

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

POSTAL RATE AND FEE CHANGES, 2006

Docket No. R2006-1

RESPONSE OF THE UNITED STATES POSTAL SERVICE
TO INTERROGATORIES OF TIME WARNER AND ADVO (TW/ADVO/USPS-1 - 7)
(October 20, 2006)

The United States Postal Service hereby provides its response to the following interrogatories of Time Warner and Advo: TW/ADVO/USPS-1 - 7, filed on October 10, 2006. A partial objection to these questions was filed today, and the provision of these responses is not intended to waive that objection.

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

Respectfully submitted,

UNITED STATES POSTAL SERVICE

By its attorneys:

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October 20, 2006

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TW/ADVO/USPS-1. Please refer to your response to POIR No. 4 Item 11.

As part of our review of your SAS regression program identified below, we converted the following five excel data files in LR L-179:

- Street.Time.MaskedZips.
- LfVolume.MaskedZips
- PAVolume.MaskedZips
- Possible.Del.Pts.MaskedZips.
- Density.MaskedZips

to comma delimited format. We then entered those five CSV data files into the LR L-180 SAS program **CityCarrierStreetTimeModel.2004data.variabilities** as sources for the files TIME, LfVOL, PAVOL, DELPT, and DENSE. However, we have been unable to run the program completely through and generate results. The program stops at line 1049 (of the LR L-180 SAS Log). At this point, the program attempts to divide route number (from the TIME data set) by 100. After initial data cleaning performed up through line 1047, there still appear to be numerous route-zip-day observations containing character (alphanumeric) data in the **rt** variable, referenced in this section of the code. We see no programming to eliminate the alpha portions of values contained in the **rt** variable for such observations which contain both alphabetic and numeric data. Given this problem, please provide the following:

- (a) Confirmation that where you construct SAS data set TIME1 (SAS log row 1022), the variable **rt \$** from data file TIME is a character (alphanumeric) variable. If not, please explain.
- (b) Confirmation that the variable **rt** created in SAS data set TIME2 (SAS Log row 1034) is the same as **rt \$** in (a) above and also a character (alphanumeric) variable. If not, please explain.
- (c) Confirmation that:
 - i) A new variable **nrt** in SAS data set TIME 2 is created and assigned values from variable **rt** in line 1048 of the log, and that
 - ii) **nrt** is also a numeric variable containing numeric data, only when **rt** contains numeric data (in character format) If not, please explain.
- (d) Confirmation that variable **rtind** in SAS data set TIME 2 is constructed by dividing the variable **nrt** by 100 which is only accepted by SAS when the latter contains only numeric data (SAS Log row 1049). (This is where our replication attempts are stopped.) If not, please explain.
- (e) Confirmation that variable **ziprt** created for SAS data set TIME 2 is used as the common variable by which to merge zip-route-day observations from TIME3, LfVOL3, and PAVOL3 to form the zip-route-day data set COMB (SAS log row 1172). If not, please explain.

Response:

Please note that we did not work with comma delimited files, so we cannot help you

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with your programming problem. As explained below, any alpha portions of route numbers were changed to numeric values in the submitted SAS program.

(a) Confirmed.

(b) Confirmed.

(c) i) Confirmed.

(c) (ii) Not Confirmed. **nrt** is a strictly numeric variable. Specifically, **nrt** is numeric either because **rt** is numeric, or because **nrt** is set equal to 99.9 at lines 1035 and 1048, or is set equal to 11.1 at line 1047.

(d) Confirmed.

(e) Confirmed.

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TW/ADVO/USPS-2. With respect to your responses to TW/ADVO/USPS-1 above, please provide the proper data sets for use with the LR L-180 SAS program

CityCarrierStreetTimeModel.2004data.variabilities:

- Street.Time.MaskedZips.prn
- LFVolume.MaskedZips.prn
- PAVolume.MaskedZips.prn
- Possible.Del.Pts.MaskedZips.prn
- Density.MaskedZips.prn

and/or programming changes that permit replication of witness Bradley's model results in response to POIR No. 4 Item 11 and in LR L-180.

Response:

It is not clear what you mean by the term "proper." The data sets read into CityCarrierStreetTimeModel.2004data.variabilities.sas are simply the "prn" versions of the Excel spreadsheets. Excel versions of these files were provided to allow for easier inspection of the data, and because it was not known which format any given analyst might want to use. Different methods of reading the data into SAS will have different formatting requirements.

For example, the route number in the Excel version of the TIME file and the date formats in the Excel versions of the Time, LFVOL and PAVOL will necessarily differ from those used in the ".prn" version of those files. The format must be modified to ensure proper reading of the route and date information when using a "prn" file. To prepare the Excel file for input into this SAS program as a prn file, use only the rightmost two characters of the route number in the Excel file, and convert the date entries in the Excel file from 4/DD/2004 to 4/DD/04, where DD is the date. This ensures that SAS does not misread the data values.

However, for your convenience, we are attaching the "prn" versions of the Excel files.

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TW/ADVO/USPS-3. Please list and explain all differences between the five final excel data files in LR L-179 (listed in TW/ADVO/USPS-1 above) and the data files provided in response to TW/ADVO/USPS-2.

Response:

There are no differences. However, please see our response to TW/ADVO/USPS-2 for a discussion of how to prepare the “pnr” versions of the files for use in a SAS program.

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TW/ADVO/USPS-4. With respect to the LR L-180 SAS program

CityCarrierStreetTimeModel.2004data.variabilities, please provide the following:

- (a) Confirmation that where you construct SAS data set DPOINTS1 from data file DELPT (SAS log row 1009), the variable **rteno \$** which is read into DPOINTS1 is a character (alphanumeric) variable. If not, please explain.
- (b) Confirmation that where you construct SAS data set LRVOL1 from data file LRVOL (SAS log row 1071), the variable **rteno** which is read into LRVOL1 is a numeric variable. If not, please explain.
- (c) Confirmation that where you construct SAS data set PAVOL1 from data file PAVOL (SAS log row 1105), the variable **rteno \$** which is read into PAVOL1 is a character (alphanumeric) variable. If not, please explain.
- (d) If you do confirm (a), (b), (c) above, please explain why the indicated route number variable from the three input files was entered twice as a character (alphanumeric) variable and once as a numeric variable.
- (e) Confirmation that the rteno variable cited in (a), (b) and (c) above contains only numeric data, regardless of whether the variable was formatted as a character variable (twice) or a numeric variable (once). If not, please explain.
- (f) If you do confirm (e) above and (a) from ADVO/USPS-1, then please explain why route identifiers by zip code were entered as numeric data in three instances and as character data in one instance.

Response:

(a) Confirmed.

(b) Confirmed.

(c) Confirmed.

(d) Programmer's choice. It makes no difference as SAS does not differentiate between character data that represent numeric data and simple numeric data unless the character data cannot be converted to numeric data.

(e) - (f). Programmer's choice. It makes no difference as SAS does not differentiate between character variables that represent numeric data and simple numeric data unless the character variable cannot be converted to numeric data. Moreover, the SAS code guarantees that **rteno** is converted into the strictly numeric variable.

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TW/ADVO/USPS-5. If you do confirm (a), (b) and (c) in TW/ADVO/USPS-4 and (a) in TW/ADVO/USPS-1, please explain why a different variable name (**rt** instead of **rteno**) was employed to collect route identifier data contained in the TIME data file.

Response:

"What's in a name? That which we call a rose by any other
word would smell as sweet."¹

It is simply the programmer's choice. Please keep in mind that SAS reads in the same data from the source file regardless of the name listed in the program. Thus it makes no difference as **rt** and **rteno** are converted into the *same* variable **rtind**, for purposes of merging the time, delivery point, and volume datasets for use in the regression analysis.

¹ William Shakespeare, *Romeo and Juliet* (II, ii, 1-2)

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TW/ADVO/USPS-6. Given the differences in how the route identifier data were collected, named and manipulated within your SAS program, please explain how these data were maintained without error to ensure correct alignment of zip-route-day data during the merge procedure to form SAS data set COMB from the separate LFMVOL3, PAVOL3 and TIME3 data sets. Please explain fully.

Response:

As explained in our response to TW/ADVO/USPS-5. The route identifier used to merge the data was the same in all three datasets. Use of a single identifier ensured correct alignment.

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TW/ADVO/USPS-7. Did you run any tests or checks to ensure correct alignment of zip-route-day data resulting from the merge procedure to form data set COMB and the subsequent merge to form data set COMBDEL (log line 1176)? If you did, please provide the results. If you did not, please explain why not.

Response:

No. No such tests were run because a single identifier was used for all the data sets.

In addition, a similar method was used successfully in Docket No. R2005-1.

CERTIFICATE OF SERVICE

I hereby certify that I have this date served the foregoing document in accordance with Section 12 of the Rules of Practice and Procedure.

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