ORIGINAL

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

SPECIAL SERVICES REFORM, 1996

Docket No. MC96-3

RESPONSE OF UNITED STATES POSTAL SERVICE
TO INTERROGATORIES OF
THE OFFICE OF THE CONSUMER ADVOCATE
(OCA/USPS-76, 77(a)-(c), 78-83, 84(a)-(c), AND 85-87)

The United States Postal Service hereby provides responses to the following interrogatories of the Office of the Consumer Advocate: OCA/USPS-76, 77(a)-(c), 78-83, 84(a)-(c), and 85-87, filed on September 18, 1996. Objections to interrogatories OCA/USPS-77(d) and (e), and 84(d) were filed on September 30, 1996.

Each interrogatory is stated verbatim and is followed by the response.

Respectfully submitted,

UNITED STATES POSTAL SERVICE

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OCA/USPS-76. Please refer to the response to OCA/USPS-58. On page 2 of the attachment to OCA/USPS-58, column (e) has two entries per line for CAG D. Please describe the circumstances for using each of the two figures.

OCA/USPS-76 Response.

The employees in two CAG D offices were sampled at rates different than the employees in all other CAG D offices. In one of those CAG D offices, they were sampled at the rate of employees in CAG C offices (.06 for all crafts except supervisors). In the other one, they were sampled at the rates for employees in CAG E offices. The tallies from these two offices were reweighted to adjust for the difference in sampling rates (see response to OCA/USPS-21.c), and then combined with other tallies from CAG D offices. The costs for these two offices were included in the CAG D cost pool.

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OCA/USPS-77. Please refer to the table of sampling rates attached to the response to OCA/USPS-58.

a. When were the sampling rates provided in this attachment known?

b. Are these sampling rates relatively stable from one year to the next?

c. Were these sampling rates the same as those used in FY 1993?

d. Were the FY 1996 IOCS employee sampling rates the same as those in this table? If not, please provide a copy of this table for FY 1996.

e. Will the FY 1997 IOCS employee sampling rates be the same as those in this table? If not, please provide a copy of this table for FY 1997.

OCA/USPS-77 Response.

a. They were known before the beginning of FY95.

b. Yes, because the majority of the tallies are relatively stable from one year to the next.

c. Yes, except for those offices which were reclassified.

d. and e. Objection filed September 30, 1996.

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OCA/USPS-78. Please refer to the response to OCA/USPS-58. SSR-90 describes the first stage office sample as stratified by size into the ten CAGs A-H and J. It also indicates that employees are stratified into 5 crafts. The response to OCA/USPS-58 shows seven "craft cost pools" further subdivided into categories of offices having varying levels of international activity and "CAG-Realigned Offices" as the level of stratification for employee sample selection. The response to OCA/USPS-58 also shows that CAG K offices are sampled, while SSR-90 only samples from CAGs A-J. Other minor inconsistencies between the interrogatory responses and SSR-90 also occur.

a. Please confirm that the sampling documentation presented in various interrogatory responses, such as OCA/USPS-58, makes any conflicting or inconsistant documentation presented in SSR-90 obsolete.

b. Please provide replacement SSR-90 pages incorporating documentation of all sampling stata, sampling rates, and definitions consistent with interrogatory responses.

OCA/USPS-78 Response.

a. Neither confirmed nor denied. The documentation presented in SSR-90 relates to the statistical sample design of the IOCS. OCA/USPS-58 focuses on the cost pools used for dollar weighting.

b. SSR-90 has been amended. Revised pages are being filed today.

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OCA/USPS-79. Please refer to the response to OCA/USPS-58b and to the row for "IOCS CAG B" in the attachment. The cost pool for "Clerks, Full-Time Regular" has been subdivided into four sampling strata, with sampling rates of .50, .12, .09, and .02.

a. Please define each of these strata or subcategories of the "Clerks, Full-Time Regular" craft cost pool. For example, what specific characteristic(s) and/or level(s) of that characteristic determine that a specific finance number/pay location should be sampled at each of the four sample rates?

b. Are the definitions of the substrata for CAG B for "Clerks, Full-Time Regular" the same as for the other CAG cost pools? If not, please provide the specific characteristic(s) and/or level(s) of that characteristic used to determine the column (d) sampling rate used for a specific finance number.

OCA/USPS-79 Response.

a. For a specific office, the higher sample rate for employees in pay locations with concentrated international activities was determined in combination with the lower 2 percent rate for the other pay locations in such a way as to maintain an acceptable overall level of data collection burden within a site.

b. Yes.

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OCA/USPS-80. Please refer to the response to OCA/USPS-58b. This states, "Each finance number is stratified into two groups: the first includes pay locations shown historically by IOCS to have concentrated international activities, and the second includes the remaining pay locations." Please provide a table showing how many pay locations are subject to each of the sampling rates for each of the 19 finance numbers.

Number of Pay Locations by Sampling Rate

Finance Number	sampling rate = .50	sampling rate = .12	sampling rate = .09	sampling rate = .02
1				
2				
3				
...				
19				

OCA/USPS-80 Response.

See Attachment. Note that there are 21 finance numbers rather than 19. See Revised Response of United States Postal Service to Interrogatory of the Office of the Consumer Advocate (OCA/USPS-58), filed today.

Attachment to OCA/USPS-80 Response.

Finance Number	sampling rate = .50	sampling rate = .12	sampling rate = .09	sampling rate = .02
1.	2			122
2.	9			113
3.	4			30
4.	2			7
5.	5			109
6.	4			58
7.	3			158
8.	2			12
9.	4			48
10.		7		63
11.	1			15
12.	3			191
13.	2			20
14.	2			1
15.	1			6
16.		18		115
17.			36	51
18.	5			24
19.	5			30
20.		10		52
21.	6			32

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OCA/USPS-81. Please refer to the response to OCA/USPS-58b and to column (e) of the attachment to that response. The CAG D row of that table contains two entries per line in column (e).

a. Please explain why two entries are necessary for CAG D offices, yet only one entry is necessary for the other CAGs having "CAG-Realigned Offices."

b. Please describe how to determine which entry for column (e) is used for a particular office.

OCA/USPS-81 Response.

a. and b. Column (c) exhibits the sampling rates for offices in a given CAG. Column (e) lists all sampling rates that were different from those in column (c) for some offices that were reclassified in that given CAG.

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OCA/USPS-82. Please refer to page 5 of the attachment to the response to OCA/USPS-53a. The first line of this printout shows PQ 4 cost data for finance number "565480." However, on pages 2-4 of this attachment, the first lines have finance number "555555." Is "565480" one of the finance numbers that was recoded to "555555" for the other PQ printouts? Please explain.

OCA/USPS-82 Response.

Yes. The costs in the print out, however, correspond to the costs for "555555".

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OCA/USPS-83. Please refer to the FY 1995 c.v. estimates for IOCS (SSR-90, pages 18-20) and to the documentation of the variance estimation formulas for the FY 1993 IOCS estimates at Tr. 1/56-58 of Docket No. R94-1, June 1, 1994. The response to interrogatory OCA/USPS-31a stated that the MC96-3 variance estimation formulas are "basically the same as the R94-1 formulas" for IOCS cost estimates. References to application of the R94-1 formulas to the MC96-3 IOCS cost estimates assume that the minor changes to the R94-1 formulas stated in response to OCA/USPS-31a have been implemented.

a. Since "IOCS CAG B" does not constitute a certainty stratum for FY 1995 (refer to the response to OCA/USPS-59), is the variance formula for certainty strata (Tr. 1/56-57) correct for CAG B?

   i. Was the CAG B R94-1 variance formula used for FY 1995 variance estimation for "IOCS CAG B?"

   ii. If the CAG B R94-1 variance formula no longer applies for FY 1995, please provide the corrected formula and SSR-90 tables.

   iii. If the CAG B R94-1 variance formula no longer applies for FY 1995 (but it was used anyway), please confirm that the effect of using the R94-1 variance formula for FY 1996 would be to understate variance. If you do not confirm, please explain.

b. Please refer to the formula for var(p_{ik}) for the noncertainty strata at Tr. 1/57.

   i. Please confirm that this formula represents the variance of a proportion estimate from a cluster sample design. If you do not confirm, please explain.

   ii. Please confirm that variance formulas for cluster sample designs (with subsampling within selected clusters) generally have two terms—one capturing variance between the clusters (offices) and one capturing variance within clusters (tallies within offices). For example,[1] for subsampling with units of equal size, the formula would be

[1] See Cochran, W. (1977), Sampling Techniques, 3rd Ed., page 279.

$v(\bar{p}) = \frac{1-f_1}{n(n-1)}\sum_i^n (p_i - \bar{p})^2 + \frac{f_1(1-f_2)}{n^2(m-1)}\sum_i^n p_i q_i$. If you do not confirm, please explain.

iii. Please confirm that IOCS sampling for the non-certainty strata is a cluster sample (office selection) with subsampling within office (employee selection). If you do not confirm, please provide the correct terminology.

iv. Please confirm that the formula for $v(p_{ik.})$ at Tr. 1/57 only captures the variance between clusters with the $1/[m_k(m_k-1)]\ \Sigma_j\ n_{kj}^2/[n_k/m_k]^2 * (p_{ijk}-p_{ik.})^2$ term. If you do not confirm, please explain how sampling error introduced by subsampling within selected offices is accounted for. If you confirm, please confirm that the effect of omitting the within-cluster variance term is to understate variance. If you do not confirm, please explain fully.

v. Please provide a textbook reference for the formula used for $var(p_{ik.})$ at Tr. 1/57.

OCA/USPS-83 Response.

a.

i. No.

ii. The response to OCA/USPS-31.a indicated that an additional stratum was established for variance computations, and the formula for the noncertainty strata was used there. That additional stratum was in CAG B. SSR-90 tables were computed on that basis.

iii. Not applicable. See (a)(i) and (ii), above.

b.

i. Not confirmed. This formula represents the variance of a ratio estimate from a cluster sample design. The denominator is a random variable.

ii. Not necessarily. Ultimate cluster variance estimators could have one term.

iii. See (b)(ii), above.

iv. See Cochran, W. (1977), Sampling Techniques, 3rd Ed., page 66.

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OCA/USPS-84. Please refer to the response to OCA/USPS-55.

a. This response states, "The FY 1995 IOCS sample for CAG C and lower is a panel of offices which consists of the same offices that were in the FY 1993 sample . . . ." Please clarify whether CAG advancements or relegations occuring for FY 1994 were taken into consideration.

b. This response states, "These offices were initially selected with equal probabilities of selection." Please confirm that this means that the initial probabilities of selection for offices in a particular CAG for FY 1995 are not equal. If you do not confirm, please explain.

c. This response states, "[T]he offices in the sample are regarded as a representative sample of offices in their respective CAGs." Is this sample of offices a probability sample of the offices in their respective CAGs? Please explain.

d. Are there any offices that were never given a chance for selection (for any year prior to FY 1995) to the IOCS office sample? If so, please provide the number of such offices by CAG.

OCA/USPS-84 Response.

a. Yes.

b. Possibly. However, the method of estimation assumes that "the sample of offices in each CAG constitutes an equal probability sample" (see SSR-90, Section D. Assumptions).

c. Possibly not. However, the method of estimation assumes these offices to be a probability sample of the offices in their respective CAGs.

d. Objection filed September 30, 1996.

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OCA/USPS-85. Please refer to the response to OCA/USPS-65.

a. The response to OCA/USPS-65c states that commercially sensitive information has been deleted. Please provide a list of the deleted variable names.

b. The attachment to this interrogatory lists the first few records of SSR-84 file ALAHQN.HIGHWAY.PQ495.SURVEY.TEXT. The first record begins:
BMC05275KO . . . 808 FF 0 0 0 025
The program TRACS.EXPAND.HWY.PQ495.CNTL(SURVEY) attempts to read a 3-digit numeric variable "ID1" at position 1, a 5 character variable "FCODE1" at position 4, a 3 character variable "FTYPE1" at position 9, and a 7 character variable "TESTID" at position 12. See SSR-82, page 16.

i. Please confirm that the program TRACS.EXPAND.HWY.PQ495.CNTL(SURVEY) would assign the value of "BMC" to FTYPE1 and ". . ." to TESTID. If you do not confirm, please explain how the SAS program would read the first record of the file as provided in SSR-84.

ii. Please confirm that these values are correct. If you do not confirm, please correct the values.

iii. Please confirm that the program TRACS.EXPAND.HWY.PQ495.CNTL(SURVEY) will not execute properly on the date file ALAHQN.HIGHWAY.PQ495.SURVEY.TEXT included with SSR-84.

Response to OCA/USPS-85.

a. The commercially sensitive variables FCODE1, ROUTENO, P1FCODE2, P2FCODE2, and FCODE3 have been masked in the file ALAHQN.HIGHWAY.PQ495.SURVEY.TEXT.

b.

i. Not confirmed. It appears that in printing the first record of the file ALAHQN.HIGHWAY.PQ495.SURVEY.TEXT for examination, the eight

leftmost characters of the record, which are all blank spaces, have been inadvertently deleted. (Such a deletion can occur during "cut" and "paste" operations involving blank spaces preceding text.) Consequently, the remaining data of the first record, which shifted eight columns leftward, has been misinterpreted. Of the eight blank spaces which must be considered in order to correctly interpret the record, the first three are the actual value of the variable ID1 at column 1. Variable ID1 is not used and always contains three blank spaces. (TRACS.EXPAND.HWY.PQ495.CNTL(SURVEY) drops variable ID1 shortly, reading it in, with no computations or processing done with the variable in the interim.) The next five blank spaces, at columns 4-8, are where the value of variable FCODE1 would reside had it not been masked (replaced with blank spaces) due to its commercial sensitivity. In the first record, the value "BMC", which was believed to be the value of variable ID1 at column 1, actually occurs at column 9, and is the value of the variable FTYPE1. To correctly interpret the record, the column positions of the data must be correctly related to the variable names.

ii. Not confirmed. The correct interpretation of the first record of ALAHQN.HIGHWAY.SURVEY.PQ495.TEXT assigns the following values to the following variables:

ID1:	" "	(not used)
FCODE1:	" "	(masked due to commercial sensitivity)
FTYPE1:	"BMC"	
TESTID:	"05275KO"	
MONTH1:	" ."	(SAS representation for missing value)
DAY1:	" ."	
YEAR1:	" ."	
ROUTENO:	" "	(masked due to commercial sensitivity)
TRIPNO:	"808 "	
RESCHED:	"F"	
REPLACE:	"F"	
RCONTYPE	" "	
RCONNO:	" "	
RTRIPNO:	" "	
RMONTH:	" 0"	
RDAY:	" 0"	
RYEAR:	" 0"	
HOURS:	" 0"	
MIN:	"25"	

iii. Not confirmed. The program TRACS.EXPAND.HWY.PQ495.CNTL(SURVEY) will execute with no errors using the data file ALAHQN.HIGHWAY.PQ495.SURVEY.TEXT. A program log showing that TRACS.EXPAND.HWY.PQ495.CNTL(SURVEY) will run successfully using the file TRACSSMN.SAFE.HIGHWAY.PQ495.SURVEY.TEXT, the file from which ALAHQN.HIGHWAY.PQ495.SURVEY.TEXT was directly copied to tape, is being filed today as USPS LR-SSR-153. The values of any commercially sensitive variables will carry through the program and result in output containing blank spaces as the value of said variables.

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OCA/USPS-86. Please refer to the response to OCA/USPS-66. The response to OCA/USPS-66b states that commercially sensitive information has been deleted. Please provide a list of the deleted variable names.

Response to OCA/USPS-86:

The variables ROUTE, OCODE, and DCODE have been masked in both file OTHERHWY.EXPAND45.TEXT and file INTRASCF.EXPAND45.TEXT. The variable DCODE has been masked in file DIVMTO.LOOKUP.FLAT.TEXT. The variables BEGIN and END have been masked in file TRACSSMN.HIGHWAY.MILES.PQ495.TEXT.

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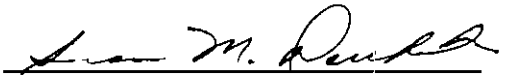
OCA/USPS-87. Please refer to the response to OCA/USPS-67. The response to OCA/USPS-67b states that commercially sensitive information has been deleted. Please provide a list of the deleted variable names.

Response to OCA/USPS-87:

The variables FCODE1, VANNO, RCODE, P1FCODE2, and P2FCODE2 have been masked in file TRACSSMN.RAIL.PQ495.SURVEY.TEXT. The variables OCODE and DCODE have been masked in file TRACSSMN.RAIL495.EXPAND.TEXT. The variables DIS_NAME, DIS_CODE, DNAME, and DCODE have been masked in file TRACSSMN.RAILFLAT.QTR495.SAMPLE.TEXT. The variable OCODE has been masked in file LATLON.LOOKUP.TEXT.

CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing document upon all participants of record in this proceeding in accordance with section 12 of the Rules of Practice.



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