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

POSTAL RATE AND FEE CHANGES, 2001

Docket No. R2001–1

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS BOZZO TO INTERROGATORIES OF UNITED PARCEL SERVICE (UPS/USPS-T14-7 through 10)

The United States Postal Service hereby provides the responses of witness Bozzo to the following interrogatories of United Parcel Service: UPS/USPS-T14-7 through 10, filed on November 29, 2001.

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

Respectfully submitted,

UNITED STATES POSTAL SERVICE

By its attorneys:

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December 13, 2001

Response of United States Postal Service Witness Bozzo
To Interrogatories of United Parcel Service

UPS/USPS-T14-7. Refer to library reference USPS-LR-J-56.
(a) Provide quarterly First Handling Pieces ("FHP") data for each of the Management Operating Data System ("MODS") operations to correspond to the Total Piece Handlings ("TPH") data in library reference USPS-LR-J-56. In particular, provide quarterly FHP data for MODS operations 17, 18, 01, 19, 20, 02, 03, 04, 05, 06, 07, 08, 10, 11, 12, and 13, for Fiscal Years 1993 to 2000.
(b) Confirm that the issue of the new MODS conversion factors raised in pages 43 through 46 of your testimony, USPS-T-14, would apply to these FHP data as well?
(c) If you do not confirm, explain why the same issue does not apply to these FHP data.

UPS/USPS-T14-7 Response.

a. The requested data have been provided by accounting period (AP) in LR-J-179. The quarterly data may be derived from the data in LR-J-179 by summing the AP data to postal quarters.

b. Confirmed. The conversion factor change issue applies to FHP in general, but does not apply to TPH and TPF data derived from machine counts.

c. Not applicable.

Response of United States Postal Service Witness Bozzo
To Interrogatories of United Parcel Service

UPS/USPS-T14-8. Refer to library reference USPS-LR-J-161, which provides data on YAQ, defined as "Year of Acquisition." Provide a more detailed explanation of the variable YAQ. In particular, does "Year of Acquisition" refer to the year in which the facility acquired the piece of equipment? If not, does it refer to the year the Postal Service (as a whole) acquired the piece of equipment?

UPS/USPS-T14-8 Response.

It is my understanding that YAQ represents the year in which the Postal Service paid for the equipment.

Response of United States Postal Service Witness Bozzo
To Interrogatories of United Parcel Service

UPS/USPS-T14-9. Provide AP # (Accounting Period)-level data for Total Piece Handlings ("TPH"), Total Pieces Fed ("TPF"), hours ("HRS"), and First Handling Pieces ("FHP"), for each of the years from 1993 to 2000, by site i.d. such that the AP-level data aggregate to the quarterly data provided in library reference USPS-LR-J-161, file "reg9300-labels.xls." Use site i.d. codes that correspond to the site i.d. codes presented in library reference USPS-LR-J-161.

UPS/USPS-T14-9 Response.

The requested data have been provided in LR-J-179.

Response of United States Postal Service Witness Bozzo
To Interrogatories of United Parcel Service

UPS/USPS-T14-10. Refer to your testimony, USPS-T-14, page 58, lines 6-8, where you state, "The standard errors reported in Tables 7, 8, and 9 are computed using a heteroskedasticity-consistent covariance matrix for the regression coefficients."
(a) Explain the procedure used to calculate the standard errors presented in your testimony.
(b) Why do you present heteroskedasticity-consistent standard errors?
(c) Does your procedure for calculating standard errors differ from the procedure you adopted in R2000-1?
(d) If your answer to part (c) is yes, why did you change procedures?

UPS/USPS-T14-10 Response.

a. The elasticities are, generically, of the form $\varepsilon = \beta' z$, where β is a vector of estimated coefficients, z is a vector of data, and the multiplication is the vector (inner) product. Using TSP's "ANALYZ" command, I compute $\text{var}(\varepsilon)$ as $z'VC(\beta)z$, using a heteroskedacity-consistent estimate of $VC(\beta)$.

The heteroskedasticity-consistent estimate of $VC(\beta)$ is computed as:

$$VC(\beta) = (\mathbf{X}'\mathbf{X})^{-1}\left(\sum e_i^2 x_i x_i' /(1-h_i)\right)(\mathbf{X}'\mathbf{X})$$

where $\mathbf{X}$ is the matrix of observations on the explanatory variables on the right-hand side of the regression equation, e_i^2 is the square of the ith regression residual, x_i is the corresponding ith row of $\mathbf{X}$, and h_i is the ith diagonal element of the least-squares projection ("hat") matrix,

$$\mathbf{H} = \mathbf{X}(\mathbf{X}'\mathbf{X})^{-1}\mathbf{X}'.$$

b. The presence (or absence) of heteroskedasticity in regression disturbances does not affect the consistency or unbiasedness of my regression coefficient estimates. However, if present, heteroskedascticity

could affect the estimated covariance matrix of the regression coefficients. Therefore, I used a heteroskedasticity-consistent estimate of $VC(\beta)$ to present more robust estimates of the standard errors of the elasticities relative to those I presented in Docket No. R2000-1.

c. Yes.

d. Please see the response to part (b).

DECLARATION

I, A. Thomas Bozzo, declare under penalty of perjury that the foregoing answers are true and correct, to the best of my knowledge, information, and belief.

A. Thomas Bozzo

Dated: December 13, 2001

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.

Frank R. Heselton

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