# Before The POSTAL RATE COMMISSION WASHINGTON, D.C. 20268-0001

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Postal Rate and Fee Changes, 2000

Docket No. R2000-1

# RESPONSE OF THE UNITED STATES POSTAL SERVICE WITNESS BARON TO ADVO INTERROGATORIES (ADVO/USPS-T12-16-19)

The United States Postal Service hereby provides the response of witness Baron to the following interrogatories of Advo, Inc.: ADVO/USPS-T12-16-19, filed on April 18, 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

Richard T. Cooper

475 L'Enfant Plaza West, S.W. (202) 268-2993; Fax: -5402 Washington, D.C. 20260-1137 May 2, 2000

ADVO/USPS-T12-16. Please refer to your response to ADVO/USPS-T13-23 (a), redirected to you from witness Raymond. There you state:

"The universe under study and the sampling frame can be defined as the population of all city carrier routes (other than phantom routes) in existence during PFY 1997 - Quarter 4. The units of the analysis are, according to this view, the individual routes. The universe and sampling frame can also be viewed as a set of six subpopulations. One sub-population is defined for each of the six major route categories: foot, business motorized, residential curb, residential park & loop, mixed curb, and mixed park & loop."

However, witness Raymond states that the Phase 1 on-day studies ranged from 10/14/96 to 2/13/97 and the Phase 2 multiple-day studies time frame ranged from 515197 to 4123198 (page 8, USPS-T-13).

- (a) Please explain fully how the universe and sampling frame for the routes in the Phase 1 single-day study could have been all routes in existence in PFY 1997 Quarter 4.
- (b) Please explain fully how the universe and sampling frame for the routes in the Phase 2 multiple-day study could have been all routes in existence in PFY 1997 -Quarter 4.
- (c) On page 34 of your testimony you indicate that four of witness Raymond's sampled files could not be located on the Carrier Route Master File for PFY 1997 Quarter 4. Please confirm that these four routes are:

	Route	USPS Area	ES Observation Dates	
CY 50	8739	Southeast	7/31/97	
CY 66	0257	Pacific	12/19/97	
CY 66	0281	Pacific	1/13/98	
CY 04	4999	Allegheny	1/30/98	

If these are not the four routes that could not be located, please provide the correct information.

- (d) Please explain why there were four routes in Mr. Raymond's sample but were not in his universe or sampling frame.
- (e) Do the results presented in parts (a) and (c) of your response include the four routes that could not be located on the Carrier Route Master File for PFY 1997 – Quarter 4?

(f) Please provide the route types and sample weights that you have used (in your response to OCAIUSPS-T-12-6) for the four routes that could not be located in the PFY 1997 - Quarter 4 Carrier Route Master File.

#### RESPONSE:

(a) and (b). It would be more accurate to state that the universe under study can be defined as the population of all city carrier routes (other than phantom routes) in existence between PFY 1997 – Quarter 1 and PFY 1998 – Quarter 3. The quoted statement from my response to ADVO/USPS-T13-23 (a) refers to PFY 1997 – Quarter 4 because it is the mid-point between these beginning and ending postal quarters. Note, however, that the population of routes changed slowly between PFY 1997 – Quarter 1 and PFY 1998 – Quarter 3. As the table below demonstrates, the total number of city routes, excluding phantom routes, decreased, but by only 1,694 or 1.02%, from PFY 1997 – Quarter 2 through PFY 1998 – Quarter 3. (Comparable PFY 1997 – Quarter 1 are not available). Therefore, the population in existence during PFY 1997 – Quarter 4 serves as a good approximation of the average population of routes from PFY 1997 – Quarter 1 through PFY 1998 – Quarter 3.

Total Number of City Carrier Letter Routes. PFY 1997 – Q1 Through PFY 1998 – Q3

	97-Q2	97-Q4	98-Q3
Foot Routes	20,267	19,115	15,995
Residential Loop Routes	82,745	82,908	81,959
Residential Curb Routes	51,134	51,486	54,281
Mixed Loop Routes	5,205	5,220	4,976
Mixed Curb Routes	4,049	4,056	4,374
Business Motorized Routes	3,300	3,322	3,421
Total Routes	166,700	166,107	165,006

### (c) Confirmed.

- (d) I cannot explain the absence of these four routes from the City Route Master File. However, the decision to include or exclude these four routes from the calculation of street-time percentages has virtually no impact on the final estimates of these percentages. See my response to OCA/USPS-T12-6(c).
- (e) No.
- (f) The route types assigned to these routes were the route types reported in the ES data set. They are as follows:

Route 8739 - Residential Loop

Route 0257 - Residential Loop

Route 0281 – Mixed Loop

Route 4999 – Residential Loop

Since the data on total population residential loop routes and mixed loop routes that were needed to form tally weights for these four routes were not available, I assigned tally weights of one to all tallies recorded for those routes.

ADVO/USPS-TI2-17. Please refer to your response to ADVO/USPS-T13-23 (a), redirected to you from witness Raymond and your statement cited in the above interrogatory.

- (a) Please explain fully how Mr. Raymond's sampling from the universe of city routes (that you have identified) was performed so as to ensure adequate representation of the universe.
- (b) Mr. Raymond has stated that, once the sites (zip codes) were selected, the routes within those sites were selected randomly. Does your comment that the universe (and sampling frame) can be viewed as a set of six populations mean that Mr. Raymond developed a sampling scheme that segmented the city letter route universe into six populations, each of which sampled randomly at some route-type-specific sampling rate? If so, please provide the details of that sampling scheme and explain how it ensures adequate representation of each of the individual route-type universes.

#### RESPONSE:

- (a) I believe Mr. Raymond's responses to OCA/USPS-T13-1 and ADVO/USPS-T13-23(b) show how his sample adequately represents the universe.
- (b) No. My comment is a suggestion that one could view the ES sample as if it consisted of six sub-samples, each of which was selected from a corresponding subpopulation of routes.

ADVO/USPS-T12-18. Please refer to your response to ADVO/USPS-T13-23(a) and (c) redirected to you from witness Raymond. If the time proportions for foot, aggregate park & loop, and aggregate curb are statistically valid, does that mean that the proportions of sample weighted tallies (within and among the three route types -- foot, aggregate park & loop, and aggregate curb) developed by you (and used to prepare your response) are also statistically valid? Please explain.

#### **RESPONSE:**

It is unclear what is being asked here. The estimated time proportions are the proportions of sample weighted tallies.

ADVO/USPS-T12-19. Please refer to your response to ADVO/USPS-T13-23 (a) and (c) redirected to you from witness Raymond. Please confirm that the statistical tests in your response describe the statistical comparison between Mr. Raymond's sampled routes and the universe during the time period over which those routes were sampled. If this is not correct, please so state, and explain that the statistical tests do describe.

#### RESPONSE:

Confirmed. In my view, these tests also describe the statistical comparison between sampled routes and the universe during the time periods when the work-sampling data were collected.

### **DECLARATION**

I, Donald M. Baron, declare under penalty of perjury that the foregoing answers are true and correct to the best of my knowledge, information, and belief.

Date: 5-2-06

#### **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.

Richard T. Cooper

475 L'Enfant Plaza West, S.W. Washington, D.C. 20260-1137 May 2, 2000