POSTAL RATE AND FEE CHANGES, 2000

Docket No. R2000–1

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS BOZZO TO INTERROGATORIES OF UNITED PARCEL SERVICE (UPS/USPS–T15–21–35)

The United States Postal Service hereby provides the responses of witness

Bozzo to the following interrogatories of United Parcel Service: UPS/USPS–T15–21–35,

filed on March 23, 2000. Partial objections to interrogatories UPS/USPS–T15–22(b)

and 30(c) and (d) were filed on April 3, 2000.

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

Susan M. Duchek

475 L'Enfant Plaza West, S.W.
Washington, D.C. 20260–1137
(202) 268–2990 Fax –5402
April 6, 2000

UPS/USPS-T15-21. Section II of Library Reference USPS-LR-I-107 describes the output of program file *ais.f* the data file *aispos*.q<q><y> which contains quarterly data on all possible (installed) delivery points by 3-digit zip code. Provide an Excel data file with the total number of nationwide-delivery points (curb + ndcbu + cent + other + rb + hct + pobox) for each quarter from the first quarter of FYI993 to the last quarter of FY I998.

UPS/USPS-T-15-21 Response.

An Excel file containing the requested data will be provided in LR-I-286.

UPS/USPS-T15-22. Section II of Library Reference USPS-LR-I-107 describes an EPL data file called *usps.qtfp* with annual national prices for postal equipment from FY1968 to FY1998, and a program file *asset.prices.epl* which uses *usps.qtfp* to output a text file called *prices* containing annual national prices for four postal asset types (CSE, PSE, AHE, and MHE).

(a)   Does *usps.qtfp* contain more price information than that contained in *prices*?

(b)   If your answer to part (a) is yes, provide an Excel data file containing the data in *usps.qtfp*, along with a description of the variables contained in this file.

(c)   Provide an Excel data file containing the data in *prices*, along with a description of the variables contained in this file.

UPS/USPS-T-15-22 Response.

Please note that due to a typographical error in the LR-I-107 text file, the documentation

refers to "usps.qtfp" whereas the data set employed by the program is "usps.tfp." The

material provided in the balance of this response pertains to the usps.tfp data set.

(a)   Yes.

(b)   A partial objection to this interrogatory has been filed on March 31, 2000. The

data from usps.tfp that I employ in my analysis will be provided in LR-I-286.

(c)   The requested data will be provided in LR-I-286.

UPS/USPS-T15-23. The FOCUS data dictionary, provided in Library Reference USPS-LR-I-201 in response to UPS/USPS-T15-3(a), shows that the MODS data contain information on machine downtime (DOWNTIME), number of machines (MACHINE), and machine run time (RUNTIME). Provide an Excel data file containing DOWNTIME, MACHINE, and RUNTIME by MODS operating group for each quarter from the first quarter of FY1993 to the last quarter of FY1998, for each of the 321 sites examined in your testimony.

UPS/USPS-T15-23 Response.

The requested data will be provided in LR-I-286.

UPS/USPS-T15-24. Refer to pages 93 through 94 of your testimony, where you state, "Since each PPAM equipment category encompasses a variety of equipment types, there is no simple correspondence between the categories and specific mail processing cost pools." However, the PPAM data contain the PCN or property code number for each piece of equipment. Handbook F-26, provided in Library Reference USPS-LR-I-201, describes each of the six-digit PCNs used to classify capital equipment.

(a)　Explain whether all, some, or none of the equipment can be classified by mail processing cost pools using the equipment PCN.

(b)　If your answer to part (a) is either all or some, explain why you did not create separate capital indices for each mail processing cost pool.

(c)　If your answer to part (a) is none, explain why the PCN cannot be used to classify equipment by mail processing cost pool.

UPS/USPS –T15-24 Response

Please note that the "categories" to which I refer in the quoted statement are the AHE,

MHE, PSE and CSE categories, not the PCNs.

(a)　Some of the equipment could, in principle, be classified by cost pool using the

equipment PCN.

(b)　Several important factors motivated my decision to employ a facility capital

measure as opposed to cost pool-level capital measures. First and foremost, as

I indicated in my response to part (a), it is not possible to classify all equipment

by cost pool using the PCN. The resulting cost pool-level capital measures

would not represent the cost pool's capital per se, but rather the portion of the

cost pool's capital that can be associated with the cost pool using the PCN. This

is compounded by the fact that data on facility space, an important non-

equipment component of a hypothetical cost pool capital index, are not available

by cost pool, as my responses to UPS/USPS-T15-8 and OCA/USPS-T-15-50 indicate. Furthermore, it is not obvious that a cost pool level capital measure would be the sole—or even the primary—economically relevant measure of capital. The effect of including the facility capital index is to capture the net effect on labor demand in a given cost pool of the capital services employed in that cost pool as well as the capital services employed in other cost pools (that may be complements or substitutes for the cost pool, or that otherwise affect the cost pool's labor usage).

(c)   Not applicable.

UPS/USPS-T-15-25 The Personal property formats descriptions of the PPAS master file, provided in Library Reference USPS-LR-I-201 in response to UPS/USPST15-7(a), show that for each piece of equipment, the PPAM data contain the finance number (FINANCE), the general ledger account category (G/L ACCT), the PCN-number (PCN), the cost (COST), the year of acquisition (YAQ), years of service life (YRSSL), depreciation status key (DEPRKEY), undepreciated balance (UNDEPBAL), and original UPS/USPS-T-15-3 Response activity code (ORGACT). Further, Section II of Library Reference USPS-LR-I-107 describes *posrtoreg.map*, a mapping of BA 1 finance numbers to REGPOs.

(a)   Provide an Excel file or files containing a list of equipment for each of the 321 sites examined in your testimony, along with GU ACCT, PCN, COST, YAQ,YRSSL, DEPRKEY, UNDEPBAL, and ORGACT for each piece of equipment, for each quarter from the first quarter of FY1993 to the last quarter of FY1998.

(b)   Provide a mapping of PCNs to the four equipment categories CSE, PSE, AHE, and MHE used to construct the capital index in your testimony.

UPS/USPS-T-15-25 Response

(a)   Text files containing the requested data will be provided in LR-I-286. Please note that some of the text files are too large for Microsoft Excel.

(b)   An Excel file containing the requested mapping will be provided in LR-I-286.

UPS/USPS-T-15-26. Section II of Library Reference USPS-LR-I-107 describes an EPL data file called *usps.qcap* containing NCTB national quarterly values of land, buildings, and equipment by equipment category CSE, square footage by 3 digit zip code, a set of data files called *sqfNy>f/d* containing PSE, MHE, and AHE, a set of data files called *sqft<y>zip* containing Postal Service owned Postal Service owned square footage by BA 1 finance number, a set of data files called *zip<y>.sfk* containing stocks for each of the four equipment categories by 3 digit zip code, and a set of data files called *f/dcy>.sfk* containing stocks for each of the four equipment categories by finance

(a) Provide an Excel file containing the data in *usps.qcap*, along with description of the variables contained in this file

(b) Provide an Excel file with the total nationwide square footage of building space owned by the Postal Service and the total nationwide stock of equipment by each of the four equipment categories for each quarter from the first quarter of FY1993 to the last quarter of FY1998.

(c) Provide an Excel file containing the annual share of owned buildings for each of the 321 sites examined in your testimony.

(d) Provide an Excel file containing the annual share of each equipment category owned by each of the 321 sites examined in your testimony.

UPS/USPS-T-15-26 Response.

(a) The requested information will be provided in LR-I-286.

(b) An Excel file containing the requested data will be provided in LR-I-286. Please note that the square footage data are the raw data from FMS and have not been edited as described in the text accompanying LR-I-107. It is unclear what is meant by 'stock of equipment' so these are not provided. However, it appears that certain variables in usps.qcap may be responsive; see the response to part (a).

(c) An Excel file containing the requested data will be provided in LR-I-286.

(d) An Excel file containing the requested data will be provided in LR-I-286.

UPS/USPS-T15-27. Chapter 3, page 13 of Postal Service Handbook F-26, provided in Library Reference USPS-LR-I-201, explains that "The Postal Service uses the straight-line method of depreciation to allocate the cost of an item in equal increments over service life." In your testimony, you explain that in your calculation of the capital index, "the value of each year's equipment is depreciated using a 1.5 declining balance rate of replacement." USPS-T15, at 94, lines 1-3. Explain why you do not adopt the Postal Service's convention of straight-line depreciation.

UPS/USPS-T15-27 Response

The purpose of the capital index is to represent the quantity of capital services (or capital input) employed at each facility. In order to obtain such a measure, it would be inappropriate to use the straight line method of depreciation. See also the response to OCA/USPS-T-15-47(c).

UPS/USPS-T15-28. For the National Consolidated Trial Balance (NCTB) Data referred to at pages 92-93 of your testimony:

(a)   List the full set of variables contained in the file, along with their definitions;

(b)   Indicate the time period covered by the file;

(c)   Describe the unit of observation;

(d)   Describe the universe of installations contained in this file; and

(e)   Provide any manuals or other documentation available for the file

UPS/USPS-T15-28 Response.

(a)   An Excel file containing the NCTB format will be provided in LR-I-286.

(b)   The time period covered by the NCTB data to which I have ready access is 1988

        to the present. The data frequency is accounting period.

(c)   The units of observation are the account (or subaccount) and finance number.

(d)   It is my understanding that NCTB encompasses all active finance numbers.

(e)   Handbook F-8, "General Classification of Accounts," has previously been

        provided as LR-I-183.

UPS/USPS-T-15-29. Programs *load.fms.ep/, /oad.ppam.epl, load.qindex.epl,* in Section II of Library Reference USPS-LR-I-107, all read in EPL data file *usps.qcap.*

(a)   Confirm or deny that *usps.qcap* contains NCTB data.

(b)   If you deny in part (a), describe the data source for *usps.qcap* and provide manuals or other documentation for the source file.

(c)   Provide the program file or files which process the original source data to create the EPL data file *usps.qcap.*

(d)   Provide a complete list with definitions of all variables contained in *usps.qcap.*

UPS/USPS-T-15-29 Response.

(a)   Confirmed.

(b)   Not applicable.

(c)   The programs that process the NCTB and PPAM source data will be provided in

        LR-I-286. Please note that the source data for prices are loaded into the

        usps.qcap data set without additional processing.

(d)   Please see the response to UPS/USPS-T15-26(a).

UPS/USPS-T15-30. The actual program *asset.prices.epl*, contained in Section II of Library Reference USPS-LR-I-107, uses as an input the EPL data file *usps.ffp*, yet on pages 27-28 of Library Reference USPS-LR-I-107, in your description of *asset.prices.epl*, you describe the input file as *usps.qtfp*. Is *usps.tfp* the same as *usps.qtfp*? Which is the correct name for this file? The remainder of this and other questions refers to the EPL data file used by *assef.prices.epl* by the name *usps.qtfp*.

(a)   Confirm or deny that *usps.qtfp* contains NCTB data.

(b)   If you deny in part (a), describe the data source for *usps.qtfp* and provide manuals or other documentation for the source file.

(c)   Provide the program file or files, which process the original source data to create the EPL data, file *usps.qtfp*.

(d)   Provide a complete list with definitions of all variables contained in *usps.qtfp*.

UPS/USPS-T15-30 Response.

The discrepancy is due to a typographical error in the LR-I-107 text file. The documentation refers to *usps.qtfp* whereas the data set employed by the program is actually called *usps.tfp*, which is the correct name for the file. The material provided in the balance of this response pertains to the *usps.tfp* data set used by the *asset.prices.epl* program.

(a)   Confirmed.

(b)   Not applicable.

(c)   A partial objection to this interrogatory has been filed on March 31, 2000. With respect to the processing of the relevant NCTB and PPAM source data, the processing procedures are conceptually the same as in the response to UPS/USPS-T15-29(c), but the data are annual rather than quarterly.

(d)   A partial objection to this interrogatory has been filed. Descriptions of the

variables from *usps.tfp* that I employ in my analysis will be provided in LR-I-286.

UPS/USPS-T15-31. In the program file *load.qindex.epl* (contained in Section II of
Library Reference USPS-LR-I-107) the comment included immediately above the
statement "IN *usps.qcap*," reads "open database with national capital prices, quantities,
and values."

(a) Are the prices contained in *usps.qffp* the same as the prices contained in
usps.qcap?

(b) What are the units of the capital prices contained in *usps.qcap* (read in
load.qindex.epl as *qahe, qmhe, qpse, gland,* and *qbuild*)?

(c) What are the units of the capital quantities contained in *usps.qcap* (read in
load.qindex.epl as *qahe, qmhe, qpse, gland,* and *qbuild*)?

(d) What are the units of the values contained in *usps.qcap* (read in *load.ppam.epl* as
vcse, vpse, vmhe, and *vahe,* and in *load.fsm.epl* as *vbld0,* and *vind*)?

(e) If prices and values from parts (b) and (d) are in dollars, are they adjusted for
inflation or do they reflect nominal levels?

UPS/USPS-T-15-31 Response.

(a) Some of the prices in usps.tfp are conceptually the same as prices in usps.qcap,

but the usps.tfp data set contains annual prices while usps.qcap contains

quarterly prices.

(b) The specified prices are indexes based to 1.0 in Quarter 1, FY1983.

(c) The units of the specified variables are dollars.

(d) The units of the specified variables are dollars.

(e) The price indexes in (b) are not in dollars. The values in (d) are nominal.

UPS/USPS-T15-32. In *fms.f* and *ppam7.f* (contained in Section II of Library Reference USPS-LR-I-107) you read only end of year *FMS* and end of year *PPAM* tapes. Further, you use AP 13 data files from the previous year for current year information.

(a)   By using only the end of year tapes, are you in effect using annual data for square footage (from *FMS*) and equipment (from *PPAM*)?

(b)   If your answer to part (a) is yes, what was your reason for not using quarterly data for square footage and equipment?

(c)   Why do you use end of year tape from the previous year for current year data.

UPS/USPS-T-15-32 Response.

(a)   Yes.

(b)   It is a fairly common assumption in capital measurement that the quantity of capital services for a given year is proportional to the stock of capital at the beginning of the year. There are timing issues in the recording of plant and equipment transactions during the year. These timing issues led me to conclude that developing the FMS and PPAM data for each quarter would not have materially improved the capital measure.

(c)   The objective was to obtain a beginning-of-year distribution of plant and equipment, which was obtainable from the end-of-year data for the previous year.

UPS/USPS-T15-33. In both program files *load.fms.epl* and *load.ppam.epl* (contained in Section II of Library Reference USPS-LR-I-107) you create the total square footage or equipment stock owned by the Postal Service nationally, by three digit zip (under the comment SUM 3-DIGIT ZIP CODE DATA) and the total square footage or equipment stock owned by the Postal Service, by BA 1 finance numbers (under comment SUM BA 1 FINANCE NUMBER DATA). By adding together square footage by finance number and by zipcode (as you do after the comment ADD ZIP and BA 1 DATA TOGETHER), are you double counting square footage?

(a)   If your answer is no, explain why not.

(b)   If your answer is yes, explain why you double count.

UPS/USPS-T-15-33 Response.

(a)   No. The referenced procedures add together square footage or equipment at

        plant (BA 1) finance numbers with square footage or equipment at customer

        service finance numbers. Therefore, there is no double counting.

(b)   Not applicable.

UPS/USPS-T15-34. In the program file load.qindex.epl in Section II of Library Reference USPS-LR-I-107, explain what the line of code: "multilat (t,p,pq) pcap2 qcap2;" does.

UPS/USPS-T-15-34 Response.

Please see the response to MPA/USPS-T-15-6.

UPS/USPS-T15-35. Provide a reference source for the multilateral quantity index you create for the capital variables.

UPS/USPS-T-15-35 Response.

Please see the response to MPA/USPS-T-15-6. See also, e.g., D. W. Caves, L. R.

Christensen, and W. E. Diewert, "Multilateral Comparisons of Output, Input, and

Productivity using Superlative Index Numbers," *The Economic Journal,* March 1982,

pages 73-86.

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: 4-6-00

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

475 L'Enfant Plaza West, S.W.
Washington, D.C. 20260–1137
(202) 268–2990 Fax –5402
April 6, 2000