

# DOCKET SECTION

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

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POSTAL RATE COMMISSION  
OFFICE OF THE SECRETARY

Docket No. R97-1

POSTAL RATE AND FEE CHANGES, 1997

UNITED STATES POSTAL SERVICE  
INTERROGATORIES AND REQUESTS FOR PRODUCTION OF DOCUMENTS TO  
UNITED PARCEL SERVICE WITNESS NEELS  
(USPS/UPS-T1-33-45)


Pursuant to rules 25 and 26 of the Rules of Practice and Procedure and rule 2 of the Special Rules of Practice, the United States Postal Service directs the following interrogatories and requests for production of documents to United Parcel Service witness Neels: USPS/UPS-T1-33-45.

Respectfully submitted,

UNITED STATES POSTAL SERVICE

By its attorneys:

Daniel J. Foucheaux, Jr.  
Chief Counsel, Ratemaking



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January 27, 1998

USPS/UPS-T1-33. Please refer to page 30 of your testimony. Please provide the formula for the Baltagi-Li serial correlation coefficient you calculated..

USPS/UPS-T1-34. Please refer to Table 5 on page 32 of your testimony.

- a. Please confirm that the table provides two columns of variabilities, one entitled "Bradley's Scrubbed Data" and one entitled "All Usable Observations." Please explain anything but an unqualified confirmation.
- b. Please confirm that the variability listed for the Manual Parcel Sorting Activity is 40% for the "Bradley's Scrubbed Data" column but 32% for the "All Useable Observations" column. Please explain anything but an unqualified confirmation.
- c. Please confirm that the variability listed for the Manual Priority Mail Sorting Activity is 45% for the "Bradley's Scrubbed Data" column but 42% for the "All Useable Observations" column. Please explain anything but an unqualified confirmation.
- d. Please confirm that the variability listed for the SPBS-Priority Mail Sorting Activity is 80% for the "Bradley's Scrubbed Data" column but 73% for the "All Useable Observations" column. Please explain anything but an unqualified confirmation.
- e. Please confirm that the variability listed for the Cancellation and Mail Prep Activity is 65% for the "Bradley's Scrubbed Data"

column but 53% for the "All Useable Observations" column.

Please explain anything but an unqualified confirmation.

- f. Please confirm that the variability listed for the Pouching Activity is 83% for the "Bradley's Scrubbed Data" column but 81% for the "All Useable Observations" column. Please explain anything but an unqualified confirmation.
- g. Please confirm that there are 12 activities for which the variability is higher in the "Bradley's Scrubbed Data" column than it is in the "All Usable Observations" column. If you do not confirm, please provide the number of activities for which the variability is higher in the "Bradley's Scrubbed Data" column.
- h. Please confirm that there are 11 activities for which the variability is lower in the "Bradley's Scrubbed Data" column than it is in the "All Usable Observations" column. If you do not confirm, please provide the number of activities for which the variability is lower in the "Bradley's Scrubbed Data" column.

USPS/UPS-T1-35. Suppose that an estimated variability is 20 percentage points different from 100 percent. In your opinion, does that estimated variability support the assumption that the true variability is 100 percent? Please explain fully.

USPS/UPS-T1-36. Suppose that an estimated variability is 30 percentage points different from 100 percent. In your opinion, does that estimated variability support the assumption that the true variability is 100 percent? Please explain fully.

USPS/UPS-T1-37. Please refer to page 11 lines 20-21 of your testimony where you state that adjustments for inflation and changes in wage levels “are not difficult to make.”

- a. Would you recommend the same easy adjustment for inflation that you would for wage levels.
- b. Please explain in detail, the easy adjustments that you would make for inflation and changes in wage levels.
- c. Would your recommended adjustment be the same for all activities? Please explain fully.
- d. Would your recommended adjustments be the same for all sites? Please explain fully.

USPS/UPS-T1-38. Consider two estimated variabilities, Variability A which is 85% and Variability B which is 75%.

- a. Please confirm that the difference between the two variabilities is 10 percentage points. If you do not confirm, please provide the correct difference.

- b. Suppose that the estimated Variability A is greater than the estimated Variability B for three reasons, (1) the technology of sorting is different, (2) the time periods of estimation are different, and (3) the use of the operations are different. Please provide what part of the 10 percentage point difference is ascribable to each of the three reasons.

USPS/UPS-T1-39. Please refer to page 27 of your testimony where you state:

*Bradley's decision to eliminate observations involving low levels of piece handling also raises questions about the representativeness of his results.*

- a. Please confirm that Table H148-1 on page H148-7 of Library Reference H-148 shows that 9 observations were eliminated for the OCR activity as a result of this scrub. If you do not confirm, please provide what you think to be the correct number.
- b. Please confirm that are 21,345 observations in the OCR data set on which this scrub was run. If you do not confirm, please provide the correct number of observations in the data set on which this scrub was run.
- c. Please confirm that Table H148-1 on page H148-7 of Library Reference H-148 shows that 57 observations were eliminated for the manual letter activity as a result of this scrub. If you do not confirm, please provide what you think to be the correct number.

- d. Please confirm that there are 28,648 observations in the manual letter data set on which this scrub was run. If you do not confirm, please provide the correct number of observations in the data set on which this scrub was run.
- e. Please confirm that Table H148-1 on page H148-7 of Library Reference H-148 shows that 47 observations were eliminated for the BCS activity as a result of this scrub. If you do not confirm, please provide what you think to be the correct number.
- f. Please confirm that there are 26,426 observations in the BCS data set on which this scrub was run. If you do not confirm, please provide the correct number of observations in the data set on which this scrub was run.
- g. Please confirm that Table H148-1 on page H148-7 of Library Reference H-148 shows that 73 observations were eliminated for the LSM as a result of this scrub. If you do not confirm, please provide what you think to be the correct number.
- h. Please confirm that there are 23,251 observations in the LSM data set on which this scrub was run. If you do not confirm, please provide the correct number of observations in the data set on which this scrub was run.
- i. Please confirm that Table H148-1 on page H148-7 of Library Reference H-148 shows that 118 observations were eliminated for

the manual flat activity as a result of this scrub. If you do not confirm, please provide what you think to be the correct number.

- j. Please confirm that are 28,504 observations in the manual flat data set on which this scrub was run. If you do not confirm, please provide the correct number of observations in the data set on which this scrub was run.
- k. Please confirm that Table H148-1 on page H148-7 of Library Reference H-148 shows that 74 observations were eliminated for the FSM activity as a result of this scrub. If you do not confirm, *please provide what you think to be the correct number.*
- l. Please confirm that are 21,544 observations in the FSM data set on which this scrub was run. If you do not confirm, please provide the correct number of observations in the data set on which this scrub was run.
- m. Please confirm that Table H148-1 on page H148-7 of Library Reference H-148 shows that 1,148 observations were eliminated for the manual parcel activity as a result of this scrub. If you do not confirm, please provide what you think to be the correct number.
- n. Please confirm that are 24,814 observations in the manual parcel data set on which this scrub was run. *If you do not confirm,* please provide the correct number of observations in the data set

on which this scrub was run.

- o. Please confirm that Table H148-1 on page H148-7 of Library Reference H-148 shows that 15 observations were eliminated for the SPBS Non-Priority activity as a result of this scrub. If you do not confirm, please provide what you think to be the correct number.
- p. Please confirm that are 6,775 observations in the SPBS Non-Priority data set on which this scrub was run. If you do not confirm, please provide the correct number of observations in the data set on which this scrub was run.

USPS/UPS-T1-40. Consider the following model:

$$y_{it} = \delta_i + \beta X_{it} + \epsilon_{it} \quad i = 1, \dots, N; \quad t = 1, \dots, T.$$

where  $y_{it}$  is the dependent variable,  $\delta_i$  is a vector of site-specific constants,  $X_{it}$  is the explanatory variable and  $\epsilon_{it}$  is independently identically distributed, with mean zero and variance  $\sigma^2$ .

If this model is estimated by Ordinary Least Squares (OLS) with cross-sectional data, please confirm that the probability limit of the OLS estimator is given by:



$$Plim \hat{\beta}_{LS} = \beta + \frac{COV(X_{it}, \delta_j)}{\sigma_x^2}$$

where  $\sigma_x^2$  is the variance of  $X_{it}$ .

If you do not confirm, please provide what you think the probability limit of the OLS estimator is.

USPS/UPS-T1-41. Please refer to page 5, lines 9 and 10, of your testimony.

- a. Did you review the professional econometric literature in preparation of your testimony?
- b. Please identify and summarize all empirical studies conducted prior to Docket No. R97-1 that you are aware of that produce volume variabilities of 100% or more for manual letter and manual flat sorting operations at mail processing facilities. Please provide copies of those studies.

- c. With respect to the empirical studies identified and summarized in part (b.) above, please answer the following questions:
- i. Were any observations eliminated from the data sets in these studies due to erroneous or suspect values?
  - ii. What were the measures of volumes used? Were they piece handlings, RPW pieces, ODIS pieces?
  - iii. How were the dependent variables defined? Specifically, were they defined as costs or workhours?

USPS/UPS-T1-42. Please refer to the "cross-sectional" volume variabilities that you present at table 1, page 7 and table 6, page 41 of your testimony. Please confirm that, in your view, both the table 1 variabilities and the table 6 variabilities qualify as estimates of "long-run volume variabilities." If you do not confirm, please explain why either set of variabilities do not constitute, in your view, estimates of long-run variabilities.

USPS/UPS-T1-43. Please consider the following hypothetical. There are two processing facilities, X and Y. Volume processed in manual letter sorting operations is initially twice as high at facility Y than at facility X. Suppose that manual letter sorting volume at X begins to increase and eventually achieves the level initially found at Y. Further, once this new level is attained at X, it remains there. Please confirm that based on your Table 1 results, workhours in the manual labor sorting

operations in facility X would be expected to exceed those initially seen in facility Y. If you do not confirm, please explain the increase in hours predicted by your Table 1 results.

USPS/UPS-T1-44. Please refer to page 39 of your testimony.

- a. Please confirm that it is your opinion that the long-run variability of mail processing labor costs exceeds the short-run variability of mail processing labor costs.
- b. Please explain how much time it takes to move from the short-run to the long-run in the manual letter sorting activity.

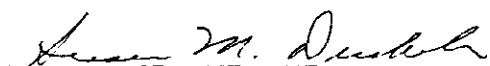
USPS/UPS-T1-45. Please refer to your testimony at pages 16-17, where you state:

It is difficult to imagine actual operational practices that would . . . bring an activity to life for only a single accounting period. Data entry errors, such as recording piece handlings under the wrong activity or with the wrong facility identifier, would seem to provide a plausible explanation.

- a. Please confirm that it is your testimony that the occurrence of a site with one observation is likely to be due to a data entry error such as a wrong facility identifier. If you do not confirm, please explain fully.
- b. Please state for how many consecutive periods a site must report data for an operation before it is reasonable to believe that the recording of the operation is not due to data entry errors.

**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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January 27, 1998