

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

POSTAL RATE AND FEE CHANGES, 2006

Docket No. R2006-1

RESPONSES OF UNITED STATES POSTAL SERVICE WITNESS
BRADLEY (USPS-T-17) TO INTERROGATORIES OF
OFFICE OF CONSUMER ADVOCATE [OCA/USPS-T17-12-15]
(July 7, 2006)

The United States Postal Service hereby provides the responses of Postal Service witness Michael D. Bradley to the above-listed interrogatories of Office of the Consumer Advocate, filed on June 23, 2006.

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

Respectfully submitted,

UNITED STATES POSTAL SERVICE

By its attorneys:

Daniel J. Foucheaux, Jr.
Chief Counsel, Ratemaking

Sheela A. Portonovo

475 L'Enfant Plaza West, S.W.
Washington, D.C. 20260-1137
(202) 268-3012, Fax -6187

**Response of Postal Service Witness Michael D. Bradley
To Interrogatories Posed by OCA**

OCA/USPS-T17-12. The purpose of this interrogatory is to develop information on the database wscleanpos.11.3.05.xls, which provides the data for your study of window service supply side volume variabilities. The database consists of 7915 rows of observations with 46 columns of data. In many cases the columns denote type of transaction. When a transaction corresponding to the type of transaction denoted in the column heading occurred, the cell in the appropriate transaction column and row was filled with a number denoting the quantity of items/products associated with the transaction. Otherwise, the cell appears to have been left blank: There are a large number of blank cells in the database. However, in some cases, rather than a cell being blank, the cell contains the number "0".

- (a) Attachment 1, "Data Questions," to this interrogatory presents the cases in which a database entry was "0" rather than being left blank. The log of the SAS program "Data Questions" is also attached to this interrogatory (Attachment 2) for informational purposes. Since the majority of cells were blank, it appears that the entry of a "0" is inconsistent with other entries. This raises the question of whether the data entry is correct. Please confirm that the entry "0" is correct in each of the identified cases or, alternatively, please provide the corrected data in a revised spreadsheet.
- (b) In a number of cases, relatively few non-zero entries have been identified for a transaction type: Domestic COD: one entry; Electronic Return Receipt: one entry; First Class Enclosure: one entry; Library Mail: one entry; Mailing Payments: twelve entries; Retail item: eight entries; Registered with Insurance: fifteen entries. Please state the minimum number of non-zero observations that would be required for a product (e.g., Mailing Payments) to generate statistically meaningful results in the regression equation. Please provide references to the literature, as available, identifying and deriving the required numbers of observations and appropriate statistical tests.
- (c) Please confirm that there is one entry for Domestic COD in the database and that COD was a variable in your regressions. If you do not confirm, please explain.
- (d) Your Table 8 provides "Estimated Variabilities". Did you use the regression results from an equation containing the above referenced data for domestic COD to compute an estimated variability for COD? If not, please explain.

Response:

- a. The entry of zero is correct. An entry of zero means that there was a transaction activity associated with the product but no purchase took place. Examples of

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non-purchase transaction activities include an inquiry about the product, an acceptance of a previously stamped product, or a customer refusing to purchase the product after an initial intent of purchase.

- b. One. A product could occur in only one transaction, but it could cause the transaction time in that transaction to be different from the transaction times in a set of other transactions that had a similar vector of products. The estimated coefficient on the product in question would be an estimate of the additional time associated with having that product included in the transaction. For a discussion of how a variable with one non-zero entry could be used in a regression, please see an econometrics textbook for a discussion of categorical or “dummy” variables. A standard “t” test can be used to test for the significance of the coefficient estimated on the dummy variable. For example, see Econometric Models and Economic Forecasts, by Robert Pindyck and Daniel Rubinfeld, McGraw-Hill, New York, 1981 at 111.
- c. Confirmed.
- d. No. The COD variability is 100 percent (as it has been in the established model) because COD transactions always take place in conjunction with another product.

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OCA/USPS-T17-13. Please turn to the database entries for the variable "Inquiry".

- (a) Please confirm that there are no positive entries indicating that an inquiry occurred, although there are a number of "0" entries. If you do not confirm, please explain.
- (b) Please confirm that the data are correct or, alternatively, provide corrected data.
- (c) Please state how the "Inquiry" data was used or could have been used in your analysis, given that a "0" entry appears to provide estimation problems and that only "0" entries occur.

Response:

- a. Confirmed that the entries for the Inquiry variable are "0," as they should be. An entry of "0" indicates that an inquiry took place but no item was purchased.
- b. The data are correct. A value of "0" indicates that an inquiry took place.
- c. The Inquiry variable was not used.

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OCA/USPS-T17-14. Please provide a cross-walk between the database wscleanpos.11.3.05.xls and the variables in Table 7 of your testimony.

- (a) In the case in which a single variable from the database maps onto a single variable in Table 7, please so indicate.
- (b) In the case in which multiple variables from the database map onto a single variable in Table 7, please so indicate.
- (c) Please denote the variables, if any, from the database which are not mapped into the variables in Table 7.

Response:

- a. Please see the table below.
- b. Please see the table below.
- c. Any variable not listed in the right-hand-column of the table is not mapped into the variables in Table 7.

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Table 7 Name	Wscleanpos.11.3.05.xls Name
Certified	Certified
First Class	First_Class
Stamps Bulk	StampScan
Stamps Non-Bulk	StampNonScan
Priority Mail	Priority
Money Order	Money_Order
Parcel Post	Parcel_Post
Other Weigh & Rate	Bounded_Printed_Matter+Library_Mail+Media_Mail
Express Mail	Express_Mail
PVI	PVI
Insurance	Insurance
Ready Post	Ready_Post
International	International+International_Special_Services
Stamped Envelopes	Stamped_Env
Registered	Registered_with_Insurance
Passport	Passport
Retail Products	Retail_Item
PO Box	Box_Rental
COD	Domestic_COD
First Class Enclosure	First_Class_Enclosure
Other Special Services	Return_Receipt+Delivery_Confirmation+Signature_Confirmation+Certificate_of_Mailing+Postage_Due
General Services	Hold_Mail+Pickup+Mailing Payments
Other	Other
Check	Tendertype
Credit Card	Tendertype
Debit Card	Tendertype

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OCA/USPS-T17-15. Please provide a cross-walk between the database wscleanpos.11.3.05.xls and the products or special services in Table 8 of your testimony.

- (a) In the case in which a single variable from the database maps onto a single product in Table 8, please indicate whether additional variables not in the database also map onto the product.
- (b) In the case in which multiple variables from the database map onto a single product in Table 8, please indicate whether additional variables not in the database also map onto the product.
- (c) Please indicate the variables, if any, from the database which are not mapped into the products in Table 8.

Response:

Please note that Table 8 simply presents the implications of updating the transaction supply side variabilities for the computation of volume variable costs in the window service spreadsheets. It is not part of my analysis, per se, so there is not necessarily a mapping between wscleanpos.11.3.05.xls and the table. Some items in the table will relate directly to wscleanpos.11.3.05.xls, but others bear no direct relationship because they were not part of the study. In this latter instance, I have entered a “na” in the table to show that the cross walk is not applicable.

- a. Please see the table below.
- b. Please see the table below.
- c. Any variable not listed in the right-hand-column of the table is not “mapped into” the variables in Table 8.

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Table 8 Name	Wscleanpos.11.3.05.xls Name
FIRST-CLASS MAIL	First_Class
PRIORITY MAIL	Priority
EXPRESS MAIL	Express_Mail
MAILGRAMS	na
PERIODICALS	na
STANDARD MAIL	na
PARCELS ZONE RATE	Parcel_Post
BOUND PRINTED MATTER	Bounded_Printed_Matter
MEDIA MAIL	Media_Mail
US POSTAL SERVICE	na
FREE MAIL	na
INTERNATIONAL MAIL	International+International_Special_Services
REGISTRY	Registered_with_Insurance
CERTIFIED	Certified
INSURANCE	Insurance
COD	Domestic_COD
MONEY ORDERS	Money_Order
STMPD CARDS	na
STMPD ENVELOPES	na
SPECIAL HANDLING	na
POST OFFICE BOX	Box_Rental
OTHER	na
TOTAL STAMPS	StampNonScan+StampScan
TOTAL CARDS	Na
TOTAL METERED	na
STAMPED ENVELOPES	Stamped_Env