Please define or describe the term "actual salaries" in the above passage.
- b. Please confirm that "[p]ostmaster relief and replacement costs" as described in the passage are included as part of the Postal Service's institutional costs. If not confirmed, please explain.

RESPONSE:

a. The reference to "actual salaries" in the above passage refers to the total salaries paid by EAS level as reported by the Postal Service's Eagan Accounting Service Center.

b. Not confirmed. Postmaster relief and replacement costs are found in subaccount 102 and are assigned to Component 1 – Postmasters EAS-23 and below. This component also contains costs from subaccount 101 for

⁵ Rule 39 C.F.R. Section 3050.60(f) Report for FY 2018 (Summary Descriptions), July 1, 2019, at SummaryDescriptionsFY2018.zip, folder "CRA.Summary.Descriptions.FY18," file "CS01-18.dox" (Summary Descriptions).

⁶ Summary Descriptions at 1-2.

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Postmasters EAS-23 and below. Together, the aforementioned costs from these two subcomponents represent the total accrued costs for the component. The previously litigated variability factor of 18.23 percent is applied in order to calculate the volume-variable costs for this component. The remainder is considered institutional cost. In conclusion, Postmaster relief and replacement costs are not categorically institutional; they receive the same variability as the other costs in Component 1 – Postmasters EAS-23 and below.

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4. Please refer to the Bradley Study, which states that “[t]o find total volume[-]variable costs under the new approach, the FY 2018 accrued cost for each grade is multiplied by the variability estimated for that grade. Those multiplications produce the volume[-]variable costs for each grade and then the grade-level volume[-]variable costs are summed to get total volume[-]variable cost.” Bradley Study at 44-45.
- a. Please describe the costs included in the term “accrued cost for each grade” in the above passage.
 - b. Please explain whether the term “accrued cost for each grade” in the above passage includes the salary increases awarded to a Postmaster based on longevity and merit, or any cost other than the minimum salary applicable to each EAS grade.

RESPONSE:

- a. The costs included in the term “accrued cost for each grade” for each grade are the result of multiplying each grade’s proportion of total accrued postmaster salaries by the total accrued costs for postmasters that are derived from the General Ledger and given by subaccount 101. Thus, the accrued costs for each grade include both the minimum salaries and any merit and/or longevity pay. The grade-specific accrued salaries used to calculate the proportions support the current cost model for postmasters. The source of this data is USPS-FY18-32, workbook I-Forms-Public, tab CS01.0.2. The total accrued postmaster cost comes from USPS-FY18-32, workbook I-Forms-Public, tab I-Trial Bal.
- b. Yes, the term “accrued costs for each grade” includes the total accrued cost for postmasters in each relevant EAS grade.

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5. Please refer to the Bradley Study at 37.
- a. Please confirm that the logistic regression model only predicts the probability that the response variable takes the value "1", which corresponds to the higher pay grade, and that it does not provide a direct prediction of the value of the response variable itself.
 - b. Please provide the rationale for using 0.5 as the cutoff-point for the estimated probabilities in the computation of the number of post offices predicted to attain the higher EAS level.

RESPONSE:

a. It is not completely clear what is meant by the term "direct prediction" in the question. If the term direct prediction is meant to suggest a situation in which that the logit model provides either a value of "0" or "1" for each post office, then it is confirmed that logit model does not provide those values for all offices. Instead, the logit model predicts the probability that an office is in the higher EAS grade. In many instances, the model will provide a probability that is virtually equal to zero or one. But in other instances, the model will provide a probability that is in between those two values.

For example, Figure 8 from the Study Report, reproduced below, shows the predicted values for the EAS-18 to EAS-20 model. Most of the predictions take on a value of zero or one, but for those offices in the Zone of Tolerance, the predicted values fall between zero and one. Those offices with higher values for

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that it is appropriate to classify each office into the grade the model indicates that the office is most likely to be in. For example, if the probability is 0.60 that an office would be in a higher grade, then the odds of it being in that grade are 1.5 to 1 (odds = $\frac{p}{1-p}$).

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6. To determine the variability of Postmaster costs, the Bradley Study shows the year-over-year WSC growth by EAS grade between April 2018 and April 2019 ranged from -0.18 percent to 2.09 percent. See Bradley Study at 42, Table 22. The Bradley Study states that to “account for the possibility that the variability could be applicable to a variety of circumstances, a sensitivity test was performed for a wide range of possible WSC changes” between 2.5 percent and 20 percent, by increments of 2.5 percent. *Id.* at 42. The Bradley Study states that the results of the sensitivity test “support the use of a 10 percent WSC change as the benchmark for calculating Postmaster variabilities.” *Id.* at 44.
- a. Please explain why the Bradley Study does not rely on the WSC growth rates calculated in Table 22 as the basis for calculating Postmaster variabilities.
 - b. Please explain why the Bradley Study considered a “wide range of possible WSC changes” between 2.5 percent and 20 percent, including whether historically observed WSC variability has ever fallen into these ranges.

RESPONSE:

a. There are two problems with relying on the WSC growth rates calculated in Table 22 as the basis for postmaster variabilities. First, please recall that the growth rates are for the period between April 2018 and April 2019. Second, note that the new EAS grade 18B and the new EAS-18 grade did not come into existence until 2019. Thus, there is no way to calculate a year-over-year growth rate for calculating an EAS-18 to EAS-18B variability, nor for an EAS-18B to EAS-20 variability. The second problem with relying on the WSC growth rates calculated in Table 22 arises because the year-over-year changes for EAS grade with explicit growth rates are so small that using them would produce zero variabilities for those grades. When the WSC change is very small, there will be no change in postmaster grades and salaries as a result of that very small WSC change, leading to a variability of zero.

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b. The Study Report considers a wide range of possible WSC changes as part of its sensitivity analysis. In such an analysis, one changes the value of a key parameter or input into a calculation and then observes the impact on the calculated output. If the resulting changes in the calculated output are modest and follow an understandable pattern, the method of calculating the output is considered to be robust. Often a researcher will select a wide range of parameters or input values to investigate whether the calculated value is robust over that wide range of input values.

In the case of the postmaster variabilities, it was of interest to see if the calculated variabilities from the various logit models were stable for any reasonable changes in WSCs. The sensitivity analysis thus started at very low, but material, WSC changes and covered the range to large WSC changes. To get a sense of historical movements in WSC, one can compare the WSC values for 1979 provided by witness Wang in Docket No. R84-1 and the WSC values for 2019 presented in this proceeding, for the EAS grades levels that appeared in both data sets.⁷ Over that period, the total WSC in these for grades nearly doubled, allowing for a variety of different sized WSC changes to take place. The next table presents the values for each of the relevant EAS grades in each

⁷ See Docket No. R84-1, Direct Testimony of Nai-Chi Wang on Behalf of the United States Postal Service, November 10, 1983, at 39.

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year, with the average annual growth rates over the forty-year period.⁸ The average annual growth rates are at the lower edge of the range of values for the WSC sensitivity analysis, but if a longer-run period is considered, then the average growth rates are well within the range. For example, if WSC growth over a three- or four-year period is considered, then the average growth rates would be materially higher.⁹ Because the Commission calculates longer-run variabilities, these longer time periods may be relevant.

⁸ The average annual growth rate, ρ , is derived from the compound growth formula:

$$\frac{WSC_{2019}}{WSC_{1979}} = (1 + \rho)^{40}$$

Solving this expression for ρ yields:

$$\rho = \left(\frac{WSC_{2019}}{WSC_{1979}} \right)^{\frac{1}{40}} - 1.$$

⁹ Because of compounding, the three-year growth rate will be slightly higher than three times the one-year growth rate. The same is true for the four-year growth rate.

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Comparison of WSC Values Between 1979 and 2019 by EAS Grade

EAS Grade	1979 WSC	2019 WSC	Overall Growth	Average Annual Growth Rate	3 Year Average Growth	4 Year Average Growth
18	11,509,000	20,450,521	1.78	1.4%	4.4%	5.9%
20	15,194,844	21,762,720	1.43	0.9%	2.7%	3.7%
21	12,959,375	21,333,129	1.65	1.3%	3.8%	5.1%
22	13,592,458	34,481,560	2.54	2.4%	7.2%	9.8%

As Figure 10 in the Study Report shows, the resulting calculated variabilities remain stable across the large WSC range. Whether the WSC change is just 2.5 percent or as much as 20 percent, the overall variability remains in the 6 to 7 percent range.

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7. Please refer to CHIR No. 1 and Responses to CHIR No. 1. In response to question 3.a, the Postal Service states that “[a]t the end of the management review process . . . if it is determined that post office should move down an EAS grade, then the Postmaster’s salary will decrease.” See Responses to CHIR No. 1, question 3.a.
- a. Please confirm that, based on the proposed methodology for computing the variability of Postmaster costs, the calculated value of the variability when the initial WSCs increase will differ from the calculated value of the variability when the initial WSCs decrease, even when the initial WSCs increase or decrease by the same percentage. If not confirmed, please explain.
 - b. Please confirm that the methodology used to estimate the number of post offices moving from a lower to a higher EAS grade, may also be used to estimate the number of post offices moving from a higher to a lower EAS grade. If not confirmed, please explain.
 - c. Please confirm that post offices that are likely to move from a higher to a lower EAS grade are excluded from the cost estimates underlying the calculation of Postmaster cost variabilities. If confirmed, please explain why they are excluded. If not confirmed, please explain.
 - d. The proposed methodology groups EAS grades in pairs and calculates the variabilities for those EAS grade pairs. See Petition, Proposal Ten at 5.
 - i. Please confirm that for a regression involving a pair of EAS grades, the underlying sample only includes the post offices falling into the two EAS grades that make up the pair.
 - ii. If confirmed, please consider, for example, the EAS 21-22 pair and explain whether it is possible for a post office in EAS-21 to move down to EAS-20 or for a post office in EAS-22 to move up to EAS-24, *i.e.*, into a different EAS pair. Please explain whether these movements can influence Postmaster costs’ responsiveness to changes in the WSCs. If not confirmed, please explain.

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RESPONSE:

a. Confirmed that it could differ, and most likely would differ, but it seems possible that a given absolute value change in WSCs could lead to the same variability if it were calculated as an increase or a decrease. The variability is the percentage change in postmaster cost for a given percentage change in WSCs. The percentage response in cost to the WSC change depends upon how many postmasters change EAS grades and the salary differential. Whether the number of postmasters who change grade from an increase equals the number of postmasters who change grade from a similarly sized decrease depends upon the distribution of postmasters in the Zone of Tolerance, as explained on page 33 of the Study Report. It seems possible that a distribution could occur in which the change in postmasters was the same for equally sized increases and decreases. But generally, one would expect the variability to differ for increases and decreases.

b. Confirmed.

c. Not Confirmed. All values in the Zone of Tolerance (as well as those outside the Zone of Tolerance) are used to estimate the models underlying the postmaster cost variabilities. This includes offices that may be likely to move up an EAS grade, as well as offices that may be likely to move down an EAS grade. Of course, if one is analyzing the effects of an increase in WSCs, then no offices will move down a grade as a result of that increase in WSCs. Similarly, if one is

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analyzing a decrease in WSCs, then no offices will move up an EAS grade as a result of that decrease.

d.i. Confirmed.

d.ii. This question is investigating the pair-wise structure of the variability analysis from the perspective of offices that are in EAS grades 21 and 22. The question contemplates movements of offices in those grades that are not limited to moving between those two grades; it is asking about possible movements between EAS-20 and EAS-21 as well as movements between EAS-22 and EAS-24. To conceptualize how a pair-wise estimation strategy includes all possible movements of offices in and out of EAS-21 and EAS-22, one must recognize the step-function structure of the EAS system. As WSCs increase, an office will stay in its current EAS grade until it hits the Zone of Tolerance and then will shift up to the next higher grade. A similar set of movements occur for WSC decreases.

Consequently, the offices included in the EAS-21 and EAS-22 pair are also included in two other pairs. EAS-21 offices are included in both the EAS-20 and EAS-21 pair and the EAS-21 and EAS-22 pair. Likewise, EAS-22 offices are included in both the EAS-21 and EAS-22 pair and the EAS-22 and EAS-24 pair. This set of three estimated logit models that include the offices in the EAS-21 and EAS-22 grades thus incorporate movements not only between EAS-21 and EAS-22, but also between EAS-20 and 22 as well as EAS-22 and EAS-24. To the extent changes in WSCs would lead to these latter types of grade changes,

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they would be captured by the relevant pairwise logit models and would influence the postmaster cost responsiveness in that way.