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

PERIODIC REPORTING (PROPOSAL SEVEN)	Docket No. RM2021-1

RESPONSES OF THE UNITED STATES POSTAL SERVICE
TO QUESTIONS 1-2 OF CHAIRMAN'S INFORMATION REQUEST NO. 7
(June 14, 2021)

The United States Postal Service hereby provides its responses to the above listed questions of Chairman's Information Request No. 7, issued June 8, 2021. The questions are stated verbatim and followed by the response.

Respectfully submitted,

UNITED STATES POSTAL SERVICE

By its attorney:

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1. Please refer to Library Reference USPS-RM2021-1-1, November 9, 2020, folder "1.Analysis Data Set," SAS dataset file "tcss_fy19.sas7bdat" (Analysis Dataset). Please answer the following questions:

a. Please confirm that for each contract cost segment (defined by two variables of the Analysis Dataset, "route" and "costsegmentcode"), the number of reported annual miles (shown in the Analysis Dataset as the variable "annmiles") is calculated as the sum over all trips in the contract cost segment of each trip distance (shown as the variable "tripmiles") multiplied by the frequency of this trip (shown as the variable "opfreq"). For example, for contract 330EH cost segment B, the annual miles will be calculated using the data from Table 1 and formula below:

annmiles = 1230*25+1119*25+1122*25+1119*25 =114750

Table 1
Data for Contract 333EH, Cost Segment B

"route"	"tripmiles"	"trip"	"opfreq"	"costsegmentcode"	"annmiles"
330EH	1230	551	25	B	114750
330EH	1119	552	25	B	114750
330EH	1122	553	25	B	114750
330EH	1119	554	25	B	114750

Source: Analysis Dataset. Column names are taken verbatim from the source.

b. If question 1.a. is confirmed, please explain why there are instances of the contract cost segments in the Analysis Dataset for which the value of "annmiles" variable (reported annual miles) is not equal to the annual miles calculated as described in question 1.a. (calculated annual miles). These instances include, but are not limited to, those provided in Table 2 below. If the observed discrepancy between the reported and calculated "annual miles" is due to error in the Postal Service's calculations, please provide corrected data files and discuss whether the error would also affect the variability estimates.

Table 2
Examples of the Contract Cost Segments for which the Value of Reported Annual Miles Differs from the Calculated Value

"route"	"costsegmentcode"	"annmiles"	annual miles	"con_desc"
802Y7	B	280465	77549	XMAS INTER AREA
381Z0	B	118434	44331	XMAS INTER AREA
054L5	A	730435	835474	DYNAMIC ROUTING
606L7	A	308761	7252	REGULAR INTER P&DC

Source: Analysis Dataset. Column names in quotation marks are taken verbatim from the source. The values in the column labeled "annual miles" are calculated as explained in question 1.a. The reported and calculated values for annual miles are rounded to the nearest integer.

c. If question 1.a. is confirmed, please also confirm that the actual annual miles for contract 601L4 cost segment B are not equal to zero and discuss whether this observation was correctly excluded from the variability calculations because the value of the "annmiles" variable was equal to zero. The data for contract 601L4 cost segment B is provided in Table 3.

Table 3
Data for Contract 601L4, Cost Segment B

"route"	"costsegmentcode"	"tripmiles"	"trip"	"opfreq"	"annmiles"	"con_desc"
601L4	B	8.4	501	26	0	XMAS INTRA P&DC
601L4	B	5.8	502	26	0	XMAS INTRA P&DC

Source: Analysis Dataset. Column names are taken verbatim from the source.

d. If question 1.a. is not confirmed or partially confirmed, please explain how the Postal Service calculates the annual miles for each contract cost segment, which are reported in the variable "annmiles" (*e.g.,* provide the applicable formula, identify the circumstances when different formulas are applied).

RESPONSE:

a. Not Confirmed. The variables annmiles, tripmiles, and opfreq are taken directly from the TCSS operational database, and the variable annual miles is not calculated, as described in the question, in producing the analysis data set. Moreover, the recorded annual miles variable is not used in the estimation of the variabilities.

b. TCSS is an operational database and, as such, occasional small discrepancies can arise. In nearly all of the thousands of contract cost segments used in analysis data set, annual miles for a contract cost segment does equal the sum of the products of tripmiles and opfreq for the trips on that segment. For example, in the Intra SCF Christmas data,

there are 924 contract cost segments. Only 5 of those cost segments have any material difference between the recorded annual miles and annual miles calculated as the products of trip miles and frequency. (A material difference occurs when the percentage difference between the two annual miles values is great than one-half of one percent. Smaller differences are immaterial and can be due to rounding errors.)

There are no computational errors in constructing the analysis database and the variable annual miles is not used in the variability estimation, so a corrected database is not required. In the variability analysis, cubic foot-mile is separately calculated for each trip on each contract cost segment. That is, for each trip on a cost segment, the value for cubic foot-miles is calculated as the product of the route length, the operating frequency, and the vehicle cube.

The small number of discrepancies between recorded annual miles and calculated annual miles has no impact on the variability analysis, as the recorded values are not used in that analysis.

c. There are 15,391 contract cost segments in the database extracted from TCSS. Four of them have annual miles equal to zero. This is a proportion of 0.000260 of the total contract cost segments. The first identified contract cost segment is Route 500N3, Segment B and is for the detention of contractor trailers. The second contract cost segment is Route 969JD, Segment B, and is from Guam. While there is no obvious explanation why the remaining two contract cost segments, Route 601L4, Segment B and Route 841L0, Segment C, having zero annual miles, it is a sufficient rarity to justify

exclusion. Including contract cost segment 601L4, Segment B in the analysis has no impact on the Christmas Intra SCF variability.

d. The variable annmiles is recorded in, and taken directly from, the operational TCSS database and is not calculated as part of the production of the analysis dataset. Thus, there are no computational formulas to provide.

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2. Please refer to the Analysis Dataset. For very many Dynamic Routing contracts, as well as some regular Intra P&DC contracts, the length of each trip in miles (which is the value of "tripmiles" variable) is equal to 99,999.9 miles, and this is the maximum length of a trip in the Analysis Dataset. Please also refer to the Bradley Report that states "over half of DRO contract cost segments list a value of 99,999.99 for the route length variable, indicating that it is a meaningless variable for that type of contract. The appropriate specification for the econometric model for DRO contracts is therefore simpler than the established model for regular transportation contracts as it includes only cubic foot-miles as a cost driver." Bradley Report at 34.

a. Please discuss whether a trip length value of 99,999.9 is a result of some formatting, coding, or other issues and does not represent the actual trip length.

b. Please discuss the effect that the trip length of 99,999.9 miles has on the variability estimates considering that "cubic foot-miles [are] calculated as the product of vehicle cube, trip length, and frequency."[1]

RESPONSE:

a. The trip length variable is a placeholder value that is used to ensure that the annual miles variable on the contract cost segment is equal to the sum of the products of trip length (Tripmiles) and operating frequency (Opfreq) for the trips on the segment. This is illustrated below for route 021L8.

[1] Response of the United States Postal Service to Question 1 of Chairman's Information Request No. 3, February 23, 2021, question 1.f.

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Route	Cost Segment	Trip Number	Tripmiles	Opfreq	Tripmiles X Opfreg	Calculated Annual Miles	Annual Miles
021L8	A	1	100000	4	399999.6		
021L8	A	2	21052	1	21052.4	421052	421052
021L8	B	3	100000	4	399999.6		
021L8	B	4	0.4	1	0.4	400000	400000
021L8	C	5	100000	3	299999.7		
021L8	C	6	15789	1	15789.3	315789	315789
021L8	D	7	38486	1	38486	38486	38486
021L8	E	8	36562	1	36562	36562	36562
021L8	F	9	28864	1	28864	28864	28864

Because many DRO trips have no specified length, the value of 99,999.9 just ensures consistency between the two approaches for measuring cost segment annual miles. While a small number of discrepancies can arise in any operational database, the use of the 99,999.9 value is effective in ensuring consistency. The correlation between the annual miles recorded in TCSS and the calculated annual miles using the 99,999.9 values for trip length is 99.9. In fact, there is only one contract cost segment for which the difference between the two measures is greater than one mile.

b. The use of the 99,999.9 placeholder has no effect on the variability estimates because that analysis is done at the contract cost segment level, not the trip level. As long as the sum of the trip level annual miles on a cost segments equals the annual miles for the whole segment, the values for the individual trip annual miles are immaterial.