POSTAL RATE AND FEE CHANGES, 1997

Docket No. R97-1

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS BRADLEY (USPS-T-14) TO INTERROGATORIES OF THE OFFICE OF THE CONSUMER ADVOCATE (OCA/USPS-T14-9-15(a)-(c), 16-28(a) AND 29-38)

The United States Postal Service hereby provides responses of witness

Bradley (USPS-T-14) to the following interrogatories of the Office of the Consumer

Advocate: OCA/USPS-T14-9-15(a)-(c), 16-28(a) and 29-38, filed on September 5,

1997. Interrogatory OCA/USPS-T14-15(d) has been redirected to the Postal Service

and and 28(b) has been redirected to witness Degen.

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

Respectfully submitted,

UNITED STATES POSTAL SERVICE

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Response of United States Postal Service Witness Bradley
to
Interrogatories of OCA

OCA/USPS-T14-9. Please refer to your direct testimony on page 5, line 12. Please define "accrued cost" as you use it in your analysis

OCA/USPS-T14-9 Response:

I am using the term as it is used in the "Summary Description of USPS Development of Costs by Segments and Components." This document has been filed as Library Reference H-1. In particular please see page vi of that document for a description of the role of accrued cost.

Response of United States Postal Service Witness Bradley
to
Interrogatories of OCA

OCA/USPS-T14-10. Please refer to page 5. Is an accurate description of what is termed volume variability or cost elasticity the percentage of change in total cost given a unit increase in the measured output? If not, please explain.

OCA/USPS-T14-10 Response:

No, it is not accurate. Volume variability or cost elasticity is the percentage response in

total cost to a <u>percentage</u> change in the relevant output.

Response of United States Postal Service Witness Bradley
to
Interrogatories of OCA

OCA/USPS-T14-11. Is your general approach suitable and extendible to other steps in the mail handling process, e.g., distribution, acceptance? Please explain. Include in your explanation all alterations in your analysis that would have to be made if your analysis was used to examine other areas of the mail handling process.

OCA/USPS-T14-11 Response:

My general approach is the application of econometric equations to measure the elasticity of cost with respect to the relevant cost driver. I cannot tell from the question what other areas you have in mind so it is impossible to be specific in my answer.[1] Nevertheless, I would think that my general approach would be applicable in cases in which the underlying cost relationship was appropriately modeled by an econometric equation and in which there are sufficient data available.

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[1]   For example, my analysis is already applied to distribution activities, one of the "other" activities listed in the question.

Response of United States Postal Service Witness Bradley
to
Interrogatories of OCA

OCA/USPS-T14-12. Is the Postal Service considering or planning to use your volume variability analysis in other areas of the mail handling process? If so, which areas? And, if so, with what modifications to the current methodology? If you are not personally aware of any such considerations or plans, please refer this interrogatory to the Postal Service for an institutional response.

OCA/USPS-T14-12 Response.

To the best of my knowledge, at this time there are no plans to extend the volume variability analysis into other areas. In addition, in response to my inquiries, the Postal Service informs me that it has no plans to extend the analysis to other areas.

Response of United States Postal Service Witness Bradley
to
Interrogatories of OCA

OCA/USPS-T14-13. Please refer to page 15 where you state that because of the fundamental restructuring of Postal Service operations in FY1993, you allowed for a segmented trend.

a.   Please describe the FY1993 changes you consider relevant.

b.   Did you do a statistical test to determine if in fact there was a significant change in the time trend before and after this restructuring period? Please comment.

OCA/USPS-T14-13 Response:

a.   It is my understanding that Postmaster General Marvin Runyon instituted a

reorganization of how mail processing operations were managed. For example, a

given physical location was split between its processing and distribution

responsibilities and its customer service responsibilities. It is also my understanding

that Postmaster General Runyon instituted certain policies to improve service

quality. Let me make clear that I did not investigate the individual policies but rather

formed the hypothesis that such a set of management changes could affect the

autonomous time trend. I then estimated the model in such a way so as to allow for

this possibility.

b.   No. The changes in the estimated coefficients were sufficiently revealing. For

example, in many of the econometric equations, the estimated coefficient for the

time trend changed sign across the two periods while being statistically significant

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in each period. If one wished to check this judgement, one could perform a test of

equality of the regression coefficients.

Response of United States Postal Service Witness Bradley
to
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OCA/USPS-T14-14. Please refer to page 16 where you discuss your use of the "manual ratio."
a. Rather than use a manual ratio, couldn't an alternative specification be used that explicitly chooses manual activity productivity as an independent variable? Please discuss.

b. How is the specification chosen superior, or easier to use than the manual ratio? Please comment.

OCA/USPS-T14-14. Response:

a. No, not really. Productivity is measured as the number of piece handlings per hour.

It is thus the ratio of the econometric equations primary independent variable to its

dependent variable. One should always be careful when specifing an equation that

includes the ratio of the dependent to independent variable as an explanatory

variable. In the case of the translog specification, your alternative specification is

particularly bad because it induces perfect multicollinearity and renders the equation

unestimable. Consider the translog without the productivity included:

$$\ln Hours = \alpha + \beta_1 \ln TPH + \beta_2 (\ln TPH)^2$$

Now let's include the productivity measure that you suggest. Productivity is

measured as the ratio of TPH to hours. It would thus be entered in the translog

specification as the ratio of TPH to hours:

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$$\ln Hours = \alpha + \gamma_1 \ln TPH + \gamma_2 \ln\left(\frac{TPH}{Hours}\right) + \gamma_3 (\ln TPH)^2 + \gamma_4 \ln\left(\frac{TPH}{Hours}\right)^2$$

$$+ \gamma_5 \ln TPH \ln\left(\frac{TPH}{Hours}\right)$$

But, of course the first three terms on the right hand side can be written as:

$$\ln Hours = \alpha + \gamma_1 \ln TPH + \gamma_2 \ln TPH - \gamma_2 \ln Hours + \dots$$

The source of the multicollinearity is immediately obvious.

b.   The specification I chose employs the manual ratio. Please see page 16 of my

testimony. The manual ratio specification is superior because of the reasons

outlined in part a. above.

Response of United States Postal Service Witness Bradley
to
Interrogatories of OCA

OCA/USPS-T14-15. Your analysis appears to make extensive use of the Management Operating Data System ("MODS"). Thus, you state on page 12 that you "use an activity's recorded MODS or PIRS hours as the dependent variable in its cost equation." See also page 25 et seq. You note on page 26 that in MODS, "[a] mail volume count is provided in operations that distribute or handle mail." Please now refer to Library Reference H-220. The said library reference is entitled "Mail Volume Measurement and Reporting Systems," and was issued in December of 1996 by the Inspector General of the Postal Service. Its summary of findings states the following about MODS at page 2:

> Our audit of MODS scale transactions at 20 P&DCs revealed large variances between the mail pieces projected from MODS and actual pieces run for FHP volume. MODS low level of accuracy as an indicator of mail volume results from inadequate conversion factors, improper data input by employees, and scales out of tolerance. Management's lack of confidence in daily MODS data diminished the usefulness of the MODS system as a management tool. We recommended the elimination of the MODS scale weight system, for volume data collection. Postal management has efforts underway to develop a system using actual piece counts obtained from processing machines in place of weights and conversions for mail volume data collection.

a. Assume that the findings of the Inspector General are correct. How does the methodology and analysis in your direct testimony seek to ensure that the types of errors described in the Inspector General's report do not cause errors in your results?

b. Were you aware of the Inspector General's report when you prepared your analysis? Please discuss.

c. The Inspector General's Report also found problems in other areas such as the ODIS, RPW, and DUVRS systems. Explain the extent to which those findings affect your methodology and analysis, including, but not limited to, your analysis of possible measurement errors infecting the data (see, e.g., page 83 of your direct testimony)

d. Please describe what steps Postal Service management has taken to rectify the problems perceived by the Inspector General. If you do not have personal knowledge of what steps have been taken, please redirect this question to the Postal Service for an institutional response.

Response of United States Postal Service Witness Bradley
to
Interrogatories of OCA

OCA/USPS-T14-15 Response:

I assume in that your question actually refers to a report with the same title prepared by the United States Postal Inspection Service. I am not aware of any such document produced by the Inspector General.

a.   In four ways. (1) Through the use of TPH rather than FHP; (2) Through the use of machine counts for both automated and mechanized operations; (3) Through the use of data scrubs; and (4) Through the application of an errors-in variables estimator for those manual operations that depend upon the weighing of mail to determine piece handlings.

b.   I became aware of the Inspection Service report before I filed my testimony but not before I performed my analysis. However, I was aware that MODS is an operational data system, not a special statistical study, and for the reasons discussed in my testimony, I instituted the procedures discussed in part a. above.

c.   I do not use the ODIS or DUVRS systems. Those findings would not affect my methodology or analysis. I make use of the RPW system only in a very limited way, to estimate the variability for the registry activity. Given my small use of the RPW data, the reports findings on that system do note affect my methodology or analysis.

d.   This part of the interrogatory has been redirected.

Response of United States Postal Service Witness Bradley
to
Interrogatories of OCA

OCA/USPS-T14-16. Please clarify how you define and quantify the term "start-up" period at line 24 on page 30 of your direct testimony.

a. Is the "start-up" period the same for all types of activities or does it differ as to each activity? Please discuss.

b. Please provide the duration of the start-up periods you used for each activity where such a start-up adjustment was necessary. Please provide an empirical basis for your determinations.

OCA/USPS-T14-16 Response:

For a discussion of how the start-up periods were defined, please see my response to

NAA/USPS-T14-18, particularly part c. and my response to UPS/USPS-T14-15.

a. It differs. As discussed in Library Reference H-148:

> **Threshold Scrub:** Eliminate all observations for periods in which the activity was "ramping up." For letter and flat activities the threshold is 100,000 piece handlings per accounting period. For parcel activities the threshold is 15,000 piece handlings per activity.

b. It is not that the start up periods were specified in terms of a time duration. Rather the duration was determined by the amount of time it took a site to get above a threshold level of activity. For a listing of the number of observations deleted by the threshold scrub, by activity, please see Table H148-1 on page H148-7 in Library Reference H-148.

Response of United States Postal Service Witness Bradley
to
Interrogatories of OCA

OCA/USPS-T14-17. Refer to page 30, line 19. How did you verify reporting omissions?

OCA/USPS-T14-17 Response:

Reporting omissions were verified by identifying those observation for which data were

not reported.

Response of United States Postal Service Witness Bradley
to
Interrogatories of OCA

OCA/USPS-T14-18. You state on page 32 that the "final scrub" eliminates observations that imply extreme values, either high or low, for productivity. This is done because data "may be misreported."
a.   What verification was done to determine if the outliers were actually misreported data and not actual observations?
b.   If no verification was done, why not? Please provide references to the econometrics literature to support your position.

OCA/USPS-T14-18 Response:

a.   Discussions were held with Postal Service experts knowledgeable about mail

processing operations about the values of the outliers and these discussions led to

the conclusion that misreporting of data was occurring. For example, in several

cases the productivity values exceeded machine throughputs or what is thought to

be humanly possible. In those cases, the outliers are unquestionably the results of

misreporting. In other cases, productivity values were sufficienty low as to present

strong evidence of misreporting.

b.   Not applicable

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Interrogatories of OCA

OCA/USPS-T14-19. Please refer to pages 31-33. Was an attempt made to complete the analysis without the continuity, outlier, and allied scrubs, in order to determine the impact of deleting such data? If so, what was the impact and what conclusions can be drawn from it? If not, why not? Please provide a response as to each type of scrub used.

OCA/USPS-T14-19 Response:

Once I became aware of potential reporting issues associated with the MODS data, I decided that we should scrub the data. Following that decision, I worked only with the scrubbed data. Because of the size and complexity of the analysis, I did not have the time to rerun all of the equations "with" and "without" the individual scrubs. I have presented the unscrubbed data in Library Reference H-148 along with detailed documentation of the scrubs so that this course is open to any who wish to pursue it.

Response of United States Postal Service Witness Bradley
to
Interrogatories of OCA

OCA/USPS-T14-20. Please refer to equation number three on page 38. The specification of functional form includes ten terms that are apparently designed to measure cross-effects of some sort. Explain the cross-effects that are expected to be captured in these terms and justify their inclusion.

OCA/USPS-T14-20 Response:

The translog functional form is a second-order approximation to an unknown functional

form. The "cross-effects" are part of the second-order approximation.

Response of United States Postal Service Witness Bradley
to
Interrogatories of OCA

OCA/USPS-T14-21. On page 51 you state: "The registry equation is thus estimated with a time series regression."
a.   Please specify the regression equation used.
b.   Was a correction for serial correlation used here?

OCA/USPS-T14-21 Response:

a.   Please see page 69 of my testimony where it states:

> The other activity for which an alternative cost driver was available was the registry activity. Here, the total registry hours for MODS offices were regressed against national RPW volumes for registry mail in a mean-centered, translog equation with a time trend and a dummy variable for the fourth quarter. (The fourth quarter contains four accounting periods, but the other quarters contain only three.) The econometric results are presented in Table 12.

b.   No. I did not correct for serial correlation because the data are at the quarterly rather than accounting period frequency.

Response of United States Postal Service Witness Bradley
to
Interrogatories of OCA

OCA/USPS-T14-22. Please refer to your discussion of remote encoding data in the last paragraph on page 51 where you state that you choose to estimate the preliminary remote encoding equation as a simple constant elasticity pooled model.

a.   Is it possible to calculate the Hausman Chi squared statistic for remote encoding data or are not enough observations available?

b.   Please comment on the potential bias or worse fit caused by relying on a pooled model for this proceeding (e.g., the assumption of homogeneity across sites). What impact is this likely to have on the hours estimate or volume variability?

OCA/USPS-T14-22 Response:

a.   There are sufficient data for calculating that statistic. To do so, one would first have

to estimate a fixed effects model.

b.   Please see page 85 of my testimony where I present econometric results for both

the pooled model and the fixed-effects model. The variability from the pooled model

is 1.005 and the variability from the fixed-effects model is 0.9859. This would

indicate that relying upon the pooled model led to a slightly higher variability.

Response of United States Postal Service Witness Bradley
to
Interrogatories of OCA

OCA/USPS-T14-23. On page 56 you state: "For example, a large volume permits dedication of the same workers to an activity on a regular basis. This regularity increases their familiarity with the activity and, as a result, their efficiency." Please comment on the following series of propositions: For many jobs under factory or other automation conditions, the job can be learned very quickly, perhaps in a few days or so. Included within this definition of "learning" would be the worker's ability to adopt efficient shortcuts, as well as to improve the manual dexterity necessary for the task. Enthusiasm for the newness of the job, and motivation to make a good first impression may further increase productivity. Once sufficient time has passed, however, boredom may set in. Further, as the worker becomes more secure with the passage of time he is less anxious about making a good impression. Consequently, productivity over the long run declines.

OCA/USPS-T14-23 Response:

This statement appears to be an attempt at explaining declining average productivity

through time. I would also note that my statement (on page 56) relates to an effects of

volume on productivity whereas the interrogatory relates to an effect of time on productivity.

Response of United States Postal Service Witness Bradley
to
Interrogatories of OCA

OCA-T14-24. On page 59, line 11-13, you state: "Recall that the variability measures the *percentage* response in cost to a given percentage change in volume."

a.   Is it more correct to state that, as presented, variability measures the percentage response in hours to a given percentage change in volume? Please comment.

b.   Is it not correct to say that costs may increase faster than hours when a facility is working at capacity and additional workers or overtime pay will drive up costs per hours the facility is running? Please discuss.

OCA-T14-24 Response:

a.   No it is not more correct. For the purpose of calculating variability, wages and hours are equivalent. Wages are set by collective bargaining, not volume. Therefore, the percentage change in hours represents the percentage change in cost. Recall that volume variability holds constant exogenous factors like seasonal patterns and wage rates. Total labor costs, C, can be defined as:

$$C = \bar{\omega}\, h(v)$$

where ω represents the wage scale and $h(v)$ represents the hours function. In log space this is:

$$\ln C = \ln\bar{\omega} + \ln h(v)$$

Volume variability (cost elasticity) is defined as:

Response of United States Postal Service Witness Bradley
to
Interrogatories of OCA

$$\frac{\partial \ln C}{\partial \ln v} = \frac{\partial \ln \overline{\omega}}{\partial \ln v} + \frac{\partial \ln h(v)}{\partial \ln v}$$

$$= \frac{\partial \ln h(v)}{\partial \ln v}$$

as the wage structure is not influenced by small changes in volume.

b.   No, It is not correct to say this when discussing volume variability. Volume variability measures the response of cost to a <u>sustained</u> increase or decrease in volume, holding other things constant. It does not measure the day-to-day responses in cost to volume changes that would reflect things like temporary capacity constraints or overtime pay. The calculation of volume variability should hold things like seasonal variations in volume and ratios of overtime hours constant.

Response of United States Postal Service Witness Bradley
to
Interrogatories of OCA

OCA-T14-25. What would be the impact of omitted variables (cost drivers) on volume variability, generally speaking?

OCA-T14-25 Response:

The effect of omitted variables on the estimated variability, in general, depends upon the relationship between the omitted variable and volume. For example, if the omitted variable is positively correlated with volume, then the estimated variability with omitted variables is biased upward. The converse is also true. Avoiding omitted variable bias is an important reason for employing a fixed effects estimator and for including explanatory variables other than volume. For a further discussion, please see my response to OCA-T14-26. The high R^2 values also suggest that I have not omitted important explanatory variables.

Response of United States Postal Service Witness Bradley
to
Interrogatories of OCA

OCA/USPS-T14-26. What steps were taken to ensure that all relevant cost drivers were included in you regression equations?

OCA/USPS-T14-26 Response:

I include in the econometric specification a non-volume cost driver (the manual ratio), a

sophisticated time trend, and seasonality terms. In addition, I am fortunate to work with

a panel data set, so I can use the econometric techniques that have been developed for

panel data sets to control for omitted variables. As I state on page 24 of my testimony:

> Perhaps the most important advantage of panel data, however, is its ability
> to mitigate or eliminate estimation bias:[1]
>
>> Besides the advantage that panel data allows us to construct
>> and test more complicated behavioral models than purely
>> cross-sectional or time-series data, the use of panel data also
>> provides a means of resolving or reducing the magnitude of a
>> key econometric problem that often arises in empirical studies,
>> namely, the often-heard assertion that the real reason one
>> finds (or does not find) certain effects is because of omitted
>> (mismeasured, not observed) variables that are correlated with
>> explanatory variables. By utilizing information on both the
>> intertemporal dynamics and the individuality of the entities
>> being investigated, one is better able to control in a more
>> natural way for the effects of missing or unobserved variables.

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[1]   See Cheng Hsiao, Analysis of Panel Data, Cambridge University Press, New York, 1986 at page 3.

Response of United States Postal Service Witness Bradley
to
Interrogatories of OCA

OCA/USPS-T14-27. You state on page 68 that you estimated variabilities for two MODS activities that do not have piece-handling measures, including the remote encoding activity.

a.   As to the remote encoding activity, did you consult with the September 1995 GAO report entitled "Performing Remote Barcoding In-House Costs More Than Contracting Out?" Note that the GAO Report contains productivity statistics for as far back as FY1994. If not, why not?

b.   What impact, if any, does the analysis contained in the GAO Report affect your analysis for remote encoding activities? Specifically comment on the Report's observations about the past and projected changing labor mix among contract labor, career Postal Service labor, and transitional Postal Service labor. For example, does your analysis take such shifts into account?

OCA/USPS-T14-27. Response:

a.   I did not consult the GAO Report that you mention because I was not aware of

its existence.

b.   I have not read the GAO report because, as stated above, I was not aware of its

existence. Given that the current estimated variability for the remote encoding

activity is 100 percent, the only impact, if any, that the analysis in the GAO report

could have would be to reduce the variability. As I have not read the report, I

cannot comment on any of its observations.

Response of United States Postal Service Witness Bradley
to
Interrogatories of OCA

OCA/USPS-T14-28. Please refer to Table 19 ("Proxy Variabilities for Mail Processing Activities Without Recorded Piece Handlings") and Table 20 ("Proxy Variabilities for Customer Service Activities)." Each table lists two different types of activities: an activity that *requires* a proxy variability, and an activity *providing* the proxy variability.

a.   As to both tables, please list for each activity that required a proxy variability all activities providing a proxy variability that were considered and dismissed, setting forth for each the reasons why they were dismissed. Please list separately those dismissed proxies that were considered most similar to the activity requiring a proxy but for which there were no estimated variabilities.

b.   For each activity providing the proxy variability please describe in what ways that activity is (1) identical to (2) substantially similar to, and (3) different from the activity requiring a proxy variability with which it is matched.

OCA/USPS-T14-28 Response:

a.   When the cost pools were formed it became apparent that certain cost pools

existed for which I was not able to econometrically estimate a variability. These

are the activities listed in Table 19 and Table 20. My first approach was to apply

the system variability to all of these cost pools. Discussions with operational

experts informed me that a better method of finding proxies was available by

drawing upon their knowledge of operations. I thus rejected the application of

the system variability in favor of operation-specific proxy variabilities. The proxy

variabilities that are in Tables 19 and 20 are the result of further discussion with

operational experts. To the best of my recollection, no other proxies were

considered.

Response of United States Postal Service Witness Bradley
to
Interrogatories of OCA

b.   This part of the interrogatory has been redirected.

Response of United States Postal Service Witness Bradley
to
Interrogatories of OCA

OCA/USPS-T14-29.   Please refer to page 90 where you discuss the lack of information about the activities taking place in non-MODS offices. Confirm that you apply the average or system variability from MODS offices to the overall mail processing costs for non-MODS offices. If not confirmed, please explain.

OCA/USPS-T14-29 Response:

Confirmed.

Response of United States Postal Service Witness Bradley
to
Interrogatories of OCA

OCA/USPS-T14-30. How would credible testimony establishing the following affect
your analysis, methodology and conclusions regarding volume variabilities?

a.   Testimony that equipment and mailflows are not identical at MODS and non-
      MODS facilities?

b.   Testimony that equipment and mailflows are not identical at facilities of different
      sizes and types?

OCA/USPS-T14-30 Response:

a.   It would not affect my analysis, methodology or conclusions as they do not

      depend upon the assumption that the equipment and mailflows are identical at

      MODs and non-MODs offices. For a further discussion of the formation of a

      variability for non-MODs offices please see my response to OCA/USPS-T14-1.

b.   It would not affect my analysis, methodology, or conclusions as they do not

      depend upon the assumption that the equipment and mailflows are identical at

      faciliites of different sizes and types.   Please recall that my analysis is performed

      at the activity level, not the facility level, and that sorting technology at the

      activity level is homogenous. Moreover, it is often advantageous for econometric

      analysis to have observations from both small and large activities.

Response of United States Postal Service Witness Bradley
to
Interrogatories of OCA

OCA/USPS-T14-31. Please provide the source of the volume or piece handlings for each of the cost pools in your MODS variability analysis. This source should specify the method or methods used to collect the piece handlings information. For example, were the volumes determined by the SWS (weighing mail and applying conversion factors to produce volumes), actual piece counts, counting trays (and applying a conversion factor to get volumes), or other methods? Please specify.

OCA/USPS-T14-31 Response:

The specific source of volume or piece handlings for each of the MODS operation

codes or cost pools is not available. The method of data collection is not preserved

with the data, only the amount of volume or piece handlings. However the methods of

data collection are common across activities and MODS operations codes and those

methods are described below.

I use total piece handlings (TPH) as the volume measure in my MODS variability

analysis. Data collection methods for TPH are as follows: TPH in manual letter and flat

operations are the sum of first handling pieces (FHP) and subsequent handling

pieces(SHP). FHP volumes for letter or flat operations may be recorded from machine

counts, mailers statements, weight, or by linear measurements in rare situations when

scales are not available (Please see M-32 at section 411). SHP is projected to

downstream manual letter and flat operations based on local mail flow densities, weight,

or actual machine counts. Subsequent handling pieces may be flowed from FHP or

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to
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TPH. (Please see M-32 at section 412.3) TPH in automated and mechanized letter and

flat operations are determined from mail processing equipment meter readings. (Please

see M-32 at section 412.4). TPH in manual parcel operations are recorded by container

count or individual piece count. Container counts are converted to pieces using

national conversion factors for the number of pieces per container. (Please see M-32 at

section 411).

The M-32 manual has been provided in Library Reference H-147.

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to
Interrogatories of OCA

OCA/USPS-T14-32. Please provide the source of the volume or piece handlings for each of the MODS codes included in the cost pools in your MODS variability analysis. This source should specify the method or methods used to collect the piece handlings information. For example, were the volumes determined by the SWS (weighing mail and applying conversion factors to produce volumes), actual piece counts, counting trays (and applying a conversion factor to get volumes), or other methods? Please specify.

OCA/USPS-T14-32 Response:

Please see my response to OCA/USPS-T14-31.

Response of United States Postal Service Witness Bradley
to
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OCA/USPS-T14-33. Please confirm that all piece handling or volume data used in your variability analysis (except for remote encoding activity and registry activity) were captured as part of the MODS system and included in the MODS data sets. If you do not confirm, please explain.

OCA/USPS-T14-33 Response:

Not confirmed. The data used in the econometric equations for the BMCs was taken

from the PIRS system. Please see page 20 of my testimony.

Response of United States Postal Service Witness Bradley
to
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OCA/USPS-T14-34. Please provide MODS volume or piece handling counts for FY 1996 by CAG for each of the MODS cost pools.

OCA/USPS-T14-34 Response:

The basic unit of observation in my data is a MODS site. A single MODS site, might have more than one finance number associated with it. For example, a single mail processing plant will often have a processing and distribution finance number and a customer service finance number. Many MODS sites, therefore, roll up into more than one CAG, through the different finance numbers. Because there is not a unique CAG for each of the MODS sites in my data, I am unable to provide the information that your request by CAG.

I am informed, however, the requested information was provided in response to OCA/USPS-T4-19.

Response of United States Postal Service Witness Bradley
to
Interrogatories of OCA

OCA/USPS-T14-35. Please provide MODS volume or piece handling counts for FY 1996 by CAG for each of the MODS codes used in your cost pools.

OCA/USPS-T14-35 Response:

Please see my response to OCA/USPS-T14-34, and witness Degen's response to

OCA/USPS-T4-19, redirected from witness Moden.

Response of United States Postal Service Witness Bradley
to
Interrogatories of OCA

OCA/USPS-T14-36. For each of the nine fiscal years of MODS data used in your
analysis please provide the MODS volume or piece handling counts by CAG for each of
the MODS cost pools.

OCA/USPS-T14-36 Response:

MODS is an operational data system, not a financial reporting data system.

Consequently, the basic unit of observation in my data is a MODS site. A single MODS

site, furthermore, might have more than one finance number associated with it. For

example, a single mail processing plant will often have a processing and distribution

finance number and a customer service finance number.   Many MODS sites, therefore,

roll up into more than one CAG, through the different finance numbers. Because the

relationship between finance numbers and MODS sites is not constant through time, it

is my understanding that there is no way for me to go back and restate the historical

MODS data by CAG.

Response of United States Postal Service Witness Bradley
to
Interrogatories of OCA

OCA/USPS-T14-37. For each of the nine fiscal years of MODS data used in your analysis please provide the MODS volume or piece handling counts by CAG for each of the MODS codes used in your cost pools.

OCA/USPS-T14-37 Response:

Please see my response to OCA/USPS-T14-36.

Response of United States Postal Service Witness Bradley
to
Interrogatories of OCA

OCA/USPS-T14-38. Please confirm that the variabilities developed for the BCS cost pool are applicable to clerk/mailhandler costs related to delivery point sequencing (DPS) operations. If you do not confirm, please explain.

OCA/USPS-T14-38:

Confirmed that the BCS variability is applicable to DPS operations in that the BCS

hours and TPH include data from several MODS operations numbers related to DPS.

DECLARATION

I, Michael D. Bradley, declare under penalty of perjury that the foregoing answers are true and correct, to the best of my knowledge, information, and belief.

Michael D. Bradley

Dated:___Sept 19, 1997___

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.

Susan M. Duchek

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September 19, 1997