

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

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POSTAL RATE COMMISSION
OFFICE OF THE SECRETARY

Postal Rate and Fee Changes, 1997)

Docket No. R97-1

OFFICE OF THE CONSUMER ADVOCATE
INTERROGATORIES TO UNITED STATES POSTAL SERVICE
WITNESS MICHAEL D. BRADLEY
(OCA/USPS-T14-9-38)
September 5, 1997

Pursuant to sections 25 and 26 of the Rules of Practice of the Postal Rate Commission, the Office of the Consumer Advocate hereby submits interrogatories and requests for production of documents. Instructions included with OCA interrogatories 1-7 to the United States Postal Service dated July 16, 1997, are hereby incorporated by reference.

Respectfully submitted,



GAIL WILLETTE

Director

Office of the Consumer Advocate



KENNETH E. RICHARDSON

Attorney

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-T14-10. 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-T14-11. 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-T14-12. 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-T14-13. 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-T14-14. 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-T14-15. 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.

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

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-T14-19. 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-T14-20. 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-T14-21. 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-T14-22. 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-T14-23. 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-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-T14-25. What would be the impact of omitted variables (cost drivers) on volume variability, generally speaking?

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

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-T14-28. 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-T14-29. 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-T14-30. 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-T14-31. 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-T14-32. 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-T14-33. 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-T14-34. Please provide MODS volume or piece handling counts for FY 1996 by CAG for each of the MODS cost pools.

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-T14-36. 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-T14-37. 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-T14-38. 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.

CERTIFICATE OF SERVICE

I hereby certify that I have this date served the foregoing document upon all participants of record in this proceeding in accordance with section 12 of the rules of practice.



KENNETH E. RICHARDSON
Attorney

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