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

Postal Rate and Fee Changes — Docket No. R2000-1

RESPONSE OF THE UNITED STATES POSTAL SERVICE WITNESS CRUM TO INTERROGATORIES OF DISTRICT PHOTO, ET AL. (DMC/USPS-T27-1-7)

The United States Postal Service hereby provides the responses of witness Crum to the following interrogatories of District Photo, et al.: DMC/USPS-T27-1-7, filed on March 20, 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.
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April 3, 2000

DMC/USPS-T27-1. Please refer to Exhibit F, Table 3. Under the column "Sum over Shapes," you show total weight equal to 10,348,752,000 pounds, and cubic feet equal to 506,070,000.

a. Please confirm that the average density implied by your data is equal to 20.45 pounds/cubic foot. If you do not confirm, please explain.

b. The 1998 CRA, at page 3, indicates that the weight per cubic foot of Total Standard A Mail is 17.7 pounds. Please reconcile the density computed from your data with the density provided in the CRA.

c. The billing determinants, Table G-6, page 5, show total weight of Standard A letters in FY 1998 equal to 2,234,989,634 pounds. Your Table 3 shows total weight of letters in FY 1998 equal to 2,309,766,000 pounds. Please reconcile the two, and indicate the source of data for your Table 3.

d. The billing determinants, Table G-6, page 5, show total volume of Standard A letters in GFY 1998 equal to 44,738,715,475. Your Table 3 shows total volume of letters in FY 1998 equal to 45,174,555,000. Please reconcile the two different figures for the volume of Standard A letters in GFY 1998, and indicate the source for this datum in your Table 3.

RESPONSE

a. Confirmed.

b. The weight per cubic foot presented in the CRA comes from TRACS density factors. Please refer to the U.S. Postal Service response to FGFSA/USPS-T1-10 for more details on TRACS density factors. That data is not disaggregated by shape. I use two studies to get weight per cubic foot by shape. These densities by shape are weighted together to get the total weight per cubic foot for bulk Standard Mail (A) presented in my testimony. Please note that since my number is only for bulk Standard

Mail (A), it does not include Single-Piece while the 17.7 number presented in the CRA does include Single-Piece.

c.-d. The source for the weights and volumes presented in Attachment F, Table 3 is Attachment F, Tables 1 and 2. Attachment F, Tables 1 and 2 show Permit volumes tied to official Fiscal Year 1998 RPW totals. The billing determinants do not have volumes broken out fully by shape (letters, flats, and parcels) so I use Permit volumes. Please also refer to witness Daniel's response to ADVO/USPS-T28-1.

DMC/USPS-T27-2. Your Exhibit F, Table 3, shows that in FY 1998 IPPs and parcels had total weight of 475,067,000 pounds and total cubic feet of 58,506,000. Please confirm that your data imply an average density of 8.12 pounds/cubic foot for IPPs and parcels.

RESPONSE

Confirmed.

DMC/USPS-T27-3. Your Exhibit F, Table 3, shows that in FY 1998 flats had a total weight of 7,563,919,000 pounds and total cubic feet of 366,291,000. Please confirm that your data imply an average density of 20.65 pounds/cubic foot for flats.

RESPONSE

Confirmed.

DMC/USPS-T27-4. Your Exhibit F, Table 3, shows that in FY 1998 letters had a total weight of 2,309,766,000 pounds and total cubic feet of 81,273,000. Please confirm that your data imply an average density of 28.42 pounds/cubic foot for letters.

RESPONSE

Confirmed.

U.S. POSTAL SERVICE WITNESS CHARLES L. CRUM
RESPONSE TO INTERROGATORIES OF
DISTRICT PHOTO, INC., MYSTIC COLOR LAB, AND COX SAMPLING

DMC/USPS-T27-5.

a. If the density of letters and flats, respectively, is 28.42 and 20.65 pounds/cubic foot, would you consider these two densities to be relatively similar?

b. If the density of flats and IPPs/parcels, respectively, is 20.65 and 8.12 pounds/cubic foot, would you consider these two densities to be relatively similar?

c. If the density of letters and IPPs/parcels, respectively, is 28.42 and 8.12 pounds/cubic foot, would you consider these two densities to be relatively similar?

RESPONSE

a. I would generally categorize those two as relatively similar.

b. No.

c. No.

DMC/USPS-T27-6. Please refer to your testimony at pages 1-7 and confirm that when computing destination entry cost savings for Standard A Mail, you average letters, flats, IPPs and parcels together, treat them as homogeneous for purposes of all your computations, and develop one set of DBMC, DSCF and DDU cost avoidances that you regard as applicable to letters, flats, IPPs, and parcels. Please explain any answer that is not an unqualified affirmative.

a. Please discuss whether your computation of cost avoidances represents a "top-down" exercise in cost analysis and rate development.

b. For purposes of this question, please assume that when mail is entered at destinating DDUs, the Postal Service avoids (or saves) the costs which you have computed. Now consider the mail that is not entered so deep in the postal network.

(i) Would you agree that mail which is entered upstream will cause the Postal Service to incur costs that, on average, will be equal to your savings estimates?

(ii) That is, will Standard A Mail entered at a DSCF cost the Postal Service an additional $0.0233 per pound ($0.1329 - $0.1096)?

(iii) And will Standard A Mail entered at a DBMC cost the Postal Service an additional $0.0367 per pound ($0.1329 - $0.0962)?

(iv) In other words, would you agree that costs avoided (in a top-down approach) would be equal to costs incurred (in a bottom-up approach)? If you do not agree, please provide a detailed explanation why costs avoided are not equal to costs incurred.

c. (i) If you were to "de-average" your computation of destination entry cost avoidances, and compute the avoidances separately (using actual density where that is the cost driver) for (i) letters and flats, and (ii) IPPs and parcels, which estimated avoidances would be higher and which would be lower?

(ii) If you have performed any such computation, please provide the results.

RESPONSE

Confirmed.

a. I am unsure exactly what you mean by "top down". The total transportation and non-transportation costs per piece are an input to the equation presented in Attachment B, Table 9 and Attachment C, Table 1.

b.

i. I assume that the total cost per pound of transporting and crossdocking all Standard Mail (A) to the destination delivery unit is comprised of the cost of transporting and crossdocking DBMC entered mail plus DSCF entered mail plus origin entered mail to the delivery unit.

ii. $.0233 per pound is the estimated additional transportation cost savings of depositing pieces at the DDU versus the DSCF.

iii. $.0367 per pound is the estimated additional transportation cost savings of depositing pieces at the DDU versus the DBMC.

iv. I am unsure what you mean by "top-down" versus "bottom-up", but the "savings" by entering at an SCF could also be viewed as the additional cost that is incurred if the piece is entered at a BMC instead of an SCF.

c.

i. All else equal, due to their density, IPPs and parcels would have higher estimated cost avoidances than letters and flats.

ii. Please refer to the attached page. This page is being provided only to fully comply with this discovery request.

ATTACHMENT TO WITNESS CRUM'S RESPONSE TO DMC/USPS-T27-6c

Transportation Savings by Shape

	(2) Density (lbs/Cft)	($/ft3) DBMC (3)	($/ft3) DSCF	($/ft3) DDU	($/lb.) DBMC (1)	($/lb.) DSCF	($/lb.) DDU	($/lb.) DBMC (5)	($/lb.) DSCF	($/lb.) DDU
Letters	28.42	2.73	3.12	3.78	*$ 0.0962*	*$ 0.1096*	*$ 0.1329*	**$ 0.0692**	**$ 0.0789**	**$ 0.0956**
Flats	20.65	1.99	2.26	2.74	*$ 0.0962*	*$ 0.1096*	*$ 0.1329*	**$ 0.0953**	**$ 0.1086**	**$ 0.1316**
Parcels	8.12	0.78	0.89	1.08	*$ 0.0962*	*$ 0.1096*	*$ 0.1329*	**$ 0.2423**	**$ 0.2761**	**$ 0.3347**

cubic feet	81,272	366,293	58,506	506,070	
cf %	16.1%	72.4%	11.6%		
(4) dbmc	$ 0.44	$ 1.44	$ 0.09	$ 1.97	Total wtd. Avg. savings per cubic foot
dscf	$ 0.50	$ 1.64	$ 0.10	$ 2.24	Total wtd. Avg. savings per cubic foot
ddu	$ 0.61	$ 1.99	$ 0.12	$ 2.72	Total wtd. Avg. savings per cubic foot

Logic:
(1) Model output in $/pound.
(2) Multiply by density (pounds/cubic feet)
(3) Have differing savings per cubic foot by shape which "should" be equal since it is cost driver
(4) Get a weighted average based on the proportion of cubic feet by shape
(5) Take that weighted average and divide by density to get savings per pound by shape.

Inputs in red and italicized. Output is bolded.

DMC/USPS-T27-7.

a. Please refer to your testimony at pages 7-12 and confirm that when computing Standard A Mail nonletter cost differences for purposes of developing a parcel surcharge, you "unbundle" letters, flats, IPPs, and parcels and treat them as non-homogeneous. If not, please explain fully.

b. Would you agree that the methodology which you use to develop the cost of IPPs and parcels is, or is tantamount to, a bottom-up approach to cost analysis and rate development? Explain fully any disagreement.

c. For purposes of this question, please assume that on average the Postal Service incurs the (bottom-up) costs which you have estimated for Standard A IPPs and parcels. Would you agree that if (or when) some of those IPPs and parcels are entered deep into the postal network, the Postal Service avoids, on average, the costs which you estimate it incurs when they are entered upstream? Unless you agree fully, please provide a detailed explanation of why costs incurred in your (bottom-up) approach to cost development in Exhibit F, Table 3, differ from costs avoided in a top-down approach to cost analysis.

RESPONSE

a. In Attachment F, Table 3 of my testimony I show cost estimates separately for Letters, Flats, and IPPs & Parcels.

b. I am unsure exactly what you mean by "bottom-up". I sum CRA costs by major segment to reach a total by shape for my cost analysis. Rate development issues are beyond the scope of my testimony.

c. I am unsure exactly what is being asked here, but the conclusion seems basically reasonable. The Standard Mail (A) cost results presented in Attachment F, Table 3 are disaggregated by shape (letter, flat, and

parcel). The estimated dropship savings presented in Attachment B and Attachment C are not disaggregated by shape.

DECLARATION

I, Charles L. Crum, declare under penalty of perjury that the foregoing answers are true and correct, to the best of my knowledge, information, and belief.

Charles L. Crum

CHARLES L. CRUM

Dated: 3 APRIL 2000

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

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