POSTAL PATE COMMUNICATION OFFICE OF THE SCORE AND AND

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-T14-1-5 and 6 (c-e))

The United States Postal Service hereby provides the responses of witness Bozzo to the following interrogatories of United Parcel Service: UPS/USPS-T14-1-5 and 6 (c-e), filed on November 21, 2001. Interrogatories UPS/USPS-T14-6(a) and (b) were redirected from witness Bozzo to the Postal Service.

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

Frank R. Heselton

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UPS/USPS-T14-1. Refer to your testimony, USPS-T-14, page 28, lines 6-8, where you indicate that you re-estimated a subset of variabilities using the generalized Leontief functional form.

- (a) Identify the Management Operating Data System ("MODS") operations for which you estimated a generalized Leontief function.
- (b) Refer to footnote 31 on page 28 where you show a formula for the generalized Leontief function. Confirm that this formula does not show a constant term.
- (c) Indicate whether in your implementation of the generalized Leontief function you included a constant among the "x" variables as shown in footnote 31.
- (d) Indicate whether in your implementation of the generalized Leontief function you included a constant term.
- (e) Indicate whether the particular samples used to estimate each of the generalized Leontief functions you tested differed in any way from the samples used to estimate the corresponding translog functions. If your answer is anything but an unqualified yes, please describe in detail how the samples differed.

- a. Please see USPS-T-14 at 74.
- b. Confirmed, noting that the absence of a constant in the cited formula should not be construed as a statement that a regression need be forced through the origin.
- c. Assuming the interrogatory refers to a function of the form $y = \gamma_{11} + \sum_i \gamma_{1i} x_i^{1/2} + \sum_i \sum_j \gamma_{ij} \left(x_i x_j \right)^{1/2}, \ \gamma_{ij} = \gamma_{ji} \ \text{(where the summations are over the non-constant variables), no.}$
- d. Yes. My implementation included site-specific constants—i.e., the results in USPS-T-14 at 74 were estimated using the fixed-effects model.
- e. Yes. The regression samples used for my recommended translog models and for the implementation of the generalized Leontief functional form are identical.

UPS/USPS-T14-2. For each quarter in FY1994 through FY2000, or if not available on a quarterly basis, for each year, provide in machine readable form the following data:

- (a) An inventory of the mail processing equipment installed in each Management Operating Data System ("MODS") facility at the end of the quarter. Include information as to the particular models (e.g., FSM (Flats Sorting Machine) 100, FSM881 and FSM1000) installed.
- (b) For each piece of equipment identified in response to part (a), indicate the year of acquisition and original cost of acquisition.
- (c) Refer to library reference USPS-LR-J-56. Include identification numbers for all MODS facilities that match the facility identification numbers used in the file 'reg9300.xls.

RESPONSE:

a.-c. The requested data will be provided in library reference USPS-LR-J-190.

UPS/USPS-T14-3. Refer to your testimony, USPS-T-14, page 7, lines 13-14, where you state that you visited several mail processing plants.

- (a) How many different mail processing plants did you visit?
- (b) How much time did you spend at each plant observing Management Operating Data System ("MODS") mail processing operations?
- (c) For each of the plants you visited, indicate which of the MODS operations for which you report econometric variability results in your testimony were present in the plant at the time of your visit.
- (d) For each plant/MODS operation combination identified in part (c) indicate whether the operation was actively running at the time of your visit.
- (e) For each plant/MODS operation combination identified in part (c) indicate whether you personally observed the operation during your visit.
- (f) For each plant/MODS operation combination identified in part (c) that you personally observed, indicate what activities were taking place at the time of your observation (e.g., set up, sorting of mail, changing of sort scheme, sweeping of bins, etc.).
- (g) For each plant/MODS operation combination identified in part (c) that you personally observed, indicate when within the shift your observation took place.

- a. Please see the response to OCA/USPS-91, parts (a) and (b).
- I spent approximately five hours at site 78, eight hours each at sites 195
 and 205, and approximately 24 hours at site 149.
- c. The LSM operation was not present at any of the sites I visited. The manual parcel and manual Priority Mail operations were not present at site 195. It is my understanding that all other operations were present at all of the sites.

d.-e. The table below provides the requested information.

| | Site 78 | Site 149 | Site 195 | Site 205 |
|--------------------|---------|----------|----------|----------|
| BCS/DBCS | Υ | Υ | Υ | Υ |
| BCS/ | Υ | Υ | Υ | Y |
| FSM/ | Υ | Υ | Υ | Υ |
| FSM/1000 | Y | Υ | Υ | Υ |
| OCR | Υ | Υ | Υ | Υ |
| SPBS | Υ | Υ | Υ | N |
| Manual Flats | N | Υ | Υ | Υ |
| Manual Letters | Y | N | N | Υ |
| Manual Parcels | N | N | NP | N |
| Manual Priority | N | Y | NP | N |

Y = Operation observed running. N = Operation not observed running. NP = Not present.

f. The table below provides the requested information.

| | Site 78 | Site 149 | Site 195 | Site 205 |
|--------------------|--------------|----------------------|----------------------|-------------|
| BCS/DBCS | Set | Set, L, Swp | L, Swp | L, Swp |
| BCS/ | Set, L, Swp | Set, L, Swp | L, Swp | Set, L, Swp |
| FSM/ | S, Swp | Set, L, S, Swp, D | Set, L, S, Swp, D | L, S, Swp |
| FSM/1000 | S, Swp | Set, L, S, Swp, D | S, Swp | L, S, Swp |
| OCR | L, Swp | L, Swp | L, Swp | L, Swp |
| SPBS | L, S, Swp, D | Set, L, S, Swp, D | L, S, Swp | N/A |
| Manual Flats | N/A | S, Swp | L, S, Swp | S |
| Manual Letters | S | N/A | N/A | S |
| Manual Parcels | N/A | N/A | N/A | N/A |
| Manual Priority | N/A | Set, S, D | N/A | N/A |

Set = Set up equipment. L = Load. S = Sort. Swp = Sweep. D = Dispatch. N/A = not observed or not present.

g. I observed the operations at various times during the visits, and do not recall the precise times of observations of individual observations.

UPS/USPS-T14-4. Refer to your testimony, USPS-T-14, page 7, lines 14-18, in which you identify a number of activities which, you assert, "would be expected to exhibit relatively low degrees of volume-variability." Describe in detail the evidence upon which this expectation is based for:

- (a) container handlings;
- (b) setup time;
- (c) takedown time; and
- (d) waiting time.

RESPONSE:

a.-d. Please see USPS-T-14 at page 7, line 18, to page 8, line 21.

UPS/USPS-T14-5. Refer to your testimony, USPS-T-14, page 9, line 21 through page 10, line 3, where you state that you anticipate that the Postal Service will in a future proceeding present a more comprehensive analysis encompassing allied operations and operations at post offices, stations and branches.

(a) Describe in detail the basis for this expectation.

(b) Has work on this more comprehensive analysis actually begun? If so, who is conducting this work? In particular, is Christensen Associates carrying out all or part of this work? Identify the data sources that have been used in the work that has so far been carried out.

- a. The report of the Postal Service Data Quality Study concluded that "Efforts to measure [mail processing cost] elasticities should be carried out since it is highly unlikely in the current automated mail processing operation regime that 100% of these costs are variable with volume over a rate making cycle (three years)." See A. T. Kearney, Inc., Data Quality Study Summary Report (April 16, 1999), p. 76. Likewise, the Commission has stated that it believes that "econometric methods properly applied to correctly formulated economic models with a reasonably complete and error-free data set is the only way to obtain accurate and unbiased estimates of structural parameters such as volume variabilities." See PRC Op., Docket No. R2000-1, Vol. 2, App. F, p. 52.
- b. Preliminary FY 2001 volume-variability factors for cancellation and metered mail preparation operation groups have been estimated by Christensen Associates. The cancellation and metered mail preparation analyses have used the same data sources as the LR-J-56 data set. Also, some investigation into possible methods for a more comprehensive mail processing volume-variability analysis (i.e., encompassing operations

outside the scope of the results provided in USPS-T-14) has begun, though that work has not proceeded to the point of identifying specific data sources or econometric methods.

UPS/USPS-T14-6. Refer to your testimony, USPS-T-14, page 13, lines 3-4, where you state that, "Furthermore, longer-term capital input decisions necessarily precede the staffing decisions they eventually affect."

- (a) Indicate the length of time that typically separates a decision to install a piece of equipment such as Small Parcel and Bundle Sorter ("SPBS") or FSM (Flat Sorting Machine)/1000 at a specific Management Operating Data System ("MODS") facility, and the actual installation of the piece of equipment. If the length of the interval varies, provide an upper and lower bound estimate of the length of the interval.
- (b) Indicate when within the interval identified in part (a) a plant manager would typically be informed of the decision to install a new piece of equipment. If the point in time when the plant manager is informed of the decision varies, indicate the earliest point in time when he might be informed, and the latest point in time when he might be informed.
- (c) Assume that because of change in volume, installation of labor saving equipment or other causes a plant manager concludes that the number of full time workers employed at the plant is 5 percent greater than what is needed. How long would it take for that plant manager to reduce the size of the full time workforce to eliminate the unneeded workers? If the length of the interval varies, provide an upper and lower bound estimate of the length of the interval.
- (d) Assume that because of change in volume, installation of labor saving equipment or other causes a plant manager concludes that the number of full time workers employed at the plant is 5 percent lower than what is needed. How long would it take for that plant manager to increase the size of the full time workforce to eliminate the shortfall? If the length of the interval varies, provide an upper and lower bound estimate of the length of the interval.
- (e) Do you believe that plant managers take knowledge of upcoming equipment installation into account when they make decisions about adjusting the size of the plant workforce?

- a.-b. Redirected to the United States Postal Service.
- c.-d. Please see Docket No. R2000-1, USPS-T-15 at 18, lines 6-13, for a discussion of the time scales of the Postal Service's staffing processes. In particular, please note that the Postal Service can generally adjust workhours (via overtime, part-time flexible, and casual labor) faster than its full-time complement. Also, it is my understanding that, for changes in the full-time workforce of the magnitude indicated in this interrogatory, the

Postal Service may be able to add to its full-time workforce more quickly than it may be able to reduce its full-time workforce. Finally, "installation of labor saving equipment," by definition, will not bring about the understaffing scenario described in part (d) of the interrogatory—i.e., if installing the equipment creates a labor shortfall, then the equipment is not labor saving.

e. It depends on how the "size of the plant workforce" is defined. I would expect that plant management may adjust the composition of its workforce (e.g., by reducing full-time positions through attrition while making appropriate use of overtime, part-time, and/or casual labor) in anticipation of an equipment installation, while not reducing workhours until the equipment is actually installed.

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 Borro

Dated: December 5 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

475 L'Enfant Plaza West, S.W. Washington, D.C. 20260–1137 December 5, 2001