

DOCKET SECTION

BEFORE THE
POSTAL RATE COMMISSION

RECEIVED

MAR 27 12 31 PM '98

POSTAL RATE AND FEE CHANGES, 1997

DOCKET NO. R97-1

MOTION OF UNITED PARCEL SERVICE TO CORRECT TRANSCRIPT (VOLUMES 26, 28, 34, 35, AND 36)

(March 27, 1998)

United Parcel Service ("UPS") hereby moves that Volumes 26, 28, 34, 35, and 36 of the transcript in this proceeding be corrected as follows:

Volume 26

<u>Page</u>	<u>Line(s)</u>	<u>Correction</u>
New Page 14418A		Insert attached page [missing attachment]

Volume 28

15719-21	All	Substitute attached pages [format error]
15730-32	All	Substitute attached pages [format error]
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Volume 33

<u>Page</u>	<u>Line(s)</u>	<u>Correction</u>
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17957	10	Change "he shows" to "it shows"
17966	12, 20	Change "rural" to "raw"

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Volume 36

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19497	5	Change "accounted mixed" to "counted mixed"

Respectfully submitted,

John E. McKeever
John E. McKeever *JB*
Daniel J. Carrigan
Attorneys for United Parcel Service

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Of Counsel.

CERTIFICATE OF SERVICE

I hereby certify that I have this date served the foregoing document
in accordance with section 12 of the Commission's Rules of Practice.

John E. McKeever
John E. McKeever *JB*

Dated: March 27, 1998
Philadelphia, PA

Auxiliary Service Facilities Outgoing Parcel Splits

Auxiliary Service Facility (ASF)	Parent BMC	Other Outgoing Splits (BMCs and ASFs)
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Oklahoma City	Dallas	Denver BMC, Kansas City BMC, Memphis BMC, St Louis BMC
Salt Lake City	Denver	Los Angeles BMC, Phoenix ASF, San Francisco BMC, Seattle BMC
Sioux Falls	Des Moines	Denver BMC, Fargo ASF, Minneapolis BMC

**ANSWER OF UNITED PARCEL SERVICE
WITNESS NEEDS TO INTERROGATORY OF
THE UNITED STATES POSTAL SERVICE**

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 Usable 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 Usable 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 Usable 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 Usable 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 Usable 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.

**ANSWER OF UNITED PARCEL SERVICE
WITNESS NEEDS TO INTERROGATORY OF
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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.

Response to USPS/UPS-T1-34. (a) Confirmed.

- (b) Confirmed.
- (c) Confirmed.
- (d) Confirmed.
- (e) Confirmed.
- (f) Confirmed.
- (g) Confirmed.
- (h) Confirmed.

**ANSWER OF UNITED PARCEL SERVICE
WITNESS NEELS TO INTERROGATORY OF
THE UNITED STATES POSTAL SERVICE**

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.

Response to USPS/UPS-T1-35. How one should interpret the evidence posed by this hypothetical depends upon a number of factors. Most important among these is the quality of the analysis that produced the estimate of variability. If the data upon which the study is based are unreliable, if the model is misspecified, or if the analysis is technically flawed, one should be extremely cautious in basing conclusions regarding variability on the study's results, regardless of the specific numerical value of the estimate. If, however, one has no reason for concern regarding the quality of the analysis, other considerations come into play. If the estimate of variability produced by the study is, say, 80 percent and the standard error of that estimate is 2 percent, these results would suggest that it is unlikely that the true variability is 100 percent. If the estimate of variability produced by the analysis is 80 percent and the standard error of that estimate is 30 percent, one's interpretation of the results would probably depend upon what other evidence regarding variability is available. If one had prior reason to believe that variability is 100 percent, an imprecise variability estimate of 80 percent could be interpreted as being consistent with that prior belief.

**ANSWER OF UNITED PARCEL SERVICE
WITNESS NEEDS TO INTERROGATORY OF
THE UNITED STATES POSTAL SERVICE**

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

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

where y_{it} is the dependent variable, δ_i is a vector of site-specific constants, X_{it} is the explanatory variable and ε_{it} is independently identically distributed, with mean zero and variance σ^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:

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

where σ_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.

Response to USPS/UPS-T1-40. As stated the question is incorrect and cannot be answered. The question assumes a cross-sectional dataset. Therefore, the question assumes $T=1$. As a result, this model cannot be estimated as specified because the number of parameters exceeds the sample size.

**ANSWER OF UNITED PARCEL SERVICE
WITNESS NEEDS TO INTERROGATORY OF
THE UNITED STATES POSTAL SERVICE**

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?

Response to USPS/UPS-T1-41. (a) Not all of it.

- (b) I am not aware of such studies.
- (c) N/A.

**ANSWER OF UNITED PARCEL SERVICE
WITNESS NEELS TO INTERROGATORY OF
THE UNITED STATES POSTAL SERVICE**

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.

Response to USPS/UPS-T1-42. Each set of variabilities could be interpreted as estimates of the "long-run" volume variability.

**ANSWER OF UNITED PARCEL SERVICE
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It is possible that productivity might increase in response to a temporary surge in volume. Workers might increase the pace of work, take fewer or shorter breaks, or adopt other strategies for dealing with the added workload. In his responses to interrogatories, Bradley concedes this point.²¹ Such increases in productivity may not be sustainable, however, and if the increase in volume persists it may eventually be necessary to hire additional workers to handle the increased workload. Thus, after an initial surge it is likely that productivity would decline to something closer to its original level.

The effect of the behavior described above would be to make mail processing labor costs less variable over the short term than over the long term.

I have not conducted a study to determine which of the two factors described above dominates, or whether other factors might also come into play to influence the relationship between short run and long run volume variabilities. However, the contrast between Bradley's short run results and the longer run results provided by the cross-sectional model does suggest that the volume variability of mail processing labor costs is higher over the long run than over the short run.

²¹

Tr. 11/5512.

**ANSWER OF UNITED PARCEL SERVICE
WITNESS NEELS TO INTERROGATORY OF
THE UNITED STATES POSTAL SERVICE**

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.

Response to USPS/UPS-T1-45. (a) Confirmed. However, I do not believe that it is impossible for an activity to be in operation at a particular site for only a single accounting period. Such situations may exist.

(b) One may reasonably accept the possibility that even when only one recorded period of data is present, it may represent real data as opposed to data entry errors. However, when there are very few observations compared to the total possible number of observations, this fact raises suspicions regarding data quality. In such a case investigation is warranted.

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