

UNITED STATES OF AMERICA
Before The
POSTAL RATE COMMISSION
WASHINGTON, D.C. 20268-0001

Postal Rate and Fee Changes, 2006)

Docket No. R2006-1

RESPONSES OF OFFICE OF THE CONSUMER ADVOCATE
WITNESS J. EDWARD SMITH TO INTERROGATORIES OF
UNITED STATES POSTAL SERVICE (USPS/OCA-T3-7-12)
(October 10, 2006)

The Office of Consumer Advocate hereby submits responses of J. Edward Smith to interrogatories USPS/OCA-T3-7-12, dated September 25, 2006. Each interrogatory is stated verbatim and is followed by the response.

Respectfully submitted,

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RESPONSES OF OCA WITNESS J. EDWARD SMITH
TO INTERROGATORIES USPS/OCA-T3-7-12

USPS/OCA-T3-7

The program entitled "ReadVolume.sas" in Section 2 of Library Reference OCA-LR-T3-1 Contains the following code:

```
*****Housing units, commercial units, and land were obtained by Zip code;  
****The land area by zip code is exclusive of any water area;  
*****The resulting database is "ahactzips";  
*****The first two letters are the initials of the individual assembling the  
data, and "actzip" denotes that an actual rather than an enclosed zip is being  
used;
```

- (a) Please explain, in detail, how and where the data on "housing units," "commercial units," and "land" were obtained by ZIP Code.
- (b) Please provide all source data sets and all programs (including logs and listings) that were used in "obtaining" the data. Please also provide a flow chart which explains how the data set was constructed.
- (c) Please confirm that the database "ahactzips" listed above is presented in Excel format as Ahactzips.xls in OCA-LR-T3-1.

RESPONSE TO USPS/OCA-T3-7

- (a) Source of data

<http://www.census.gov/geo/www/gazetteer/places2k.html>

<http://www.census.gov/tiger/tms/gazetteer/zcta5.txt>

<http://censtats.census.gov/cbpnaic/cbpnaic.shtml>

Household data from dc_dec_2000_sf1_u_data1.txt

Unit Definition

http://www.census.gov/popest/topics/terms/housing_unit.html

- (b) The information was transferred through cut-and-paste into an Excel file.

There are not programs, logs, or listings.

RESPONSES OF OCA WITNESS J. EDWARD SMITH
TO INTERROGATORIES USPS/OCA-T3-7-12

(c) Not confirmed. The file with protected information was inadvertently provided in OCA-LR-L-4 but was removed. Please see "Office of the Consumer Advocate Notice of Replacement of Library Reference OCA-L-4," September 27, 2006

RESPONSES OF OCA WITNESS J. EDWARD SMITH
TO INTERROGATORIES USPS/OCA-T3-7-12

USPS/OCA-T3-8

The program entitled "ReadVolume.sas" in Section 2 of Library Reference OCA-LR-T3-1 Contains the following code:

```
*****The procedure below assumes that missing data is zero rather than deleting the data--this is an important assumption;
```

```
data volume;
set volume;
if autoflats = "." then autoflats = 0;
if autoltrs = "." then autoltrs = 0;
if casflts = "." then casflts = 0;
if casltrs = "." then casltrs = 0;
if dps = "." then dps = 0;
if miles = "." then miles = 0;
if prcl = "." then prcl = 0;
if pri = "." then pri = 0;
if seqflts = "." then seqflts = 0;
if seqltrs = "." then seqltrs = 0;
if seq_letters_sets = "." then seq_letters_sets = 0;
if seq_flats_pcs = "." then seq_flats_pcs = 0;
run;
```

- (a) For each of the variables listed in the code above, please provide a frequency table, by Zip Code, indicating how often a zero value reflects a missing observation and how often a zero value reflects and [sic] actually recorded value of zero.
- (b) Please explain why this assumption is "important."
- (c) Please explain why you chose to make this assumption.

RESPONSE TO USPS/OCA-T3-8

- (a) Please see Interrogatory 8 Listing in Library Reference OCA-LR-L-8.
- (b) There appeared to be a large number of missing entries. Several discussions with operational personnel at Postal facilities indicated that the personnel were conscientious and dedicated in meeting data requirements. On the assumption

RESPONSES OF OCA WITNESS J. EDWARD SMITH
TO INTERROGATORIES USPS/OCA-T3-7-12

that such behavior extended across the Postal Service I concluded that absent entries were probably zero rather than failure of an individual to enter positive data.

(c) The assumption results in the inclusion of the observation in the analysis rather than its deletion from the analysis. If the assumption had not been made, then the dataset ultimately analyzed would have been different.

RESPONSES OF OCA WITNESS J. EDWARD SMITH
TO INTERROGATORIES USPS/OCA-T3-7-12

USPS/OCA-T3-9

Please consider the program entitled, "ReadVolume.sas" in Section 2 of Library Reference OCA-LR-T3-1. Please provide, in accordance with the Commission rules, the following documentation for that program:

(a) A general description of the program that includes:

1. Objectives of the program
2. Processing tasks performed.
3. Methods and procedures employed.
4. A listing of the input and output data.
5. A listing of the source codes.

(b) For all input data:

1. Designation of all sources of such data.
2. Explanations of any modifications to such data made for use in the program.

(c) Definitions of all input and output variables or sets of variables.

(d) A description of input and output data file organization.

RESPONSE TO USPS/OCA-T3-9

(a) – (d) Please see "Documentation for ReadVolume.sas" in Library Reference OCA-LR-L-8.

RESPONSES OF OCA WITNESS J. EDWARD SMITH
TO INTERROGATORIES USPS/OCA-T3-7-12

USPS/OCA-T3-10

Please consider the program entitled, "ReadVolume.sas" in Section 2 of Library Reference OCA-LR-T3-1. Please provide the Sas log for that program.

RESPONSE TO USPS/OCA-T3-10

Please see "SASLOG for ReadVolume.sas" in Library Reference OCA-LR-L-8.

RESPONSES OF OCA WITNESS J. EDWARD SMITH
TO INTERROGATORIES USPS/OCA-T3-7-12

USPS/OCA-T3-11

Please refer to the file entitled, "LibrefPrgmsSection3.doc" contained in Library Reference OCA-LR-T3-1.

- (a) Please confirm that, as indicated on page 13 of that document, the dataset used to estimate the full quadratic contains 160 observations with missing values. If you do not confirm, please indicate how many observations there are with missing values?
- (b) Given that you have assumed that "missing data is (sic) zero rather than deleted," please explain why the estimation data set contains 160 observations with missing values.

RESPONSE TO USPS/OCA-T3-11

- (a) Confirmed.
- (b) The 160 missing observations are generated from the unavailability of square miles of land for one of the ZIP codes. In the case of square miles of land, I did not assume that the appropriate entry was zero.

RESPONSES OF OCA WITNESS J. EDWARD SMITH
TO INTERROGATORIES USPS/OCA-T3-7-12

USPS/OCA-T3-12

Do you consider “density” to be an endogenous or exogenous variable in the Postal Service optimization process that you assert on page 6 of your testimony. Please explain fully.

RESPONSE TO USPS/OCA-T3-12

The equations model cost as a function of output. This type of cost curve does not use the variable density. Accordingly, for purposes of this analysis, the question is meaningless.