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POSTAL NATE LOMMISSION OFFICE OF THE SECRETARY

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Before the

### UNITED STATES POSTAL RATE COMMISSION

In the Matter of: Free POSTAL RATE AND FEE CHANGE

Docket No. R2000-1

**VOLUME 8** 

Wednesday, April 19, 2000 DATE: PLACE: Washington, D.C.

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BEFORE THE 1 POSTAL RATE COMMISSION 2 - - - - - - - X \_ \_ \_ \_ \_ In the Matter of: 3 POSTAL RATE AND FEE CHANGE : Docket No. R2000-1 \_ \_ \_ \_ \_ \_ \_ \_ **\_ \_ \_ \_ \_ \_ \_ \_** \_ \_ \_ X 4 Third Floor Hearing Room 5 Postal Rate Commission 1333 H Street, N.W. 6 Washington, D.C 20268 7 8 Volume VIII Wednesday, April 19, 2000 9 10 The above-entitled matter came on for hearing, pursuant to notice, at 9:31 a.m. 11 12 13 BEFORE: 14 HON. EDWARD J.GEILMAN, CHAIRMAN HON. GEORGE A. OMAS, VICE CHAIRMAN 15 HON. W.H. "TREY" LeBLANC, COMMISSIONER HON. DANA B. "DANNY" COVINGTON, COMMISSIONER 16 HON. RUTH GOLDWAY, COMMISSIONER ž7 18 19 20 21 22 23 24 25 ANN RILEY & ASSOCIATES, LTD.

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PROCEEDINGS 1 2 [9:31 a.m.] CHAIRMAN GLEIMAN: Good morning. Today we 3 continue our hearings to receive testimony of Postal Service 4 witnesses in support of Docket R2001. 5 Does any participant have a procedural matter to 6 raise this morning before we begin? I hope no. 7 [No response.] 8 CHAIRMAN GLEIMAN: Good. Moving right along, as 9 my colleague over here from Louisiana says, our first 10 witness today is Michael Bradley. Dr. Bradley is already 11 12under oath. 13 Mr. Koetting, or Mr. Cooper or whoever wishes to can proceed when ready. 14 15 Thank you, Mr. Chairman. The MR. KOETTING: Yes. 16 Postal Service calls Michael Bradley as its next witness. 17 Whereupon, MICHAEL D. BRADLEY, 18 a witness, having been recalled for examination and, having 19 20 been previously duly sworn, was examined and testified further as follows: 21 DIRECT EXAMINATION 22 BY MR. KOETTING: 23 Dr. Bradley, I have handed you a copy of a 24 Q 25 document entitled "Direct Testimony of Michael D. Bradley on

Behalf of the United States Postal Service," which has been 1 designated as USPS-T-22. Are you familiar with this 2 3 document? Α I am. 4 Was it prepared by you or under your supervision? 5 0 6 Α I prepared it. If you were testify orally today, would this be 7 0 8 your testimony? 9 It would. Α MR. KOETTING: Mr. Chairman, the Postal Service 10 moves the admission into evidence of the direct testimony of 11 Michael D. Bradley on behalf of the United States Postal 12 Service, USPS-T-22. 13 CHAIRMAN GLEIMAN: Is there any objection? 14 [No response.] 15 CHAIRMAN GLEIMAN: Hearing none, I will direct 16 counsel to provide the reporter with two copies of Witness 17 Bradley's testimony and the testimony is received into 18 evidence. As is our practice, we will not transcribe the 19 Postal Service direct testimony into the record. 20 [Direct Testimony of Michael D. 21 22 Bradley, USPS-T-22, was received into evidence.] 23 24 CHAIRMAN GLEIMAN: Are there any Category 2 25 Library References? I heard a shake of the head that

1 indicated a no.

There are none, Mr. Chairman. 2 MR, KOETTING: CHAIRMAN GLEIMAN: Dr. Bradley, have you had an 3 opportunity to examine the packet of designated written 4 5 cross-examination that was made available to you earlier today? 6 7 THE WITNESS: I have. CHAIRMAN GLEIMAN: And if those questions were 8 asked of you today, would your answers be the same as those 9 10 you previously provided in writing? THE WITNESS: They would. 11 CHAIRMAN GLEIMAN: No additions or corrections? 12 13 THE WITNESS: No, sir. CHAIRMAN GLEIMAN: Counsel, if you would please 14 15 provide two copies of the designated written 16 cross-examination of the witness to the reporter, I will direct that the material be received into evidence and 17 18 transcribed into the record. [Designation of Written 19 Cross-Examination of Michael D. 20 21 Bradley, USPS-T-22, was received into evidence and transcribed into 22 23 the record.] 24 25

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#### BEFORE THE POSTAL RATE COMMISSION WASHINGTON, DC 20268-0001

Postal Rate and Fee Changes, 2000

Docket No. R2000-1

DESIGNATION OF WRITTEN CROSS-EXAMINATION OF UNITED STATES POSTAL SERVICE WITNESS MICHAEL D. BRADLEY (USPS-T-22)

<u>Party</u>

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Newspaper Association of America

Interrogatories NAA/USPS-T22-1-4 UPS/USPS-T22-1-4

NAA/USPS-T22-4

UPS/USPS-T22-1-4

Office of the Consumer Advocate

United Parcel Service

NAA/USPS-T22-1-4

UPS/USPS-T22-1-4, 6-8, 9a-b

Respectfully submitted, Margan withu

Margaret P. Crenshaw Secretary

#### DESIGNATED RESPONSES OF UNITED STATES POSTAL SERVICE WITNESS MICHAEL D. BRADLEY (T-22) DESIGNATED AS WRITTEN CROSS-EXAMINATION

Interrogatory: NAA/USPS-T22-1 NAA/USPS-T22-2 NAA/USPS-T22-3 NAA/USPS-T22-4 UPS/USPS-T22-1 UPS/USPS-T22-2 UPS/USPS-T22-3 UPS/USPS-T22-4 UPS/USPS-T22-6 UPS/USPS-T22-7 UPS/USPS-T22-9a UPS/USPS-T22-9a

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Designating Parties: NAA, UPS NAA, UPS NAA, UPS NAA, OCA, UPS UPS UPS UPS UPS UPS

#### Response of United States Postal Service Witness Bradley to Interrogatories of NAA

NAA/USPS-T22-1. Please refer to page 15, lines 23-25 of your testimony, where you state that "Attributable costs incorporate only the cost of the last unit produced, whereas incremental costs incorporate the costs of all of the units produced."

- a. Please confirm that the quoted statement assumes that "attributable costs" are defined as marginal costs (or volume variable costs).
- b. Please confirm that the Postal Rate Commission has not, in past cases, defined "attributable costs" as marginal costs (or volume variable costs) in all cost segments.

NAA/USPS-T22-1 Response:

- a. Not confirmed. Attributable costs are defined as the sum of volume variable costs and specific-fixed costs.
- b. I'm not sure I understand the role of the qualifier "in all costs segments." I believe that the Commission has attempted to apply a consistent definition of attributable cost in all cost segments. That definition specifies that attributable cost is the sum of volume variable and what the Commission has defined as specific fixed costs.
  I can thus confirm that in cost segments that contain specific fixed costs, attributable cost will exceed volume variable cost.

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#### Response of United States Postal Service Witness Bradley to Interrogatories of NAA

NAA/USPS-T22-2. Does the term "intrinsic cost" as defined in your testimony at page 20 include product specific costs that do not vary by volume (so long as at least one unit is produced)? If not, please explain.

#### NAA/USPS-T22-2 Response:

Intrinsic costs do not vary with volume at the margin. There are two types of product specific costs in the Postal Service cost structure: specific fixed costs and intrinsic costs. Neither vary with volume at the margin but the former is a fixed cost and the latter is a variable cost.

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#### Response of United States Postal Service Witness Bradley to Interrogatories of NAA

NAA/USPS-T22-3. Are the access costs incurred by a city carrier in accessing a single subclass stop an example of an intrinsic cost? If not, how would you classify single subclass access costs?

#### NAA/USPS-T22-3 Response:

No. I would classify the pool of single subclass costs as volume related incremental cost.

As volume of a subclass increases, some of that volume may go to a previously uncovered

stop. If so, a single subclass stop is created and additional access cost is incurred.

#### Response of United States Postal Service Witness Bradley to Interrogatories of NAA

NAA/USPS-T22-4. Please identify the ways in which your definition of incremental costs differs from the Postal Rate Commission's definition of "attributable costs."

#### NAA/USPS-T22-4 Response:

The definition of attributable cost includes volume variable cost. This means that all units of the product are multiplied by the marginal cost of the last unit produced. Incremental cost, in contrast, multiplies each unit of the product produced by its own marginal cost. This means that in components in which the variability is less than one, incremental cost will exceed attributable cost.

In addition, the definition of incremental cost includes both specific fixed costs and intrinsic costs. The definition of attributable cost includes only specific fixed cost. It is informative to note, however, that this difference may be greater in definition than in measurement. In the past, the Commission seems to have classified some intrinsic costs as "specific fixed" and thus included them in attributable cost.

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#### Response of United States Postal Service Witness Bradley to Interrogatories of UPS

UPS/USPS-T22-1. Confirm that "intrinsic costs," such as the expedited air network premiums (see USPS-T-22, p.20, footnote 17), were previously called "specific fixed costs" by the Postal Service. If you do not confirm, please explain.

#### UPS/USPS-T22-1 Response:

Not Confirmed. It is my sense that there was a bit of confusion about terms in this area in Docket No. R97-1. It is also my sense that intrinsic costs were never explicitly identified but were included as part of "product specific costs." For an explanation of the relationship among intrinsic costs, specific-fixed costs, and product-specific costs, please see my answer to your interrogatory UPS/USPS-T22-3.

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#### Response of United States Postal Service Witness Bradley to Interrogatories of UPS

UPS/USPS-T22-2. Refer to Docket No. R97-1, USPS-T-41, p.4, where witness Takis presents a graphical comparison of incremental costs and volume variable costs, and to Docket No. R97-1, Tr. 4735-37, where witness Takis discussed the use of the term "specific fixed."

- a. Confirm that the "darkly shaded triangle" on page 4 of USPS-T-41 represents those costs "which are associated with the economies or diseconomies which are realized or lost as volumes change" (Docket No. R97-1, Tr. 4735) if you do not confirm, please explain.
- b. Confirm that a product's specific-fixed cost is not included in this "darklyshaded triangls." If you do not confirm, please explain.
- c. Are a product's intrinsic costs included in this "darkly-shaded triangle"?

#### UPS/USPS-T22-2 Response:

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- a. As I understand it, the "darkly shaded triangle" represents the difference between incremental cost and volume variable cost in the diagram. In this diagram, incremental cost exceeds volume variable cost because the marginal cost of each unit of the driver decreases as the number of units provided increases. I believe that it is this latter characteristic that is associated with economies of scale.
- b. Confirmed.
- c. I don't think that this chart contemplated the role of intrinsic costs.

#### Response of United States Postal Service Witness Bradley to Interrogatories of UPS

UPS/USPS-T22-3. Provide a precise definition of the term "product-specific cost." Include in your definition the relationship between product-specific cost and each of the following terms:

- a. Specific-fixed costs;
- b. Intrinsic costs;
- c. Costs that are associated with the economies or diseconomies that are realized or lost as volume changes.

#### UPS/USPS-T22-3 Response:

The definition of product-specific cost and the relationship among product specific costs,

specific-fixed costs, and intrinsic costs are described in Section IV. B. of my testimony,

starting at page 33. The definition of product-specific costs and its relationship to other

costs are repeated here for convenience:

Before discussing their role in the incremental cost calculation, we should probably be clear as to what product specific costs are. Product-specific costs are incurred if any amount of the product is provided, but they do not increase at the margin with additional units of that product.

There are two types of product specific cost in the Postal Service cost structure: specific fixed costs and intrinsic costs. Specific-fixed costs do not vary with variations in the product's volume; indeed, they would be incurred even if the product's volume fell to zero. However, they are caused by the provision of just one product and would not exist if the product

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#### Response of United States Postal Service Witness Bradley to Interrogatories of UPS

was not part of the Postal Service's output vector.1

The other type of product-specific costs can be called intrinsic costs. These are variable costs that arise because of the particular characteristics of a product but do not vary at the margin. Consider two instances of intrinsic costs in the postal cost structure; these instances occur in the Priority Mail distribution operations and in network air transportation. The Priority Mail distribution operations exist for the purpose of expediting the handling of Priority Mail. They can and do sort other classes of mail, but without Priority Mail, those classes would be sorted in other operations. Consequently, if the Postal Service decided not to provide Priority Mail, the institutional costs for these operations would not exist. These costs thus are part of Priority Mail's incremental cost.

In similar fashion, the network costs exist for the transportation of expedited mail. For example, it is my understanding that the Eagle Network exists for the purpose of providing air transportation for Express Mail. Network air transportation is more expensive than commercial air transportation and this additional expense, in the case of the Eagle network, is caused by Express Mail. Regardless of what mail is actually carried on the network, the intrinsic costs exists because of the characteristics of Express Mail.

The roles of specific fixed costs and intrinsic costs in the incremental cost calculation can be illustrated analytically. The total cost in a cost component can be divided into fixed cost

<sup>&</sup>lt;sup>1</sup> Note that producing a product at zero volume and eliminating a product from the output vector are not the same thing. Product-specific advertising expenses are incurred before the fact and exist even if no units of the advertised product are sold. On the other hand, if the firm did not plan to sell the product at all, no advertising would be incurred.

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#### Response of United States Postal Service Witness Bradley to Interrogatories of UPS

and variable cost.<sup>2</sup> This is described analytically as:

$$C_{j} = F_{0j} + \sum_{i=1}^{m} F_{ij} + VC_{j}.$$
 (17)

Note the two types of fixed cost  $F_{ol}$  and  $F_{ij}$ . The former represents fixed and common cost, which exist for the provision of all products and are not part of the incremental cost of any. The  $F_{ij}$  represent specific-fixed costs. Within the postal costing structure, variable costs are well defined and this equation can be rewritten as:

$$C_{j} = F_{0j} + \sum_{i=1}^{n} F_{ij} + \alpha_{j} D_{j}^{e_{j}}$$
(18)

Later on, at page 38, my testimony presents an analytical definition of intrinsic costs:

The first of our two instances of intrinsic costs arise in the Priority Mail distribution operations. As explained above, other classes of mail are handled in these operations, but they are designed primarily for the handling of Priority Mail. That is, the operations were created because of the existence of Priority Mail and would not exist otherwise. The incremental cost calculation reflects this. From the base-year cost model, one obtains the volume variable costs of the individual products handled in a Priority Mail operation. One also then identifies the institutional cost. The incremental cost for Priority Mail operation is thus calculated as its volume variable costs and the total institutional costs. Mathematically, the incremental cost of Priority Mail ( $|C_{11}\rangle$ ) in one of these

<sup>&</sup>lt;sup>2</sup> Variable cost is not the same thing as "volume variable cost." In fact, volume variable cost is a subset of variable cost found by multiplying the total variable cost times the relevant "volume variability" or cost elasticity.

#### Response of United States Postal Service Witness Bradley to Interrogatories of UPS

operations is given by:<sup>3</sup>

$$IC_{ij} = a_j D_j^{e_j} \left( 1 + v_j (\theta_{ij} - 1) \right).$$
<sup>(21)</sup>

where  $\theta_{11}$  is Priority Mail's share of the driver.

The other instance of intrinsic cost is for dedicated air network transportation. In these cost components, the volume variable cost is found by multiplying the amount of the driver (poundmiles) times the (constant) marginal cost of commercial air transportation, ( $\beta_i$ ). In product cost model, the cost function for the dedicated air network is thus given by:

$$C = \alpha_i \tilde{D}_i, \qquad (22)$$

where the bar on the driver indicates that its amount is fixed with respect to small changes in volume and  $\alpha$ , represents the cost of a pound mile of dedicated network air transportation.4 One can express the volume variable cost for Express Mail as the product of the cost of a pound-mile of commercial air transportation times the number of pound-miles required:5

$$VVC_{ij} \bullet \beta_j D_{ij}. \tag{23}$$

3 Note that there are no fixed costs in these components.

It is my understanding that the air network is sized for a minium scale and more capacity exists than is required to handle just the Express Mail. Thus marginal increase in Express Mail volume do not affect the capacity of network.

5 The volume variability of commercial air transportation is one.

#### Page 5 of 5

#### Response of United States Postal Service Witness Bradley to Interrogatories of UPS

The incremental cost of Express Mail in this component adds in the intrinsic cost to the volume variable cost:

$$IC_{ij} = \beta_j D_{ij} + \langle \alpha_j - \beta_j \rangle \vec{D}_j. \qquad (24)$$

I'm not sure exactly what was meant by "Costs that are associated with the economies or diseconomies that are realized or lost as volume changes." However, the other part of incremental cost (the only part that is left after accounting for specific-fixed and intrinsic costs) is the volume related cost caused by the product. That is represented by the term  $\alpha_j D_j^{e_j} (1 - (1 - \theta_{ij})^{e_j})$  from equation 12 from my testimony, reproduced below for convenience.

$$IC_{ij} = F_{ij} + \alpha_j D_j^{e_j} (1 - (1 - \theta_{ij})^{e_j}), \qquad (12)$$

#### Response of United States Postal Service Witness Bradley to Interrogatories of UPS

UPS/USPS-T22-4. Witness Kay uses the term "volume related incremental cost" at line 26, page 4 of USPS-T-23. Provide your definition or understanding of this term, and describe the relationship between "volume related incremental cost" and each of the following terms:

- a. Product-specific costs;
- b. Specific-fixed costs;
- c. Intrinsic costs;
- d Costs that are associated with the economies or diseconomies that are realized or lost as volume changes.

#### UPS/USPS-T22-4 Response:

When Witness Kay uses the term "volume related incremental cost," she is referring to those costs that are caused by a product and that vary with the level of provision of that product. In the incremental cost calculation, they are give by the term:  $\alpha_j D_j^{r_j} (1 - (1 - \theta_j)^{r_j})$ .

I provide a detailed description of the relationship among product-specific costs, specific

-fixed costs, intrinsic costs and volume related cost in my answer to USP/USPS-T22-3.

However, the following taxonomy may be helpful.

Product-specific costs are made up of specific fixed costs and intrinisic costs. (Neither of these costs vary with volume at the margin).

A product's total incremental cost is made up of its product-specific cost and its volume related incremental cost.

#### Response of United States Postal Service Witness Bradley to Interrogatories of UPS

UPS/USPS-T22-6. Refer to page 34 of your testimony, where you state that it is "[your] understanding that the Eagle network exists for the purpose of providing air transportation for Express Mail." USPS-T22, at 34, lines 16-17. Explain the basis for your understanding.

UPS/USPS-T22-6 Response:

My understanding is based upon the testimony of Witness Takis on this subject in Docket

No. R97-1 and discussions with Postal Service transportation experts.

#### Page 1 of 1

#### Response of United States Postal Service Witness Bradley to Interrogatories of UPS

UPS/USPS-T22-7. Please refer to page 2 of the testimony of witness Pickett, USPS-T19, where he states that "premium costs of the Eagle and Western networks are treated as incremental to Express Mail." USPS-T19, at 2, lines 2-3. Is it your understanding that the Western network exists for the purpose of providing air transportation for Express Mail. If so, provide the basis for your understanding.

#### UPS/USPS-T22-7 Response:

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My testimony presents the new Postal Service method of computing incremental cost and provides the mathematical basis for calculating incremental costs. It was not necessary for me to review the details of the Western network to develop that mathematical basis. However, because the Postal Service treats the premium cost of the Western network as incremental to Express Mail, then I would infer that the network exists for the purpose of "providing air transportation for Express Mail."

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#### Page 1 of 1

#### Response of United States Postal Service Witness Bradley to Interrogatories of UPS

UPS/USPS-T22-8. Refer to the testimony of witness Xie, USPS-T-1, page 24, Table 9. Confirm that, in BY98, Express Mail accounted for 9 percent (\$1,161,000/\$12,398,000) of non-premium Western Network costs.

#### UPS/USPS-T22-8 Response:

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In response to your interrogatory, I obtained a copy of witness Xie's testimony. On page 24 of witness Xie's testimony, I found a table entitled "BY98 Western Network Costs and Confidence Intervals." I found the numbers \$1,161,000 (associated with Express Mail) and \$12,398,000 (associated with the Total). When I divided the two numbers I obtained 9.36%.

#### Page 1 of 4

#### Response of United States Postal Service Witness Bradley to Interrogatories of UPS

UPS/USPS-T22-9 Refer to footnote 28 on page 38 of your testimony, where you state that "It is my understanding that the air network is sized for a minimum scale." Refer also to the response of the Postal Service to Interrogatory UPS/USPS-T1-17, redirected from witness Xie, in which the Postal Service indicates that on August 29, 1999, the aircraft deployed on the Western network were upgraded from DC-9-30s and DC-9-15s to 727-200s.

- a. On page 38, footnote 28, of your testimony are you referring to the scale of the Western Network prior to August 27, 1999 or its current scale?
- b. If you were referring to the scale of the Western Network as it existed in BY98, is it you opinion that currently, following the upgrade to 727-200s, the Western Network is still at the minimum efficient scale needed for the transportation of Express Mail?
- c. Provide supporting data by mail class and subclass to show how rising mail volumes have affected the scale of the Western network.
- d. Provide volume data by mail class for the Western Network from August 20, 1999, through AP4, PY2000.

#### UPS/USPS-T22-6 Response:

a. Neither. I was not aware of the physical configuration of the aircraft on the Western

network. I was just providing a general statement for the context of the following mathematical expression:

In this expression, C is the accrued cost, D is the cost driver (pound miles of dedicated air transportation), the bar on the driver indicates that its amount is fixed with respect to small changes in volume, and  $\alpha_j$  represents the cost of a pound mile of dedicated network air transportation.

#### Response of United States Postal Service Witness Bradley to Interrogatories of UPS

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b. My testimony provides the analytical structure for calculating incremental costs. On pages 37-38, I present the mathematical basis for calculating incremental costs for the dedicated air network under the condition that small changes in volume do not bring forth changes in its capacity. I did not undertake, as it was not required for my testimony, an investigation of the nature of the Western network either before or after August 27, 1999.

In response to your inquiry, however, I investigated why the aircraft were changed in the Western network. The response from Postal Service air transportation experts indicated that it did not have to do with volume but with technical aspects of network transportation. I do not purport to be an expert in this area, but I was able to obtain information that was responsive to your question. In particular, I was informed that alternative aircraft were specified due to the following reasons:

 The fact that DC-9s use different sized cargo containers than other aircraft.
 This apparently makes it difficult and time consuming to connect between DC-9s and other aircraft. In addition, I am told that it also reduces efficiencies when the Postal Service has to have multiple-sized containers on site.

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#### Response of United States Postal Service Witness Bradley to Interrogatories of UPS

- 2. DC-9s apparently have a reduced presence in the marketplace. The Postal Service believes that DC-9's cost and cargo displacement have made them less attractive to the industry. Therefore, the Postal Service was concerned that a solicitation requiring DC-9s would have been meet with a lot less competition and availability.
- 3. I was told that a reduced presence for the DC-9 in the marketplace results in a higher cost, that is then comparable to the cost of the larger 727-100. For example, Postal Service transportation experts indicated that reduced availability can cause maintenance difficulties as parts and trained mechanics are more difficult to find. In fact, the Postal Service apparently had occasions in which they had contract bids including 727s that were priced less then the current cost of using DC-9s.
- 4. The requirements for the Western Network solicitation did not specify the type of aircraft. Rather, I was told that it required containers that were compatible with the "A-2" container. DC-9s are not compatible with this type of container as they apparently carry "A-6" containers. In addition, I was told that the solicitation required that ability to carry eight "A-2" containers, which

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#### Response of United States Postal Service Witness Bradley to Interrogatories of UPS

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could be satisfied by a 727-100. The Postal Service believes, however, that many offerors bid the equipment that they had available. Because of the prevalence of 727-200s in the industry, these larger aircraft (which apparently can hold twelve "A-2" containers) were included in the bids. Finally, I was informed that the Postal Service believes that it obtained the services of the larger aircraft at a cost that it expected to pay for the smaller aircraft. That is, they did not specify and pay for larger aircraft for volume reasons.

Given this information, it seems reasonable that the Western network is sized for technical efficiencies associated with providing network transportation and not due to changes in the volume of Express Mail or any other class or subclass.

- c. This part of the interrogatory has been redirected to the Postal Service
- d. This part of the interrogatory has been redirected to the Postal Service

CHAIRMAN GLEIMAN: Is there any additional written 1 2 cross-examination for Witness Bradley? 3 [No response.] CHAIRMAN GLEIMAN: If not, that brings us to oral 4 cross-examination. The Office of the Consumer Advocate is 5 the only participant that I am aware of that filed a request 6 7 for oral cross-examination. Is there anyone else who either filed or didn't file and wishes to cross this witness? 8 9 [No response.] CHAIRMAN GLEIMAN: If not, then, Mr. Costich, you 10 can begin when you are ready. I hope you are of stronger 11 voice this morning. If not, pull the mike closer. 12 MR. COSTICH: Well, it is early in the morning, 13 perhaps that will help. 14 CHAIRMAN GLEIMAN: Is it early in the day, but it 15 16 is hardly early in the morning. MR. COSTICH: Right you are. 17 CROSS-EXAMINATION 18 BY MR. COSTICH: 19 Good morning, Dr. Bradley. 20 Q 21 Α Good morning. Could you look at your response to interrogatory 22 Q UPS/USPS-T-22-3? 23 24 Α I have it. On page 3 of that response, toward the bottom, 25 Q

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1 there is a quotation from your direct testimony, is that 2 correct?

3 A That is correct.

4 Q And you are discussing intrinsic costs, is that 5 correct?

A That is correct.

Q And you give an example of intrinsic costs
occurring in Priority Mail distribution, is that correct?

A Yes, sir.

Q You say that while these operations may process other classes of mail, the operation would not exist but for the existence of Priority Mail, is that the point you are making?

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A That is my understanding, yes.

Q If I could pose a hypothetical to you, would the same concept of intrinsic cost apply where a combination of two subclasses of mail exist and cause the existence of a particular cost, would that be also -- or conceivably an instance of intrinsic cost?

A To be sure -- I think the answer is yes, but to be sure I understand your question, in the hypothetical we have an operation which is in existence only because of the existence of the two products that we are discussing. And in that instance, there could be intrinsic costs which were incremental to those two products, yes.

1 Q Well, that is -- I guess several folks are having 2 a little difficulty figuring out where intrinsic cost fits 3 in with the overall notion of incremental cost.

A Sure.

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These are fixed costs?

If you would just, if you would allow me a 6 Okay. Α 7 little latitude, I would be glad to first explain sort of 8 where they fit in and then specifically answer your 9 question. No, they are not fixed costs. These costs are a 10 little hard because, let's think about -- specific fixed costs is a concept we are probably -- we are familiar with, 11 12 and these are costs which exist to provide the product but 13 don't vary with volume. In most part, that is understandable. 14

15 But the Postal Service is an organization that has 16 a lot of labor, and they have a lot of variable costs. So 17 there are certain things that they do which really aren't 18 fixed costs in the traditional sense that you have to pay 19 them even if you don't provide the product, but yet those costs exist even in their amount without any variation in 20 21 volume. An example here might be Priority Mail operation in 22 this case where there is a certain amount of cost dedicated to setting up and having that operation in place, and those 23 24 are labor costs.

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Now, if you didn't have Priority Mail, you

wouldn't have to pay those costs. So this isn't like 1 2 lawyers' fees or fixed building costs, which is fixed, whether they have the operation or not, but yet once you set 3 up that operation, those costs no longer vary with volume at 4 5 the margin. So their responsibility goes to Priority Mail but they are not the classic fixed costs which -- fixed 6 7 costs means I have got to pay it whether I have the product That is, you know, a commitment I as the firm has 8 or not. made and I have got to pay it. 9

10 So, intrinsic costs are trying to fill in the gap 11 in the Postal context when you have traditional variable 12 costs that are part of the provision of a product, but 13 really would go away if you didn't have the product itself.

14 So, that very long answer to your question is, no, 15 they are not specific fixed, and the reason that one would 16 know that is if we didn't provide the product, the costs 17 would disappear.

Q Okay. The description you have given of fixed costs or intrinsic costs, or rather the distinction you are making between intrinsic and fixed sounds more like a distinction I used to be familiar with, a distinction between fixed and sunk.

23 A Well, --

Q Does the concept of sunk costs get in here at all? A No. No. Neither of these costs are sunk. Sunk

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1 costs are fixed costs which are not recoverable, have no salvage value, that once they are spent, they are gone. 2 And that is not really the issue here at all. 3 0 Okay. When you say the intrinsic costs are costs 4 you have to pay, but would go away --5 А Right. 6 7 Q -- if you eliminated the product, --Right. Α 8 9 0 -- I think I can follow that. 10 Α Okay. But when you were trying to distinguish fixed 11 Q 12 costs, you said costs that you have to pay whether you provide the product or not, is that -- did I hear you right? 13 14 А Right. The traditional -- I will give a general 15 traditional economic response and then we can think about some Postal examples. The classic case is the law firm. 16 17 You know, a law firm goes into business and they have to contract for space and they sign a contract for that space 18 or, you know, they buy it, and they pay those costs. Now, 19 20 if the partnership doesn't work out and the lawyers never go into business, well, those costs were still incurred and 21 they are fixed costs, even though the product was never 22 provided. That is, you know, the classic story of what a 23 24 fixed cost is. 25 From the Postal perspective, fixed costs would be

similar. It is a cost that the Postal Service has incurred
 and that has to be paid even though zero amount of the
 product will be provided.

Q Okay. I guess the trouble I am having is I was thinking of a similar example, a lease or a buying of space. You can always sublet or resell what you bought. At least in your lawyer example, I would think there would be a fine market for getting rid of your unfortunate lease or deed.

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9 A Not being an expert in real estate economics, it 10 seems reasonable to me that there is some possibility the 11 landlord may let you out of the lease. Maybe not, I don't 12 know, it depends upon, I guess, how good a rental contract 13 he negotiated with you.

But that is really, the issue there is determining 14 the size of the fixed cost. In other words, in your 15 hypothetical, if the original rental contract was for 16 \$10,000 a year and I can sublet it for eight, then the two 17 mixed be the fixed. Or it could be that, you know, the 18 lease would not be a fixed cost. If you can -- if it is 19 costs you don't have to incur, then it wouldn't have to be 20 fixed. 21

Q Okay. In your example of a lease for 10,000, and you can sublet for eight, the eight would be something like your fixed costs, and the two would be a sunk? A I think the two is a fixed cost. That's -- the

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eight, actually, as it turns out, because you have the 1 2 ability not to incur it, it would be -- it's more variable costs. 3

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it.

It's a cost I can get rid of if I no longer 4 produce output. Again, I'm not that expert on the nature of 5 leasing, and maybe that old example predates, it seems. 6 7 But I think the idea of fixed costs is pretty simply defined as costs that the firm incurs, even at zero 8 output -- zero level of output. 9 COMMISSIONER LeBLANC: Mr. Costich, I'm sorry to 10 interrupt you. 11 12 MR. COSTICH: Sure. COMMISSIONER LeBLANC: Dr. Bradley, are you saying 13 then that you have a -- it's almost a variable and an 14 institutional combination? Forget what you call it, whether 15 it's specific fixed or whatever it is; it's institutional; 16 is it not? 17 In other words, you're drawing a very fine line 18 there between institutional and specific fixed, to me. 19 20 THE WITNESS: Yes. COMMISSIONER LeBLANC: And what you just said, if 21 22 we use your example of the attorneys, that cost is there; 23 therefore, it is institutionalized. They still owe it, and it's just a play on words at that point as to what you call

1 THE WITNESS: Okay, let me try to be clear: The 2 whole point of intrinsic costs is to avoid making costs 3 institutional. In other words, the notion behind intrinsic 4 costs is to recognize that there are some variable costs 5 that are associated with individual products that should not 6 be just put into institutional.

7 That's its goal; it's trying to increase the 8 circumference of the costs that are attributed or 9 incremental, to classes.

10 So, I agree, it's a bit awkward, but it's an 11 attempt to try and make sure that when one thinks about all 12 the types of costs that the Postal Service incurs, you have 13 this mechanism to get them back to products.

14 They're very much like specific fixed costs. And 15 the distinction is one that just allows for the possibility 16 that the Postal Service does incur costs that it cannot 17 incur if it doesn't provide the product, but don't vary at 18 the margins.

19 COMMISSIONER LeBLANC: Well, we'll get into it 20 later. I didn't mean to interrupt you, Mr. Costich, thank 21 you.

22 MR. COSTICH: Sure.

23 BY MR. COSTICH:

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Q Well, perhaps another way to go at this is to ask you to distinguish between two costs you just mentioned.

A Okay.

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Q Variable costs or even volume variable costs, and then costs that vary at the margin, do you see a distinction there?

A Okay. Variable costs, broadly defined, are costs that are incurred if output is produced.

50 we're not saying whether they vary at the 8 margin or not. Those are costs that are associated with 9 production of the product.

Volume variable costs are costs that are associated with additional production. They do vary at the margin.

So I'd make a distinction between the general
 classification of variable costs, and volume variable costs.

15 In the Postal contracts, labor is an example. 16 Again, we can get into distinctions, but, generally 17 speaking, labor has traditionally been characterized as a 18 variable costs.

19 It's something the firm generally has the ability 20 to shed if they don't produce output.

But as you know, not all labor costs are volume variable, because not all vary at the margin. So I would make the distinction between variable as a class of costs, and volume variable.

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Q Are you familiar with the phrase, inframarginal

- 1 costs?
- 2 A I've heard it.

3 Q Is that what you're trying to describe when you 4 talk about intrinsic costs?

5 A No, no.

6 Q Well, what is your understanding of inframarginal 7 costs?

A I'm reluctant to bring another term into this discussion, but inframarginal costs, I think was an attempt to try to get at this notion that when the Postal Service has scale economies, the cost of the last letter provided, the marginal cost incurred, is less than the cost of the one before, the one before that, the one before that.

And so inframarginal costs is just a way of capturing the degree to which the cost of that last letter is below the cost of some previous amount.

17 Q So this concept applies when the marginal cost 18 curve is actually declining?

19 A That's correct.

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20 Q So it really wouldn't apply in your analysis; 21 would it?

A I'm not sure where that came from. My analysis?
 Throughout my analysis, marginal costs were
 declining, virtually for every component.

Oh, you mean in the discussion of intrinsic costs?

Q Yes. 1 Again, as I think I said, inframarginal and 2 Α 3 intrinsic aren't the same. 0 Gee, and I thought I might have a handle on it. 4 5 Α I'm sorry. Let's see, could you look at page 45 of your 6 Q 7 testimony? Sure. I have it. Α 8 0 Line 2. 9 Α I have it. 10 You mention that the Postal Service in this case 11 0 is going beyond single product incremental cost and has 12 looked at 26 pairs of products; is that correct? 13 Ά That is correct. 14 These pairs of products, Express and Priority, is 15 Q that one of the pairs. 16 17 А I think there is a -- I don't know, offhand, to tell you the truth. I think the Postal Service does do a 18 combination for expedited products, which is, I think, 19 Express and Priority. I don't think there is anything else 20 in there. 21 Would a similar possible combination of two 22 0 products be First Class letters and sealed parcels and 23 Standard-A Regular? 24 25 Would that be a combination? Sure. Α

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Q Have you analyzed any possible incremental costs
 of that combination?

A I actually haven't calculated incremental costs of any combinations, no. So the answer is no.

5 Q I take it it's Witness Kay who does the actual 6 calculations?

A That's correct. I'd be happy to talk to, you
know, issues in terms of feasibility and that kind of stuff,
but the actual calculations, I haven't done.

10 Q I began by asking you about a operation the Postal 11 Service performs that might go away if two products were 12 eliminated.

Would it be reasonable to think about the possibility that the delivery network of the Postal Service would be radically altered if First Class letters and sealed parcels and Standard A regular were to disappear entirely?

A Yes, sir.

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18 Q There would probably be a change in the delivery 19 network?

20 A I think that's fair.

Q Instead of thinking about that in terms of groups of subclasses, if one -- do you think it is reasonable to think about the delivery network in terms of shape if there were no letter-shaped pieces, only flats and parcels? Would there be likely a change, a significant change in the way

1 the Postal Service delivers the mail?

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That one is a little harder because my somewhat А 2 ready agreement with the previous one was under the 3 assumption that the vast majority of volumes are First and 4 5 Standard A regular. It is less clear if there were no letters what that would mean for the volumes of flats and б 7 whether indeed you would have the same significant volume reduction. 8

9 Q Does your approach to analyzing incremental costs 10 allow for the possibility that a product doesn't completely 11 disappear but volume reduces significantly, say 80 percent?

12 A The incremental cost of a product is defined as 13 the entire amount of cost associated with its provision and 14 I really haven't contemplated calculating the incremental 15 cost of 80 percent of a product.

16 It is not inconceivable to me that one could think 17 about that exercise but one would have to be very careful in 18 doing so because I hate to say this but it would affect the 19 specific fixed and intrinsic cost parts of your calculation, 20 and for those two parts it is not the amount of volume that 21 matters but whether the product is offered at all.

I just don't want to leave with the impression that the incremental cost of an 80 percent, 90 percent number would be 80 or 90 percent incremental cost of the whole product.

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Q I wouldn't expect that either --

A Okay.

Q -- but if 80 or 90 percent of a product were to disappear, does it seem likely to you that after full adjustment to that volume change the technology used to supply the remaining volume would be radically different from what had been used to supply the original volume.

8 A That would really be something I think you would 9 want to do on a case by case basis and look at the product 10 and look at the technologies and analyze it.

11 Q I am not asking you at this point about any 12 specific products or any specific technology but just in the 13 abstract would you expect that result, at least in a firm 14 that had significant declining marginal cost.

15 A Again I think it is a question that is very hard 16 to answer in the abstract.

17 It very much depends upon the nature of the 18 activity and the nature of the size of the class compared to 19 the overall activity and things like that.

I don't think it is -- I would not jump to the general rule to say well, just because 70 percent of a class's volume went away that would mean a radical alteration in its technology, no.

Q I will probably reveal how long ago it was that I studied economics, but I read an article by George Stigler

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1 entitled, "Economies of Scale Are Limited by the Extent of 2 the Market." Is that either an article or a concept that 3 you are familiar with?

A I don't want to reveal how long ago I studied 5 economics either but I do remember the title, yes.

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Q Does that title along suggest that if there is a 60 or 80 or 90 percent drop in volume of a product that 8 there may be economies of scale lost and therefore a 9 significant change in the total cost of production of the 10 new level of output?

11 A I don't know so much how the title relates to the 12 question but certainly it is possible that if a product 13 loses a substantial amount of its volume the marginal costs 14 will rise significantly because you have moved up the cost 15 curve.

You have lost the advantages of scale and economies, and I think that is your question, and the answer to that is yes.

19 Q Back to the concept of intrinsic cost.

Does that fit in anywhere in that situation, where the volume doesn't go to zero but it goes to significantly less?

23 A Right. In that case the intrinsic cost would 24 still have to be incurred. The idea behind intrinsic cost 25 is that the provision of the product makes you have to be

1 ready to man the windows or accept the product in the 2 processing facility or transport or whatever the case may 3 be, and it is perhaps the expedited nature of the product or 4 whatever that causes you to undertake these costs, so they 5 are very much like specific fixed costs. They are, just as 6 an economist would define them, variable costs, so they 7 would still be there.

8 Q Well, I think we have agreed that in a situation 9 where 80 percent of the volume disappears that there can be 10 some shedding of costs?

- 11 A Yes. Oh, yes.
- 12 Q But not intrinsic costs?
- 13 A Correct.
- 14 Q Is that what you are saying?
- 15 A What you would shed there would be the16 volume-related incremental cost.
- 17 Q But you couldn't use the current unit attributable 18 cost or unit volume variable cost in order to estimate how 19 much cost would be shed, could you?

20 A If we are still in the world of declining marginal 21 costs, then you would not use the current average 22 incremental costs to estimate the total reduction of volume. 23 You would have to redo the incremental cost exercise.

Q And what you would have to pick up is what we were discussing earlier, the inframarginal costs?

1 Α Yes, yes. So in the case of declining marginal cost, 2 0 Okay. if a significant volume disappears but doesn't go to zero --3 Α Right. 4 -- you are still left with the specific fixed 5 0 6 costs? 7 Α Correct. You are still left with the intrinsic costs? 0 8 Α Correct. 9 But you can shed these inframarginal costs that 10 Q exist between the two volume levels? 11 Α Exactly. 12 MR. COSTICH: Thank you. I have no further 13 14 questions, Mr. Chairman. CHAIRMAN GLEIMAN: Thank you, Mr. Costich. 15 Is there any follow-up? There doesn't appear to 16 17 be. Any questions from the bench? 18 19 [No response.] CHAIRMAN GLEIMAN: I just have one question. Mr. 20 Costich touched on a number of questions that I had about 21 22 the intrinsic nature of intrinsic. I am kind of curious about what a unit is, in your 23 24 mind. You talked before about a letter; you actually had to spell the word out for the Court Reporter. Is a unit just a 25

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single piece or is a unit something more or can it be 1 2 something more? THE WITNESS: It could be. It could be. In part 3 I think it depends upon which part of the postal activity we 4 are talking about in terms of a unit could be a cubic foot 5 6 mile of transportation or it could be --7 CHAIRMAN GLEIMAN: I am talking in terms of 8 volumes. 9 THE WITNESS: Oh, okay. Could a unit be more than a single letter? 10 11 CHAIRMAN GLEIMAN: Yes. THE WITNESS: Yes, it could be. 12 CHAIRMAN GLEIMAN: Could it be more than 100,000 13 letters if they came all at one distinct point in time? 14 THE WITNESS: I would say probably not, given the 15 16 nature of -- well -- I would say probably not because when 17 we talk about units in this vague sense we are really talking about small additions to output and to my mind 18 100,000 seems like it is big but maybe not compared to -- is 19 it 60 billion, dot, letters a year or whatever so --20 CHAIRMAN GLEIMAN: Actually it is --21 THE WITNESS: Sixty billion dollars --22 CHAIRMAN GLEIMAN: In terms of letters it is 100 23 billion, First Class letters or First Class pieces, excuse 24 25 me.

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1 THE WITNESS: I think the answer would be to look 2 at the technology and to see if traditionally output is 3 sized in 100,000 units -- 100,000 letter units -- I used the 4 word again -- 100,000 letter units. Is that a traditional 5 unit of production? You know, is the end of a run filling 6 up a truck and bringing 100,000 letters out? If so, then we 7 could think of it as a unit.

8 CHAIRMAN GLEIMAN: What about if it was filling up 9 a whole bunch of airplanes? You had "x" planes and then you 10 had a whole bunch more mail and you suddenly had "x plus 11 one" plane and you had to have that plane because you had 12 however many pieces of mail -- letters, parcels and whatever 13 else it took to fill up that one additional plan. Is that a 14 unit?

15 THE WITNESS: No. See, there the airplane is an 16 input not an output and units refer to the output, the 17 letters and the flats, that kind of stuff.

18 CHAIRMAN GLEIMAN: But the technology in this case 19 is how you transport mail so it is delivering mail not 20 through a machine, which has a throughput of 10-30,000 21 pieces an hour, but it is the amount of mail that you need, 22 the additional unit of mail that requires you to have some 23 additional transportation costs.

THE WITNESS: But in your hypothetical I don't think it would be -- was the plane carrying just that one

letter or was it filled again? I thought your hypothetical
 was just the additional letter, in which case the additional
 unit would just be that letter.

4 CHAIRMAN GLEIMAN: Well, I am talking about a 5 whole bunch of pieces of mail that suddenly appear on the 6 scene and require you to go from "x" airplanes or "x" pieces 7 of transportation equipment to "x plus one" pieces of 8 transportation equipment.

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You talked in terms of technology and throughput 9 10 of machines and I am just talking about another part of the postal system. Instead of the processing I am talking about 11 the next thing that happens after processing, which is 12 13 transporting it and I am just wondering that in light of the fact that you said or I understood you to say that looking 14 at technology, you know, it could be 100,000 letters if that 15 is the way you measure maybe throughput on a machine, 16 17 whether in terms of transportation costs you couldn't have a 18 measure of intrinsic incremental costs that relates to this 19 additional volume of mail that requires you to add another piece of transportation equipment. 20

I think you would agree in that case that that is an intrinsic incremental cost because you are adding an airplane.

THE WITNESS: I would certainly agree in that case that in that case it was incremental to the products that

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1 caused you to add the airplane, yes.

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2 CHAIRMAN GLEIMAN: Okay, but on the other hand, so 3 then a unit could be whatever it takes to fill up an 4 airplane?

5 THE WITNESS: If the -- I think it get it. If the 6 Postal Service is buying air transportation in airplane 7 chunks and it pretty much filled the airplane every time, 8 then in that case, you could think of the unit as the volume 9 to fill an airplane.

Just like in the rail, I think they buy it by the van, and in that case, the unit would be a van. So, you know --

13 CHAIRMAN GLEIMAN: Christmas Air Network would be 14 an intrinsic incremental cost, or volume variable cost? 15 THE WITNESS: I think my understanding of the 16 Christmas Network is that it is intrinsic incremental cost. 17 CHAIRMAN GLEIMAN: Why?

18 THE WITNESS: My understanding is that the network 19 is put in place for the --

CHAIRMAN GLEIMAN: Excuse me, the network is put in place to handle a specific unit of additional mail that couldn't be carried on all the airplanes that the Postal Service had previously contracted for.

You have to add a plus-one to the X-number of airplanes that you will use to transport the mail, so the

1 Christmas mail is a unit of mail.

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2 THE WITNESS: I see. I understand now. The 3 difference is and the reason I would draw the distinction is 4 the following:

5 When w talk about the marginal cost of an 6 additional unit, we're talking about in this case, I think, 7 Priority Mail, adding another unit of Priority Mail 8 throughout the whole year.

9 That is, when you do a marginal cost of Priority 10 Mail -- when I do a marginal cost of Priority Mail for, 11 let's say, a base year, that really is a marginal cost of 12 Priority Mail, given its characteristics throughout the 13 whole year.

And I think what we have here is the Christmas peak. So it's really not an increase in volume in the sense of a year-over-year-over-year increase in volume, but just a blip in volume that causes Priority Mail to incur these additional costs at the peak.

For example, if that mail came spread out throughout the year, the same volume would not cause those Christmas Network costs to be incurred.

22 CHAIRMAN GLEIMAN: What rule is there in economics 23 that says that you have to measure costs in terms of a year? 24 Or is it just a convenience of the Postal Service? 25 THE WITNESS: No, no. A year doesn't -- it

doesn't have to be a year, but it has to be defined for a given product output. In other words, the rule in economics is that when I want to find out the marginal cost of a hamburger, I have to define that unit as the characteristics associated with producing it.

And if it's a seasonal product, I want to include all the seasons. And so the reason to use the year here is simply because of the seasonality in mail.

9 CHAIRMAN GLEIMAN: But there is no seasonality to 10 Christmas mail, per se, as a unit; it comes every year at 11 Christmastime.

12 THE WITNESS: I guess if the product was Christmas 13 Priority Mail or Priority Mail sent in December or whatever 14 that two-week or three-week period of time is, then we might 15 say that those costs were volume variable to Christmas 16 Priority Mail, if that's a product sent only then, sure. 17 CHAIRMAN GLEIMAN: Thank you.

18 COMMISSIONER GOLDWAY: Can I follow up?

19 CHAIRMAN GLEIMAN: Sure, please.

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20 COMMISSIONER GOLDWAY: Under this pattern of 21 discussion, would that mean then that the costs or the rates 22 for Christmas Priority Mail would be different from the 23 costs and rates for the rest of the year, because you've 24 identified a unit that's just Christmas mail? 25 THE WITNESS: Certainly the costs would be

different. Whether the rates would be different, would, of 1 course, be a different matter, but the costs would be 2 different, sure. 3 COMMISSIONER GOLDWAY: So if we were to define 4 5 that product in a certain way? THE WITNESS: That's right. 6 7 COMMISSIONER GOLDWAY: And I have another question that I think also deals with Priority. In the example you 8 used, you said that intrinsic fixed costs would be costs . 9 10 such as the labor, the established labor system developed to handle the Priority system. 11 THE WITNESS: That's correct. 12 COMMISSIONER GOLDWAY: Whether or not you had one 13 piece or 100 pieces. 14 15 THE WITNESS: That's correct. 16 COMMISSIONER GOLDWAY: Are you saying that that 17 labor cost is not now attributed to Priority Mail? 18 THE WITNESS: I believe it is currently attributed to Priority Mail, yes. 19 COMMISSIONER GOLDWAY: And how is it currently 20 21 attributed? THE WITNESS: In the Postal Service model, it's 22 part of Priority Mail's incremental cost, and in the Postal 23 24 Rate Commission's model, it's part of Priority Mail's attributable costs. 25

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1 COMMISSIONER GOLDWAY: So you're just identifying 2 a different name for something that's already been captured 3 in terms of costs?

4 THE WITNESS: Yes, in that example. 5 COMMISSIONER GOLDWAY: Are there costs that you 6 think have not been captured and you're offering this new 7 definition because we have to rethink this system and 8 identify new costs?

9 THE WITNESS: My motivation is to go through this 10 definitional battle to ensure in the future when people do 11 incremental costs, they -- I think the Postal Service has 12 done what they could to figure out what they are now.

But, you know, as technology changes and process changes, I think it's important to be sure that you're capturing all the costs going to products.

So, I introduced this difficult term to ensure all categories of costs are on the table when one does incremental costs. So I think in this case, they've done a job of trying to find all those.

20 But, who knows in the future, and that's why I 21 wanted to go through the battle.

22 COMMISSIONER GOLDWAY: Thank you. That clarifies 23 it for me.

24 CHAIRMAN GLEIMAN: I got a little confused with 25 the question and answer that just transpired.

Going back to what I was asking you, if we defined 1 2 Christmas mail as a unit that occurred every year at the same time and it was an expected volume, which it is, and 3 that's what the Postal Service contracts ahead of time for, 4 a Christmas air network. 5 Then those costs would be costs that varied with 6 7 volume. THE WITNESS: Of the Christmas mail? 8 CHAIRMAN GLEIMAN: Of Priority Mail, because 9 Priority Mail goes up every year at the same time, as 10 11 opposed to being intrinsic costs. THE WITNESS: NO, they vary with the volume of the 12 product called Christmas mail or Priority Christmas mail, 13 not Priority Mail as a product. 14 There are a lot of costs in the Postal Service 15 16 that are higher at one time or another, but when volume 17 rises, we want to take into account, whether it's distribution characteristics across stops or it's seasonal 18 19 pattern throughout the year. CHAIRMAN GLEIMAN: So now you say that Christmas 20 mail cannot be perceived as a unit of mail? 21 THE WITNESS: No, no. Let me try to be clear: 22 When we were agreeing that there was this new product called 23 Christmas Priority Mail, that's when I agreed. 24 25 CHAIRMAN GLEIMAN: I didn't say it was a new

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1 product.

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THE WITNESS: Oh, I misunderstood.

3 CHAIRMAN GLEIMAN: I said it was additional volume 4 that occurred every year at the same time; that the Postal 5 Service knew it was coming -- just add that they know it's 6 coming every year at this point in time.

And I was asking about it in the context of how
you defined a unit, whether a unit had to be a single piece.
You told me that, no, it didn't have to be a

single piece, that it could be the throughput on a piece of equipment which could be 10,000, 30,000, 100,000 pieces.

12And we then discussed the fact that you suddenly13have, not looking at processing, but looking at

14 transportation, you have a throughput issue here also, and 15 you need another airplane to handle this additional volume 16 of mail that suddenly arrives on the scene.

And the cost of the airplane varies with volume,therefore. That's where I think you were.

19 THE WITNESS: Almost. I think the difference is 20 that what you're talking about, or what we were talking 21 about there was month-to-month or season-to-season 22 variations in volume, as opposed to year-over-year or 23 sustained increases in volume.

And when we talk about how costs rise with volume, we're saying if volume goes up throughout the production

process -- and that production process might involve peaks,
 not shifting volumes from peak-to-peak.

In the example you gave, if, all of a sudden, people decided to send more mail at Christmas and less mail in the summer, even though the total volume of Priority Mail stayed the same, costs would change.

7 And so that's why I think those costs are 8 intrinsic to the existence of that product, not the amount 9 that's sent throughout the whole -- through all the seasonal 10 patterns.

11 CHAIRMAN GLEIMAN: And if the Postal Service needs 12 to hire -- needs to have workers work overtime because the 13 volume varies, then the overtime costs are intrinsic?

14THE WITNESS: Now, we're talking about over time?15CHAIRMAN GLEIMAN: Just forget about -- you've16decided that the convention is that you have to look at it17for a year, and you have to look at it from year to year.

18 So, during a given year, the Postal Service has to 19 have its complement of workers work overtime at some times 20 during the year.

21 And at other times during the year, they just put 22 in their 40 hours, sometimes, you know, working hard for the 23 whole 40 hours, and sometimes because volume is rather 24 light, perhaps not working as hard as they might otherwise. 25 THE WITNESS: Right.

1 CHAIRMAN GLEIMAN: The machines aren't running as 2 many hours, let's say that, because the workers always work 3 hard. 4 But if the overtime associated with cyclical 5 volume, because nobody peak-loads, you know, plans for peak, I assume -- that's why you have overtime -- then overtime is 6 7 intrinsic? · 8 THE WITNESS: Overtime would be volume variable to 9 the extent that labor hours are overall. I wouldn't make the argument that overtime was intrinsic, per se. 10 11 I don't know if it's 100 percent variable, but labor hours as a total vary with increases and decreases in 12 13 volume, you know, assuming the seasonal patterns. 14 CHAIRMAN GLEIMAN: Are labor costs the only costs 15 that can vary with volume? 16 THE WITNESS: Oh, no, of course. 17 CHAIRMAN GLEIMAN: Okay, thank you. I have no 18 further questions. Any other followup? 19 20 [No response.] 21 CHAIRMAN GLEIMAN: Okay, no followup questions from the Bench? 22 23 [No response.] 24 CHAIRMAN GLEIMAN: Would you like some time for 25 redirect?

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MR. KOETTING: I would like a few minutes, Mr. 1 2 Chairman. CHAIRMAN GLEIMAN: How much is a few? Give me a 3 unit? 4 MR. KOETTING: Five minutes. 5 CHAIRMAN GLEIMAN: Five minutes it is. 6 [Recess.] 7 CHAIRMAN GLEIMAN: Mr. Koetting? 8 MR. KOETTING: I do have a couple of questions, 9 Mr. Chairman. 10 REDIRECT EXAMINATION 11 BY MR. KOETTING: 12 First, Dr. Bradley, there has been a fair amount 13 0 of discussion of the cost of the Christmas Network and the 14 intrinsic nature. 15 Are all of the costs of the Christmas Network 16 intrinsic? 17 18 А No. I don't think I made that clear in my discussion that only the premium portion of the Network's 19 intrinsic. The bulk of it's volume variable. 20 The second question, Dr. Bradley, is, you had an 21 0 exchange with Commissioner Goldway in which she was 22 23 inquiring about the new terminology in your testimony. 24 And her question, as I recall it, was something along the lines of, is all you're doing here is introducing 25

new terminology for costs that have already been attributed
 to products?

And you pointed out that in the specific example she was talking about, that was true, both under the Postal Service's approach to costing and the Commission's approach to costing.

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Getting away from that specific example to a more general question, would it be true that all you're doing is introducing new terminology to merely reflect costs that are already identified with products under both the Commission's and the Postal Service's approach to costing?

12 THE WITNESS: I think that my answer was 13 specifically related to this costs and intrinsic costs. As 14 a general matter, incremental costs are above the 15 Commission's attributable costs, and so they're not exactly 16 the same; in fact, they're larger.

MR. KOETTING: That's all I have, Mr. Chairman. CHAIRMAN GLEIMAN: Do I understand correctly from having plowed through your testimony that none of the formulas that you've used have an element in them that reflects what you call intrinsic incremental costs? THE WITNESS: There are formulas for intrinsic incremental costs.

24 CHAIRMAN GLEIMAN: In your -25 THE WITNESS: In my testimony.

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CHAIRMAN GLEIMAN: When you had variables in your 1 -- did you include intrinsic incremental costs as a variable 2 in any equations? 3 THE WITNESS: Yes. 4 CHAIRMAN GLEIMAN: Could you just tell me where 5 6 they are? 7 THE WITNESS: Sure. CHAIRMAN GLEIMAN: Or not just everyplace, but a 8 9 couple of places, and then I can take it from there, assuming you use the same designations. 10 THE WITNESS: Where they generally appear is the 11 12 section, the role of product-specific costs. For an example, if we look on page 38, there is this term, alpha 13 14 minus beta times D. That is an example of intrinsic costs. 15 It's a formula, Equation 24. 16 CHAIRMAN GLEIMAN: Thank you, sir, I appreciate 17 it. Is there any other follow on redirect? 18 [No response.] 19 CHAIRMAN GLEIMAN: Is there any more re-redirect? 20 MR. KOETTING: No. That being the case, Dr. 21 CHAIRMAN GLEIMAN: Bradley, that completes your testimony here, an at least for 22 this round of hearings on R2001. I don't know whether we'll 23 see you back later on or not. 24 25 We appreciate your appearance and your

1 contribution to the record. We want to thank you, and 2 you're excused. [Witness Bradley excused.] 3 CHAIRMAN GLEIMAN: Mr. Cooper, if you want to call 4 your next witness? 5 MR. COOPER: Yes, the Postal Service calls Charles 6 Crum to the stand. 7 CHAIRMAN GLEIMAN: Counsel, you can proceed. 8 9 Whereupon, 10 CHARLES L. CRUM, a witness, having been called for examination, and, having 11 been first duly sworn, was examined and testified as 12 follows: 13 DIRECT EXAMINATION 14 15 BY MR. COOPER: Mr. Crum, I'm handing you two copies of a document 16 Q entitled Direct Testimony of Charles L. Crum on Behalf of 17 United States Postal Service, marked as USPS-T-27. 18 Are you familiar with that document? 19 20 Α Yes, I am. Was it prepared by you or under your direct 21 Q supervision? 22 23 Α Yes, it was. I understand you had number of minor changes you 24 0 25 wanted to point out today?

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The first one was on page 14, line 23. 1 А That 2 should have been changed consistent with errata filed April 3 14th; that number should be .385 and not .384. 4 Similarly, on page 17, line 6, that number should 5 be .385 and not .384. 6 Finally, Attachment J, Table 1, while I was going :7 through my notes yesterday, I realized that the printed 8 version of Attachment J, Table 1, was incorrect. 9 The electronic version filed in LR-I-175 is 10 correct, and the numbers in the body of testimony are 11 correct; the numbers supplied to the pricing witness were correct, and the supporting numbers to that table were all 12 13 correct. So this is purely a cosmetic change, and I have 14 replaced that page in the packet. 15 MR. COOPER: With those changes, I would move 16 admission of this document into the evidentiary record. 17 CHAIRMAN GLEIMAN: Is there any objection? 18 MR. PRZYPYSZNY: I'm John Przypyszny on behalf of 19 AAP. While we don't have any objection to the Postal 20 Service revising the testimony of Mr. Crum, I'd just like to bring to your attention, the manner in which this has been 21 22 done. 23 On Friday, they filed some revisions to his

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24 testimony, including two revisions to Attachments H and I, 25 which we believe could be significant.

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And this morning, we were also provided with 1 2 additional changes to Attachment J of his testimony, and 3 again, we haven't had significant time or substantial time to really digest or understand the exact effect that this is 4 going to have on his testimony or the effect that this could 5 have on other testimony of witnesses who have offered 6 testimony pertaining to bound printed matter and the 7 substantial rate increases that are resulting for that. 8 9 I just would like to reserve our right to ask additional written questions, if necessary, regarding the 10 changes to these attachments. 11 We are prepared, though, today, to go ahead with 12 13 our oral cross examination as well. CHAIRMAN GLEIMAN: The Commission would certainly 14 entertain a motion to recall the witness if you made a case 15 16 that you were prejudiced as a consequence of the late-arriving changes to his testimony. 17 MR. PRZYPYSZNY: Thank you, Mr. Chairman. 18 CHAIRMAN GLEIMAN: There was no objection, and I 19 will direct, if counsel has not already provided the 20 Reporter with two copies of the corrected direct testimony 21 of Witness Crum, that he do so, and that the testimony be 22 received into evidence, and not transcribed into the record. 23 [Direct Testimony of Charles L. 24 Crum, USPS-T-27 was received into 25

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1	evidence.]
2	CHAIRMAN GLEIMAN: Mr. Cooper, does Witness Crum
3	sponsor any Category II Library References?
4	MR. COOPER: Yes, he does. I'll get those numbers
5	in a second here.
6	[Pause.]
7	BY MR. COOPER:
8	Q Now, Mr. Crum, consistent with Ruling Number 13 in
9	this case, are you familiar with Library References 109 and
10	175?
11	A Yes, I am.
12	Q Are they associated with your testimony?
13	A Yes, they are.
14	Q Are you prepared to sponsor them in this case?
15	A Yes.
16	CHAIRMAN GLEIMAN: That being the case, I'll
17	direct that the Library References in question be entered
18	into evidence and not transcribed into the record.
19	[Library References I-109 and 175
20	were received into evidence.]
21	CHAIRMAN GLEIMAN: Mr. Crum, have you had an
22	opportunity to examine the packet of Designated Written
23	Cross Examination that was made available earlier today?
24	THE WITNESS: Yes.
25	CHAIRMAN GLEIMAN: And if those questions were

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1	asked of you today, would your answers be the same?
2	THE WITNESS: Yes.
3	CHAIRMAN GLEIMAN: That being the case, if the
4	Reporter excuse me, if counsel could provide two copies
5	of the Designated Written Cross to the Reporter, I'll direct
6	that the material be entered into evidence and transcribed
7	into the record.
8	[Designated Written Cross
9	Examination of Charles L. Crum was
10	received into evidence and
11	transcribed into the record.]
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## BEFORE THE POSTAL RATE COMMISSION WASHINGTON, DC 20268-0001

## Postal Rate and Fee Changes, 2000

Docket No. R2000-1

## DESIGNATION OF WRITTEN CROSS-EXAMINATION OF UNITED STATES POSTAL SERVICE WITNESS CHARLES L. CRUM (USPS-T-27)

Party Advo, Inc.

Association for Postal Commerce

Interrogatories ADVO/USPS-T27-1-2, 4-5, 8-9 OCA/USPS-T27-5-6

ADVO/USPS-T27-8-9 DMC/USPS-T27-9 NAA/USPS-T27-1-5 PostCom/USPS-T27-1, 6 VP-CW/USPS-T27-1

Association of American Publishers

District Photo, Inc., Mystic Color Lab & Cox Sampling

Mail Order Association of America

Newspaper Association of America

AAP/USPS-T27-1-6, 8-9, 11, 13-16, 18-32, 35-36

DMC/USPS-T27-1-19

AAP/USPS-T27-2, 8, 13-14 NAA/USPS-T27-2

DMC/USPS-T27-8-9 NAA/USPS-T27-1-5 PostCom/USPS-T27-6 PSA/USPS-T27-3, 5 RIAA/USPS-T27-3-4 VP-CW/USPS-T27-1 Office of the Consumer Advocate

ADVO/USPS-T27-1-2, 4 CSA/USPS-T27-1-2 DMC/USPS-T27-8, 13 OCA/USPS-T27-1-2, 3b, 4-9 PostCom/USPS-T27-6

Parcel Shippers Association

Recording Industry Association of America, Inc.

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OCA/USPS-T27-3b PSA/USPS-T27-1-3, 5 RIAA/USPS-T27-2-3

DMC/USPS-T27-8 PostCom/USPS-T27-1, 3-5 PSA/USPS-T27-1-3, 5 RIAA/USPS-T27-1-4 UPS/USPS-T27-1

Val-Pak Direct Marketing, Val-Pak Dealers, & Carol Wright VP-CW/USPS-T27-1

Respectfully submitted,

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Margaret P. Crenshaw

## DESIGNATED RESPONSES OF UNITED STATES POSTAL SERVICE WITNESS CHARLES L. CRUM (T-27) DESIGNATED AS WRITTEN CROSS-EXAMINATION

Interrogatory:	Designating Parties:
AAP/USPS-T27-1	AAP
AAP/USPS-T27-2	AAP, MOAA
AAP/USPS-T27-3	AAP
AAP/USPS-T27-4	AAP
AAP/USPS-T27-5	AAP
AAP/USPS-T27-6	AAP
AAP/USPS-T27-8	AAP, MOAA
AAP/USPS-T27-9	AAP
AAP/USPS-T27-11	AAP
AAP/USPS-T27-13	AAP, MOAA
AAP/USPS-T27-14	AAP, MOAA
AAP/USPS-T27-15	AAP
AAP/USPS-T27-16	AAP
AAP/USPS-T27-18	AAP
AAP/USPS-T27-19	AAP
AAP/USPS-T27-20	AAP
AAP/USPS-T27-21	AAP
AAP/USPS-T27-22	AAP
AAP/USPS-T27-23	AAP
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AAP/USPS-T27-29	AAP
AAP/USPS-T27-30	AAP
AAP/USPS-T27-31	AAP
AAP/USPS-T27-32	AAP
AAP/USPS-T27-35	AAP
AAP/USPS-T27-36	AAP
ADVO/USPS-T27-1	Advo, OCA
ADVO/USPS-T27-2	Advo, OCA
ADVO/USPS-T27-4	Advo, OCA

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PostCom/USPS-T27-3 PostCom/USPS-T27-4 PostCom/USPS-T27-5 PostCom/USPS-T27-6 PSA/USPS-T27-1 PSA/USPS-T27-2 PSA/USPS-T27-3 RIAA/USPS-T27-5 RIAA/USPS-T27-2 RIAA/USPS-T27-3 RIAA/USPS-T27-4 UPS/USPS-T27-1 VP-CW/USPS-T27-1

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AAP/USPS-T27-1 On page 1 of your testimony (lines 10-12), you state that USPS-LR-109 was prepared by you or under his supervision. With respect to this statement:

(a) Please provide a full description of your personal involvement in the preparation of LR-109.

(b) Describe the full nature of his activities in preparing any survey forms used to produce LR-109 and in supervising the work needed to complete USPS-LR-109.

# RESPONSE

a.-b. When I was planning my analysis, I determined that there was no entry profile data available for Bound Printed Matter and that it would be required to complete my costing work. After some internal discussion, it was decided that a field study might be required to get this and other data and we contracted with Christensen Associates to assist with the sample selection, design, and data collection portion of the analysis. I planned the study in coordination with Christensen personnel and drafted the site survey letters shown on pages 408 and 409 of LR-I-109.

During the study, I responded to questions from field Postal personnel and either answered their question or referred them to the appropriate individual at Christensen Associates. I also visited one of the nearby survey sites to check on the progress of the study and answer any questions that may have arisen.

After the data was collected, I was in frequent contact with Christensen Associates as we interpreted the results. In August 1999, I traveled to Christensen's facility in Madison, Wisconsin to review the collected survey forms and resolve issues

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of how to present the data. Finally, I reviewed the draft library reference and provided comments and suggested changes.

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AAP/USPS-T27-2 On page 13 of your testimony (lines 9-11), you state that "Because of its zoned nature and local/non-local rates, Bound Printed Matter is already entered fairly deep into the system. However, mail is often entered in ways that are inconsistent with current Postal operations." With respect to this statement:

(a) Please explain whether the entry of BPM in ways that are inconsistent with "current" postal operations was ever consistent with postal operations in any past periods.

(b) If these entry practices had been consistent with postal operations in the past, please explain the nature and timing of the changes in postal operations that rendered these entry practices inconsistent with current postal operations.

#### RESPONSE

a. They were more consistent than they are now. Please also see the response to

part (b).

b. The "Local" zone in Bound Printed Matter was introduced with the subclass in 1939 and substantially predates the use of zip codes. Before zip codes, mail could not be split based on the station/delivery unit. All mail for a given city generally went to the Main Post Office and then was dispersed out to the final delivery Post Office. This was basically the definition of "Local" and all mail deposited in that area received the Local zoned rate.

Today there is generally not transportation between post offices below the plant/SCF level so any mail that must be transferred between them must first go back to the plant and then out to the destination delivery unit. The situation was not ideal in the past because there was not always direct transportation between Local post offices, but

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today there is a means of differentiating individual post offices with the zip code that was not previously available.

The current postal network could be very simply described as a hub and spoke system with the plant acting as the hub and each delivery unit acting as a spoke. Therefore, the least expensive routing involves depositing the mail at the destination delivery unit spoke. The next most expensive routing involves depositing the mail at the destination SCF/plant hub. The next most expensive routing is depositing the mail at a non-destination spoke.

This question gets at the difference between zone-skipping and dropshipping. With zone-skipping, mail is deposited at a facility closer to the final destination for the likely purpose of saving postage costs in a zoned rate structure. With dropshipping, on the other hand, the mail is not just deposited at a closer facility, it is deposited at a facility consistent with the Postal Service's mail processing and transportation networks and in a way the maximizes the efficiency of the postal system.

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AAP/USPS-T27-3 On page 13 of your testimony (lines 15-16), you state that "...Local pieces can have higher costs than similar non-local pieces." With respect to this statement, please provide a detailed example of the most likely situation where local BPM pieces can have higher costs than similar non-local BPM pieces. Please identify and provide all studies, reports, data or other evidence that you relied upon to provide the example.

# RESPONSE

A BPM piece is deposited at a post office in a given city and is destined for a different post office in the same city. The piece pays the Local rate. That mail will generally be sent back to its parent SCF/plant. The plant sorts the mail to the appropriate destination delivery unit post office and ships it back to that facility.

A similar BPM piece is deposited at the post office in the SCF/plant and receives the Zone 1/2 rate. It is sorted and sent out to the appropriate destination delivery unit. This piece paid a higher rate and saved one leg of transportation (from the nondestination post office back to the plant).

Please also refer to witness Kingsley's response to AAP/USPS-T10-1(a).

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AAP/USPS-T27-4 On page 13 of your testimony (lines 17-19) you state that "mail is sometimes entered at facilities geographically close to, but outside of the destinating service area of the plece." With respect to this statement, please define the destinating service area and explain whether, the destinating service area would generally be inside or outside the BPM local zone boundary determined by the USPS.

#### RESPONSE

For a definition of service areas please refer to the Domestic Mail Manual. For SCF service areas please see DMM section L005 and for BMC service areas please see DMM section L601. The referenced part of my testimony is taken out of context. It was not intended to refer to the local zone boundary in any way. I would assume the local zone boundary would usually but not always be inside both the SCF and BMC service areas.

A hypothetical example might better help explain what I was trying to get at with those lines in my testimony. A mailer located in Independence, Missouri with a large customer base in Denver, Colorado might deposit a BPM mailing at a postal facility in west/central Kansas with the goal of paying lower zoned rates. However, the Postal Service will ship those pieces back east to the Kansas City BMC (near the mailer's facility), then sort them and ship them to the Denver BMC who will sort them and ship them to the destinating SCF or directly to the final 5-digit destination for distribution. The extra trip the mailer made to west/central Kansas lowered the rate they paid, but increased the total costs to the Postal Service. Thus, the rates are currently set up in a way that can cause inefficiency in the US economy. The proposed rates, on the other hand, would attempt to create the proper incentive in line with postal costs to either

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deposit the pieces at origin (near or at the Kansas City BMC) or at a destination facility such as the Denver BMC, the destinating SCF, or destinating delivery unit.

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AAP/USPS-T27-5 On page 14 of your testimony (lines 2-4), you state that "Dropship discounts have proven to be popular and appropriate in Periodicals, Standard Mail A, and Standard Mail B Parcel Post." With respect to this statement, please state whether any similar "local" rate zones were eliminated when drop ship discounts were introduced in each of these subclasses.

# RESPONSE

No similar "local" rate zones were eliminated when dropship discounts were introduced

in those mail classes/subclasses.

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AAP/USPS-T27-6 On page 14 (lines 21-23) and page 15 (line 1) of your testimony, you state "[b]eing consistent with the Postal Service's volume variability assumptions in this case, I estimate that DBMC Bound Printed Matter will save \$.380 relative to non-DBMC entered pieces at Test Year 2001 cost levels. Please explain, in detail, how the cost savings for DBMC-entered BPM is "consistent with the Postal Service's volume variability assumptions in this case."

#### RESPONSE

Errata filed January 28, 2000 changed the \$.380 figure referenced above to \$.384.

That number is produced in Attachment I, Table 3 of my testimony. Lines B and C of

Table 3 refer to Attachment I, Table 1 of my testimony. Column 10 in Table 1 presents

the Base Year 1998 volume-variable costs by cost pool. The Postal Service's volume

variability assumptions are described in the testimony of witness Bozzo (USPS-T-15)

and presented by cost pool on pages 24-25 of witness Van-Ty-Smith's testimony

(USPS-T-17). To the extent that the "Pool Volume-Variable Factor(s)" presented on

pages 24-25 of witness Van-Ty-Smith's testimony change, the numbers presented in

Attachment I, Table 1, column 10 of my testimony would change and my estimate of

test year DBMC mail processing cost savings would change.

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AAP/USPS-T27-8 Following Attachment H, Table 2 of your testimony is a document entitled "Appendix H, Table 2.1" which contains certain figures without column headings. Please provide a corrected version of "Appendix H, Table 2.1" that includes column headings and make any other required corrections to this Table.

# RESPONSE

The document should be titled Attachment H, Table 2.1. The column headings are the same as in the top section of the table showing the volume by zone. The purpose of Table 2.1 is to show the volume by zone for non-dropshipped mail. Note that the entry points labeled DDU, DSCF, and DBMC volumes by zone are therefore removed. The percentage results at the bottom are used in Attachment K, Table 3, page 2, column 1. I have attached a new version of Table 2.1 that should make the purpose more clear and results easier to read.

## ATTACHMENT TO WITNESS CRUM'S RESPONSE TO AAP/USPS-T27-8

#### Attachment H, Table 2.1 BOUND PRINTED NATTER SURVEY REBULTS: VOLUMES BY ENTRY PROFILE AND ZONE DISTRIBUTION TRANSPORTATION VERSION

Container Type	(A)
Presont Rate	(A)
Entry Prectice	
CR	

Sum of Places2	Zene:								<u></u>	
Entry Profile:	Lacal	1	2	3	4	5	6	1	8	Grand Total
COU	32,016,229	139,666	10	20						33,055,947
DDU - Destinating 3-Digit 21P Area	3,221,991	2,752,929	30	1,712						5,878,882
000 - Destinating BMC Bervice Area	205,053	2,854,121	3,783,285	409,578	50,036	13,834				7,400,908
Origin AO		1,072,277	4,417,711	8,331,698	31,020,172	22,300,456	2,162,310	2,491,127	1,951,257	73,818,007
SCF	28,733,340	43,810,700	860,202	· · ·						74,424,242
SCF - Destinating MMC Service Area	148	0,305,005	7,869,265	4,273,348	902,001	5,001				19,375,449
Ortain BCF		40,279	2,794,213	8,965,342	10,087,458	11,474,830	8,545,111	4,002,710	2,484,884	46,374,635
Destinating BMC	787,484	88,544,472	59,963,227	25,757,512	7,714,895	121,745	•			183,869,315
Ortain BMC		210,394	850,832	4,052,000	4,829,723	1,217,634	155,246	1,026,125	1,411,418	13,758,030
Destinating ABF		327,020	718,300	486,521	54,285		-			1,584,128
Origin ASF			252	25,237	51,331	32,391	9,009	2,413	18,596	130,108
Grand Total	66,945,123	147,056,956	81,305,327	50,317,631	54,690,499	35,234,981	10,871,757	7,524,375	5,845,965	450,792,620

NON-OROPSHIPPED VOLUME BY ENTRY POINT AND ZONE DISTRIBUTION

	Zana:	Zana:									
	Local	1	2	3	4	5	6	7		Grand Tatel	
DOU										•	
DDU - SCF true	3,221,001	2,752,829	30	1,712	•	•	•	•	-	5,976,662	
DOU- BMC mus	205,053	2,854,121	3,793,265	403,578	50,036	13,834	•	•	•	7,400,906	
ONO		1.072.277	4,417,711	8,331,890	31,020,172	22,300,455	2,162,310	2,401,127	1,451,257	73,816,007	
DBCF	1	•								•	
SCF - BMC tren	146	6.305.008	7,809,265	4,273,346	902,801	5,001	•	-	•	19,375,449	
OBCF	•	40.279	2,794,213	6,865,342	10.057.456	11,474,830	8,545,111	4,002,710	2,404,804	48,374,835	
DEMC	1	• • •		-•• •• -			• •		- •		
OBMC		210.384	850,832	4.052.005	4.829.723	1.217.634	155.240	1.028.125	1,411,419	13,758,030	
DASE	1 .	327.020	716.300	405.521	54,285		-	•	•	1,554,120	
DASE			252	25 237	\$1 331	32 301	9.009	2.413	18.398	139,108	
	3 508 082	13 552 088	20 401 400	74 560 000	48 975 804	35 113 748	10 671.757	7.524.575	5,845,965	100.423.124	
	2.08%	8.05%	12.15%	14,80%	27.00%	20.05%	8,46%	4.47%	3.47%		

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AAP/USPS-T27-9 Please explain the differences between the "Mail Processing Version" of Attachment H (Table 1) and the "Transportation Version" of Attachment H (Table 2). Why are the survey results different for the two versions?

## RESPONSE

The "Mail Processing Version" describes the entry profile where pieces enter the Postal Service's mail processing network. The "Transportation Version" describes the entry profile where pieces enter the Postal Service's transportation network.

The major difference between the two versions is for plantloaded mail in which the Postal Service (at its own convenience) picks pieces up at the mailer's facility and deposits them at the appropriate postal facility. For example, rather than having a mailer overload a nearby post office or plant with a large amount of mail it is unsuited to accept, the Postal Service accepts the mail at the mailer's plant and drives it to a facility such as the nearby BMC. For purposes of mail processing, the entry point is that nearby origin BMC, but for transportation purposes, the entry point is the closest postal facility to the mailer's plant since that is where the piece enters the postal transportation network. Relating the above example to Tables 1 and 2 of Attachment H, we can see that in the mail processing version (Table 1) origin BMC receives 24.0 percent, origin AO receives 1.2 percent, and origin SCF receives 3.9 percent. Alternately, in the transportation version (Table 2) origin BMC receives 3.0 percent, origin AO receives 16.1 percent, and origin SCF receives 10.1 percent.

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AAP/USPS-T27-11 With respect to Table 3 of Attachment H of your Testimony (Simplified Standard Mail (B) Mailflow), please show where BPM mail that is now shipped at local zone rates generally would enter the mail flow as described by the Table.

# RESPONSE

The first section of Attachment H, Table 1 titled "Sum of Total Pieces" shows the volume by entry profile point for pieces entered at the Local rate in the first column. I have attached another version of the simplified Standard Mail (B) mailflow in response to this interrogatory that will allow you to match up the Table 1 results with the simplified mailflow.



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AAP/USPS-T27-13. With respect to the Bound Printed Matter Entry Survey (the "Survey") provided with LR-I-109 (Bound Printed Matter Characteristics Study (the "Study")), please confirm that the percentage of total BPM pieces reported in the Survey as Destination SCF pieces (15.58%) are all predicted to qualify for the Postal Service's proposed Destination SCF discount recommended for BPM in this case by Postal Service witness Kiefer (USPS-T-37). Explain any answer that does not confirm this statement.

# RESPONSE

It is my understanding that 15.6 percent of all Basic and Carrier Route Presorted

Bound Printed Matter are assumed to take advantage of the DSCF discount.

**AAP/USPS-T27-14.** With respect to the Bound Printed Matter Entry Survey provided with LR-I-109, please confirm that the percentage of total BPM pieces reported in the Survey as Destination DDU pieces (7.17%) are all predicted to qualify for the Postal Service's proposed Destination DDU discount recommended for BPM in this case by Postal Service witness Kiefer (USPS-T-37). Please explain any answer that does not confirm this statement.

#### RESPONSE

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It is my understanding that 7.2 percent of all Basic and Carrier Route Presorted

Bound Printed Matter are assumed to take advantage of the DDU discount.

AAP/USPS-T27-15. Please confirm that at the time the BPM Mail Characteristics Study provided in LR-I-109 was conducted, the Postal Service had not determined or finalized the mail makeup and entry requirements that BPM mail will be required to meet in order to receive the DSCF and DDU discounts proposed by Postal Service witness Kiefer (USPS-T-37). Please explain any answer that does not confirm this statement.

# RESPONSE

Confirmed.

# RESPONSE OF UNITED STATES POSTAL SERVICE TO INTERROGATORIES OF ASSOCIATION OF AMERICAN PUBLISHERS REDIRECTED FROM WITNESS CRUM

**AAP/USPS-T27-16.** Please state when the Postal Service will finalize the mail makeup and entry requirements that BPM mail will be required to meet in order to receive the DSCF and DDU discounts proposed by witness Kiefer (USPS-T-37). If such requirements are known, please provide the actual requirements.

# RESPONSE

The Postal Service anticipates filing a Federal Register notice that contains the requirements in approximately mid-July. Mailer comments to the proposed requirements will be taken into consideration when developing the final requirements. It is anticipated that the final requirements will be published in the Federal Register shortly (approximately 5 days) after the Governors issue their decision regarding the Postal Rate Commission's Docket No. 2000-1 Opinion and Recommended Decision.

**AAP/USPS-T27-18.** In LR-I-109, under the heading "Survey Instruments," the Study states that "[i]n all, seven different survey forms were used to gather data, with their development based on DMM rules for mail containerization and presentation." With respect to each form, please list and summarize the relevant DMM rules for containerization and presentation that were relied upon in developing the forms. Please provide hard-copies of each these forms as the forms could not be downloaded from the electronic version of LR-I-109 obtained by AAP.

#### RESPONSE

A list of the relevant DMM citations is attached. The requested forms are in the hard-

copy version of LR-I-109 available at both the PRC docket room and the Postal Service

library. The information you request consists of pages 82-186 of the library reference.

#### Attachment to Witness Crum's Response to AAP/USPS-T27-18

Yellow - Sack Mailing/Bedloaded Bundles Separated by Zones

630.2.2 - zone separation

630.3.4 - package preparation

630.2.5 - sack preparation

630.6.2 - sack preparation (machinable parcels)

630.7.2 - zone separation (bedloaded bundles)

630.7.2 - bundle preparation (bedloaded bundles)

Gray - Sacks on Pallets/Sacks in Pallet Boxes

630.2.2 - zone separation

630.3.4 - package preparation

630.2.5 - sack preparation

630.6.2 - sack preparation (machinable parcels)

630.7.2 - zone separation (bedloaded bundles)

630.7.2 - bundle preparation (bedloaded bundles)

045 - pallet preparation

Pink - Palletized/Boxed Pieces or Packages Separated by Zones

630.2.2 - zone separation

630.3.4 - package preparation

630.7.2 - zone separation (bedloaded bundles)

630.7.2 - bundle preparation (bedloaded bundles)

045 - pallet preparation

Green - Sack Mailing/Bedloaded Bundles Commingled Zones or Correct Postage Affixed to Each Piece

630.3.4 - package preparation

630.2.5 - sack preparation

630.6.2 - sack preparation (machinable parcels)

630.7.2 - zone separation (bedloaded bundles)

630.7.2 - bundle preparation (bedloaded bundles)

630.8 - zone commingling

Blue - Sacks on Pallets/Sacks in Pallet Boxes Commingled Zones or Correct Postage Affixed to Each Piece

630.3.4 - package preparation

630.2.5 - sack preparation

630.6.2 - sack preparation (machinable parcels)

630.7.2 - zone separation (bedloaded bundles)

630.7.2 - bundle preparation (bedloaded bundles)

630.8 - zone commingling

045 - pallet preparation

# Attachment to Witness Crum's Response to AAP/USPS-T27-18 (page 2)

Salmon - Palletized/Boxed Pieces or Packages Commingled Zones or Correct Postage Affixed to Each Piece

630.3.4 - package preparation 630.7.2 - zone separation (bedloaded bundles) 630.7.2 - bundle preparation (bedloaded bundles) 630.8 - zone commingling

045 - pallet preparation

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AAP/USPS-T27-19. With respect to the forms used in LR-I-109, please list each form that could be used to capture a trailer load of BPM mail, not in sacks, that was loaded on pallets. Explain the circumstances that would lead to the use of each possible form for this mail. Please provide hard-copies of each of these forms.

## RESPONSE

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Please refer to LR-I-109, page 65, Section III.A. For the case you mention, either the

Pink form or the Salmon form would be used depending on whether the mailing is

separated by zones or whether it commingles zones / has correct postage affixed. The

Pink form can be found on pages 112-136 of LR-I-109. The Salmon form can be found

on pages 167-186 of LR-I-109.

AAP/USPS-T27-20. In LR-I-109 under the heading "Piece Controls," the Study states that "[p]ieces from each office are first inflated to office totals from FY 1998 by the presort rate paid (basic bulk rate and carrier route rate)." With respect to this statement, please explain how the Survey would capture and inflate piece volumes for single piece BPM mail. Please state how many observations of single piece BPM mail and how many actual pieces of such mail were captured in the Survey results.

#### RESPONSE

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The survey measured only Basic presorted BPM and Carrier Route presorted BPM.

Single-Piece BPM was not in the survey at all. According to the 1998 Billing

Determinants, Single-Piece comprised less than 6 percent of total Bound Printed Matter

by volume.

**AAP/USPS-T27-21.** Please provide the number of observations and the number of pieces of single piece BPM mail that were captured in the Survey that were single pieces mailed by the Postal Service back to BPM mailers in connection with the return of books.

# RESPONSE

None.

**AAP/USPS-T27-22.** Please provide the number of observations and the number of pieces of non-single piece BPM mail that were captured in the Survey that were pieces mailed by the Postal Service back to BPM mailers in connection with the return of books.

# RESPONSE

No such pieces were counted.

AAP/USPS-T27-23. With respect to the LR-I-109, please assume that a trailer load of BPM mail on pallets is physically delivered to the Postal Service at a BMC and that this trailer load was recorded in the BPM Survey. Please identify and list each row and column combination found in Attachment H of your testimony where this mail would be recorded. Please explain the criteria used to determine the row and column combination of Attachment H where this mail would be recorded.

#### RESPONSE

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For the Transportation Version, pieces entered at a BMC could be recorded in Attachment H on the rows titled Origin BMC or Destination BMC. If the piece's final destination is in the service area of that BMC, it would be labeled Destination BMC. If the piece's final destination is outside the service area of that BMC, it would be labeled Origin BMC. The column is determined by the Postal Zone. The Zone is generally calculated based on the distance from the BMC to the destinating 3-digit Zip Code of the piece. For more detail on Postal Zones, please refer to DMM Section G030. Please also refer to page 8 of LR-I-109. For the differences associated with the Mail Processing Version, please refer to my response to AAP/USPS-T27-35.

AAP/USPS-T27-24. With respect to the LR-I-109, please assume that a trailer load of BPM mail on pallets is physically delivered to the Postal Service at an SCF and that this trailer load was recorded in the BPM Survey. Please identify and list each row and column combination found in Attachment H of your testimony where this mail would be recorded. Please explain the criteria used to determine the row and column combination of Attachment H where this mail would be recorded.

#### RESPONSE

For the Transportation Version, pieces entered at an SCF (plant) could be recorded in Attachment H on the rows titled Origin SCF, SCF (BMC Service Area), or Destinating SCF. If the piece's final destination lies within the service area of the SCF, the piece is labeled as Destinating SCF. If the piece's final destination lies outside of the service area of the SCF, but within the service of the parent BMC, the piece is labeled as SCF (BMC Service Area). If the piece's final destination lies outside of both the SCF and parent BMC service areas, the piece is labeled Origin SCF. The column is determined by the Postal Zone. The Zone is generally calculated based on the distance from the SCF to the destinating 3-digit Zip Code of the piece. For more detail on Postal Zones, please refer to DMM Section G030. Please also refer to page 8 of LR-I-109. For the differences associated with the Mail Processing Version, please refer to my response to AAP/USPS-T27-35.

AAP/USPS-T27-25. With respect to the LR-I-109, please assume that a trailer load of BPM mail on pallets is physically delivered to the Postal Service at a DDU and that this trailer load was recorded in the BPM Survey. Please identify and list each row and column combination found in Attachment H of your testimony where this mail would be recorded. Please explain the criteria used to determine the row and column combination of Attachment H where this mail would be recorded.

#### RESPONSE

For purposes of this response I will assume that you mean Delivery Unit in place of DDU. More precisely, DDU stands for Destination Delivery Unit. Therefore line 2 and 3 in Attachment H should read "Delivery Unit (DU) - Destinating 3-digit Zip Area" and "Delivery Unit (DU) - Destinating BMC Service Area" respectively.

For the Transportation Version, pieces entered at a delivery unit could be recorded in Attachment H on the rows titled DDU, DDU - Destinating 3-Digit Zip Area, DDU - Destinating BMC Service Area, or Origin AO. If the piece's final destination as defined in the Dropship Product is the location where the piece was deposited, the piece would be labeled as DDU. If the piece's final destination is not that delivery unit, but it is in the destinating 3-digit Zip Code area, the piece would be labeled DDU - Destinating 3-Digit Zip Area. If the piece is outside the destinating 3-digit Zip Code area, the piece would be labeled DDU - Destinating BMC Service Area. If the piece is outside the destinating BMC service area, the piece would be labeled DDU - Destinating BMC Service Area. If the piece is outside the destinating BMC service area, the piece would be labeled DDU -

The Zone is generally calculated based on the distance from the entry point to the destinating 3-digit Zip Code of the piece. For more detail on Postal Zones, please

refer to DMM Section G030. Please also refer to page 8 of LR-I-109. For the differences associated with the Mail Processing Version, please refer to my response to AAP/USPS-T27-35.

AAP/USPS-T27-26. With respect to LR-I-109, did the Survey in any way identify or even consider specific exceptions to the normal BPM acceptance policies that may have been negotiated between a mailer and the local representatives of the Postal Service? Please explain the manner in which this possibility was addressed by the Survey.

#### RESPONSE

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As described on page 8 of LR-I-109, mailer provided zone information was used when it

was available. This may have taken into account any local exceptions coincidentally.

Other than that I am not aware of how any specific exceptions might have been handled

though knowing what those exceptions were might make the question easier to answer.

**AAP/USPS-T27-27.** With respect to LR-I-109, assume a trailer load of BPM mail is physically delivered by a mailer to the Postal Service at an SCF. Please explain fully how the BPM Survey would have recorded the destination entry location for any BPM mail delivered by the mailer that does not qualify for the proposed destination SCF discount.

# RESPONSE

As described in my response to AAP/USPS-T27-24, a piece deposited at an SCF could

be labeled Destinating SCF, SCF - BMC Service Area, or Origin SCF. Therefore, the

survey would have recorded pieces not deposited at a destinating SCF as either SCF-

BMC Service Area or Origin SCF.

AAP/USPS-T27-28. With respect to LR-I-109, assume a trailer load of BPM mail is physically delivered by a mailer to the Postal Service at a DDU. Please explain fully how the BPM Survey would have recorded the destination entry location for any BPM mail delivered by the mailer that does not qualify for the proposed destination DDU discount.

#### RESPONSE

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As described in my response to AAP/USPS-T27-23, a piece deposited at a delivery unit

could be labeled DDU, DDU - Destinating 3-Digit Zip Area, DDU - Destinating BMC

Service Area, or Origin AO. Therefore, the survey would have recorded pieces not

deposited at a destinating delivery unit as DDU - Destinating 3-Digit Zip Area, DDU -

Destinating BMC Service Area, or Origin AO.

AAP/USPS-T27-29. In LR-I-109 under the heading "Piece Controls," the Study states that "[p]ieces from each office are first inflated to office totals from FY 1998 by the presort rate paid (basic bulk rate and carrier route rate)." With respect to this statement:

(a) For each office surveyed, please provide the exact period during which the Survey observations were made.

(b) Please provide workpapers and supporting calculations showing how these pieces from each office were first inflated to individual office totals from FY 1998 and then inflated to all of BPM for FY 1998.

## RESPONSE

a. Survey sites were directed to capture every bulk rate BPM mailing presented

between June 21, 1999 and July 21, 1999.

b. Please see the programs referenced in LR-I-109, Appendix D, Section III, pages

195-199.

AAP/USPS-T27-30. Please refer to Attachment I, Table 1 of your testimony. With respect to the Direct Talley IOCSs Costs by Function that are shown at rows (1) through (4), please provide (in Excel spreadsheets if possible), the underlying IOCS tally information for all underlying mail processing activities that were totaled to produce the tallies shown for each of the 52 cost pools shown in column (1), column (2), column (3) and column (4). Please provide separate subtotals for each column.

#### RESPONSE

I am unsure exactly what you are asking for. I am informed that the detailed raw tally

information is available in electronic form in USPS LR-I-12, but is not available in Excel

spreadsheet form. I have attached the direct record counts that support Table 1. The

attachments are output from an Excel spreadsheet.
#### Attachment to Witness Crum's Response to AAP/USPS-T27-30

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#### BY98 IOCS Direct Tally Record Counts Bound Printed Matter (BPM)

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		(1)	(2)	(3)	(4)	(5)			
		Direct Tally IOCS Record Counts by							
			Basic Fi	unction					
Group	Pool	Outgoing	Incoming	Transit	Other	Total			
1 mods	bcs	0	0	0	0	0			
2 mods	ocr	0	0	0	o	0			
3 mods	fsm	16	17	0	0	33			
4 mods	lsm	C	· 0	0	0	0			
5 mods	1SackS_m	a	3	0	a	3			
6 mods	mecparc	0	2	0	0	2			
7 mods	spbs Oth	13	19	0	0	32			
8 mods	spbsPrio	0	1	0	o	1			
9 mods	manf	4	15	0	o	19			
10 mods	mani	0	6	1	0	7			
11 mods	manp	11	9	0	0	20			
12 mods	Priority	1	t	0	0	2			
13 mods	kd15	O	0	0	0	0			
14 mods	1bulk pr	0	٥	0	0	0			
15 mods	1cancMPP	1	1	0	0	2			
16 mods	1OpBulk	5	7	0	0	12			
17 mods	10pPref	13	7	0	0	20			
18 mods	1Platform	8	10	1	2	21			
19 mods	1Pouching	8	2	0	D	10			
20 mods	1SackS_h	3	5	. 0	0	8			
21 mods	1scan	0	0	0	o	0			
22 mode	1EEqmt	0	Ő	0	o	0			
23 mods	Support Fon 1	0	0	1	o	1			
24 mods	BusReply	0	0	0	1	1			
25 mods	Express	0	0	0	0	0			
26 mods	Mailgram	0	0	0	o	0			
27 mods	Registry	0	0	0	0	0			
28 mods	Rewrap	0	0	0	0	0			
29 mods	Inti	7	0	0	1	8			
30 mods	LD41	0	0	0	0	0			
31 mods	LD42	0	ð	0	0	0			
32 mods	LD43	4	54	0	0	58			
33 mods	LD44	0	6	0	0	6			
34 mods	Support Fon 4	0	3	0	0	3			
35 mods	LD48_Exp	0	0	0	0	0			
36 mods	LD48_SpSv	1	3	0	1	5			
37 mods	LD49	7	4	0	2	13			
38 mods	LD79	1	11	0	0	2			
39 bmc	NMO	7	3	0	0	10			
40 bmc	Other	28	51	0	1	80			

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Attachment to Witness Crum's Response to AAP/USPS-T27-30

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#### Bound Printed Matter (BPM)

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			(1)	(2)	(3)	(4)	(5)				
			Direct	Direct Tally IOCS Record Counts by Basic Function							
	Group	Pool	Outgoing	Incoming	Transit	Other }	Total				
- 41	bmc	Platform	11	12	2	0	25				
42	bmc	PSM	68	109	0	. 0	177				
43	bmc	SP8	9	. 10	0	o	19				
- 44	bmc	SSM	7	14	0	o	21				
45	non-mods	Atlied	1	20	0	0	21				
- 46	non-mods	Auto Dist	0	0	0	0	0				
47	non-mods	Express	0	0	0	o	0				
- 48	non-mods	Manual Flats	0	19	0	0	19				
- 49	non-mods	Manual Letter	0	0	0	0	0				
50	non-mods	Manual Parcel	6	38	0	0	44				
51	non-mods	Misc/Support	2	2	0	0	4				
52	non-mods	Registry	0	0	0	0	0				
	Total		242	454	5	8	709				

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AAP/USPS-T27-31. In LR-I-109, under the heading "Piece Controls," the Study states that "[v]olumes associated with the mailer's permit numbers are deducted from the appropriate offices and strata before sampled pieces are inflated to national pieces." Since the Survey was conducted in FY 99, please explain fully how the Postal Service deducted FY 99 volumes associated with mailer's permit numbers from FY 1998 office totals.

#### RESPONSE

i.

I am informed that pieces captured during the survey period for the mailer

referenced are inflated to their 1998 volumes. This mailer's 1998 volumes are deducted

from 1998 office and strata volumes for the purpose of inflation.

AAP/USPS-T27-32. In LR-I-109, under the heading "Estimation Procedures," the Study states that "[i]n the final results, strata 2 and 3 are combined. Given the especially low response rate from stratum 3, it was determined that it was inadvisable to represent its mail volume by the single mailing sampled from that strata during the survey period." With respect to this statement:

(a) Please confirm that there was only one mailing sampled from stratum 3 during the survey period.

(b) If you confirm that there was only mailing sampled from stratum 3 during the survey period, please state whether there is any way to measure the standard error of BPM mail sampled from stratum 3. Please explain your answer fully and provide any standard error calculations for BPM from stratum 3.

#### RESPONSE

a. Confirmed.

b: I am informed that the procedure for estimating the standard errors did not permit

an estimate of standard error for stratum 3. For non-stratum 1 offices, the procedure

selects mailings randomly from within each stratum to estimate standard errors.

Because there is only one observation in stratum 3, no variance is generated using this

procedure.

AAP/USPS-T27-35. In LR-I-109, under the heading "Zone Calculation and Entry Profile Determination," the Study states that "[e]ntry and destination ZIP codes determine the entry profile." With respect to this statement, please explain fully how entry ZIP codes were determined for BPM that entered postal facilities on pallets. In particular, please explain how the Survey would determine the entry level zip code for a single pallet of BPM mail that was delivered by the mailer to the Postal Service at a SCF but was destined for another BMC service area.

#### RESPONSE

Transportation Version

The entry Zip Code for mail entering a postal facility on pallets will depend on whether it is plantloaded (mail loaded onto a Postal or Postal contracted vehicle), dropshipped, or BMEU entered. For Plant Load, the entry Zip Code is recorded as the Zip Code of the mailer facility where the mail is loaded. For dropshipped mail, the entry Zip Code is recorded as the Zip Code of the postal facility where the mail is being deposited. For BMEU Entry, the entry Zip Code is recorded as the Zip Code of the BMEU. In the example presented, the entry Zip Code would be the Zip Code of the SCF at which the mail was deposited.

Mail Processing Version

The Mail Processing Version will be slightly different. It was assumed that containers sorted to a more aggregate level than the office where they are entered are first processed at the facility representing their sortation level. For example, SCF sacks first entered into an Origin AO would first be handled at an SCF. In the example

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presented if the mail was on a BMC pallet, the entry Zip Code would be the Zip Code of the parent BMC of the SCF at which the mail was deposited.

AAP/USPS-T27-36. Appendix A of LR-I-109 provides "Standard Error Estimates" for various volume estimates in the BPM Survey. With respect to each of these "Standard Error Estimates":

(a) Please provide all confidence intervals and statistical tests that were conducted for any and all tables contained in Appendix A.

(b) Please provide all underlying data that were used to produce the tables provided in Appendix A. If possible, please provide this data in Excel spreadsheet form.

#### RESPONSE

a. Pages 41-56 of Appendix A present standard errors. The standard error

procedure is described on pages 8-9 of LR-I-109. It is my understanding that

confidence intervals can be calculated using the tables in the standard error section in

coordination with the associated tables in the previous section. No statistical tests, as

such, were conducted in the library reference.

b. Please refer to LR-I-109, Appendix D, Section 4, pages 199-204. I am informed

that the raw data used to generate the standard errors can be found in two text files -

process\_data.csv and transport\_data.csv - in the \libref\inputs subdirectory of the

electronic version of the library reference. The data is not available in Excel

spreadsheet form.

ADVO/USPS-T27-1. With respect to the "BMC Realization Factor" identified as an input in LR I-175, Attachment D - Table 16, please provide the following:

(a) An explanation of its original purpose.

(b) An explanation of what it represents and how it has been used, in addition to the ratemaking analyses.

(c) An explanation of what it represents in your analyses.

(d) An explanation of how it was calculated.

(e) When it was calculated.

#### RESPONSE

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a. As described in the testimony of witness Byrne (Docket No. R84-1, USPS-T-14, page 38), "The 'realization' measurement of efficiency at a BMC is calculated as the total direct labor hours <u>earned</u> for all mail processing operations divided by total direct labor hours <u>clocked</u> for the same operations over the same time period."

b. Please see my response to part (a).

c. In my analysis, it scales down estimated cost savings at BMCs only. As stated in the testimony of witness Acheson (Docket No. MC95-1, Exhibit USPS-T-9F. page 1), "Because engineering standards were used to estimate the time needed for each operation, the following factors were multiplied times the weighted-average time (and thus cost) per container/facility to align the result with postal costs as determined by the CRA: a P, F, and D factor of 1.15, a mail processing overhead factor of 1.2841, an appropriate piggyback factor from USPS LR-MCR-9, a BMC realization factor (.9713) for application to BMC

**costs only**, and an FY 1995 clerk/mailhandler average hourly wage rate (\$24.06) that is multiplied by a premium pay factor (.957518) and divided by 60 (the minutes in an hour)."

- d. The factor was calculated in Table A-2 of LR-F-151 in Docket No. R94-1.
- e. It was calculated based on data in 1993.

ADVO/USPS-T27-2. With respect to the MTM productivities presented in Attachment E Tables 5, 6, and 7, please provide the following:

(a) An explanation of their original purpose.

(b) An explanation of how they have been used, in addition to the ratemaking analyses.

(c) An explanation of how they were measured.

(d) When they were calculated.

(e) Confirmation that the productivities have not been changed since they were measured. If this is incorrect, please identify when each has been changed and describe how it was changed.

#### RESPONSE

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a. Witness Acheson first used MTM productivities to estimate the

nontransportation savings of Standard Mail (A) dropship in Docket No. MC95-1.

As stated in Library Reference MCR-27 in that docket, "Most of these MTM

productivities were used in the pallet and sack models that were relied upon by

the Commission to recommend pallet discounts in Docket No. MC91-3 (see

Exhibit USPS-2C in that docket)." Page 5 of witness Acheson's testimony in

Docket No. MC91-3 further refers to Docket No. R87-1, Tr.9/5729-30, 5782-84,

and 5911-13, and Tr. 29/22309-24 for a more complete description.

b. I am not sure exactly how (or if) those specifically referenced numbers

have been used by the Postal Service outside of the ratemaking process.

Describing Methods Time Measurement (MTM) in general, the Industrial

Engineering Handbook has said that the uses to which that tool has been put are almost infinite in scope.

c. Please refer to the transcript references cited in the response to part (a).

d. The time figures were developed by the Office of Industrial Engineering in the early 1970's. Witness Acheson applied the appropriate standard time to the components of the operations in the mail flow models in his testimony (USPS-T-12) in Docket No. R87-1.

e. Confirmed.

ADVO/USPS-T27-4. For the Personal Needs, Fatigue and Delay (PF&D) Factor, please provide the following:

(a) An explanation of the original purpose for its measurement.

(b) An explanation of how it has been used, in addition to the ratemaking analyses.

(c) An explanation of what it represents in your analyses.

(d) An explanation of how it was measured.

(e) When it was calculated.

#### RESPONSE

a. As explained in Docket No. R87-1 (USPS-T-12, page 21), the MTM productivity "is a 'model' time that is based on standard industrial engineering times estimated for the individual mail processing operations included in each model. It is not expected that this or other total weighted standard times computed by the models will actually be achieved by Postal Service mail processing personnel; therefore, an upward adjustment to the model times is needed to account for the workforce's personal needs, fatigue, and delay (PF and D)."

b. As stated in witness Acheson's response to OCA/USPS-T12-46 in Docket No. R87-1 (Tr. 9/5785), "the inclusion of this allowance is common practice in the development of a work standard and is generally used in the Postal Service's Office of Industrial Engineering. As far back as the 1960's, when the Postal Service used Basic Motion Time (BMT) Study as the means to develop work standards in all mail processing operations, 15 percent was routinely added to

BMT time standards because that factor was considered the norm to correct for miscellaneous delays."

This standard 15 percent is also common across other industries. For example, in the text Motion and Time Study (Benjamin W. Niebel, 1982), it states` that "in typical metal trade and related operations, the allowance for personal, unavoidable, and fatigue delays usually approximates 15 percent." (Docket No. R87-1, Tr. 29/22331).

c. Please see my response to part (a).

d. Please see my response to part (b).

e. As it is a standard that developed in the Industrial Engineering field, I am not aware exactly when it was "calculated". Please see my responses to parts
(a) and (b).

ADVO/USPS-T27-5. With respect to the Van-Ty-Smith (USPS-T-17, Table 1) mail processing variabilities that you use to adjust the MTM productivities in LR I-175, please confirm:

(a) A variability of less than one means average unit costs decline as units of the cost driver increase. If you cannot, please explain why not.

(b) Declining average unit costs can occur when there is either: (a) fixed cost in the cost pool and marginal cost is constant; or (b) there is no fixed cost but declining marginal unit costs; or (c) both fixed cost and declining marginal unit costs. If you cannot confirm, please explain why not.

#### RESPONSE

a. Confirmed, assuming that the term "average unit costs" refers to the result of dividing total cost in a cost pool by the number of units of the cost pool's cost driver.

b. Confirmed that each circumstance listed in the interrogatory would lead to declining "average unit cost," interpreting the term as in the response to part (a), at least over some range of output. The listed circumstances do not encompass all situations in which average cost would decline with increases in output. For example, if the marginal cost curve is "u-shaped" (i.e., decreases over some range of output and then increases over another), average cost will decrease over any range of cutput for which average cost exceeds marginal cost, whether or not marginal cost is decreasing.

ADVO/USPS-T27-8. Please define completely the following terms:

(a) Direct labor hours earned for all mail processing operations (at a Bulk Mail Center - BMC). In this definition, please include the types of BMC labor activities that cause or require "hours earned."

(b) Direct labor hours clocked for all mail processing operations (at a Bulk Mail Center - BMC). In this definition, please include the types of BMC labor activities that cause or require "hours earned."

(c) Do Methods Time Measurement (MTM) productivities represent of labor hours earned or labor hours clocked (to conduct a specific MTM activity) or something else? Please explain.

# RESPONSE

a. "Hours earned" are the expected hours for a BMC to handle a given plece. I am informed that the hours earned are from Planning Guidelines which are based on MTM standards. They indicate how much time a BMC should spend on the labor activities required to process a piece through the BMC. As I understand it, hours earned is the result of all expected

BMC mail processing labor activities.

b. "Hours clocked" are the hours actually recorded for employees clocked into the various labor operations at the BMC. As I understand it, hours clocked is the result of all actual BMC mail processing labor activities.

c. I assume you refer to the MTM productivities presented in my testimony. These productivities are intended to be consistent with labor hours earned. To the extent there is a difference between labor hours

earned (theoretical) and labor hours clocked (actual), an adjustment needs

to be made to the cost models to account for this difference.

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ADVO/USPS-T27-9. Please refer to your response to ADVO/USPS-T27-7(c).

(a) Do any of the MTM productivities unadjusted by a volume-variability factor, represent anything other than a constant unit cost (i.e., as number of units change, unit time remains constant, with unit defined as in each individual MTM productivity)? If so, please identify them and describe clearly how they represent something other than a constant unit cost.

(b) Do the MTM productivities adjusted by a volume-variability factor represent anything other than a constant unit cost (i.e., as number of units change, unit time remains constant, with unit defined as in each individual MTM productivity)? If so, please identify them and describe how they represent something other than a constant unit cost (with unit defined as in each individual MTM productivity).

# RESPONSE

a. I do not believe these productivities represent anything other than a

constant unit average cost.

b. I do not believe these productivities represent anything other than a

constant unit marginal cost.

# U.S. POSTAL SERVICE WITNESS CHARLES L. CRUM RESPONSE TO INTERROGATORIES OF CONTINUITY SHIPPERS ASSOCIATION

#### CSA/USPS-T-27-1.

Do the data on which your analysis of the cost differential between flats and parcels relies incorporate the elimination of the single piece Standard A parcel rate category shortly after the end of the base year?

- (a) If not, what effect on the cost differences that you measure would the elimination of the single piece costs have on test year costs?
- (b) Please provide revised versions of your Tables 3-3.6 to demonstrate your answer to sub-part (a) above.

#### RESPONSE

My analysis considers only the four bulk subclasses of Standard Mail (A). Those

are Regular, Enhanced Carrier Route, Nonprofit, and Nonprofit Enhanced Carrier

Route. The presence or absence of the former Single-Piece subclass has no bearing

on my results.

a. None.

b. Since the presence or absence of Single-Piece has no impact on my analysis,

Tables 3-3.6 would not change.

# U.S. POSTAL SERVICE WITNESS CHARLES L. CRUM RESPONSE TO INTERROGATORIES OF CONTINUITY SHIPPERS ASSOCIATION

# CSA/USPS-T-27-2.

What would the cost of a Standard A single piece regular commercial parcel be versus Standard A bulk regular commercial parcel? Please provide versions of your Table 3.2 for a Standard A single piece regular commercial parcel.

#### RESPONSE

I have done no analysis related to Standard Mail (A) Single-Piece parcels. The Base

Year 1998 Cost Segments and Components contained in the testimony of witness

Meehan (Exhibit USPS-11A, page 7) shows total Single-Piece costs of \$213,628,000.

The 1998 revenues of \$123,859,000 and volumes of 150,276,000 can be found on

pages 6 and 8 of the testimony of witness Hunter (USPS-T-5). All these data are for all

of Single-Piece and not specifically related to parcels.

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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

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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.

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#### DMC/USPS-T27-5.

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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 topdown 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 "bottomup", 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.

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i. All else equal, due to their density, IPPs and parcels would have higher estimated cost avoidances than letters and flats. 3372



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

ii. Please refer to the attached page. This page is being

provided only to fully comply with this discovery request.

# ATTACHMENT

# ENT TO WITNESS CRUM'S RESPONSE TO DMC/USPS-T27-60

#### Transportation Sevings by Shape

	(2) <u>Density</u> (Ibs/Cft)	(\$/13) DBMC (3)	(\$/13) DSCF	(\$713) DDU	(\$/ DE (1)	ib.) IMC	(\$/) DS	b.) CF	(\$/ DD	նե.) ՔՄ	(\$ D (5	/3b.) BMAC )	(\$ D	/Ib.) SCF	(\$/ DI	/1b.) DU
Letters	28.42	2.73	3.12	3.78	5	0.0962	5	0.1096	5	0.1329	Ś	8.0692	\$	0.9789	S	8.0956
Flats	20.65	1.99	2.26	2.74	5	0.0962	5	0.1096	5	0.1329	S	6.0953	5	6.1986	5	0.1316
Parcels	8.12	0.78	0.89	1.05	\$	0.0962	5	0.1096	5	0.1329	5	0.2423	5	0.2761	S	0.3347

cubic feet		81,272	3	66,293	58,506	. 506,070	
cí %		16.1%		72.4%	11.6%		
(4) dhmc	S	· 0.44	\$	1.44	\$ 0.09	\$ 1.97	Total wid. Avg. savings per cubic foot
dscf	\$	0.50	\$	1.64	\$ 0.10	\$ 2.24	Total wid. Avg. savings per cubic foot
ddu	5	0.61	\$	1.99	\$ 0.12	\$ 2.72	Total wid. 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.

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#### DMC/USPS-T27-7.

a. Please refer to your testimony at pages 7-12 and confirm that when computing Standard A Mail nonietter 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



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

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

DMC/USPS-T27-8. In the following table, BY 1996 Costs were taken from USPS-T-28, Docket No. R97-1 (revised 10/1/97), Exhibit K, Table 3: BY 1998 Costs were taken from your response to PSA/USPS-T27-3.

Parcels	BY 1996 Costs	BY 1998 Costs	Percentage Incr.
Std. A Reg.	\$0.513	\$0.768	49.7%
Std. A ECR	\$0.455	\$0.746	64.0%
Std. A Nonprofit	\$0.659	\$0.984	49.3%
Std. A N. ECR	\$1.382	\$2.262	63.7%
Std. A N. ECR	\$1.382	\$2.262	63.7%

a. Please confirm the data in this table, or supply correct figures.

b. Do you believe that these disproportionately high unit cost increases have resulted from: (i) sharp decreases in productivity, as has occurred with flats; (ii) random variations in the number of tallies in the IOCS; (iii) changes in the mail mix (i.e., relatively more high cost pieces and relatively fewer low-cost pieces; or (iv) maybe something else. Please explain if these factors are different for each category of parcels?

c. Did parcel processing become more mechanized between 1996 and 1998? If so, please detail how, and describe the impact that such mechanization would have on parcel cost incurrence.

d. Did any changes occur in the processes for identification of costs incurred by shape between 1996-98?

#### RESPONSE

a. Confirmed.

b. As described in my response to RIAA/USPS-T27-1 "the purpose of my

testimony is to estimate the total cost difference between parcels and flats in all

of bulk Standard Mail (A) ... I have provided Tables 3.1 through 3.4 because

external parties expressed an interest in those numbers in Docket No. R97-1 and to present a more complete record."

Any changes you note for Nonprofit ECR parcel unit costs are likely to be related to variability associated with their very low volume. Please refer to my response to RIAA/USPS-T27-3(a). I believe the majority of the other cost increases you note can be explained by the change in mail processing approach between Docket No. R97-1 and Docket No. R2000-1. Please refer to page 8, lines 7-14 of my testimony and my response to Postcom/USPS-T27-1.

c. I am unaware of any major changes in parcel processing between 1996 and 1998.

d. I believe the only change of consequence is the new mail processing approach referred to in my response to b. I am informed that other smaller changes in approach can be found in the testimonies of witnesses Degen (USPS-T-16) and Van-Ty-Smith (USPS-T-17). I do know that the single Non-MODS cost pool in Docket No. R97-1 was broken into 8 cost pools in this docket though I am unsure what, if any, impact that particular change had on my cost results.

**DMC/USPS-T27-9**. Please provide data for FY 97 and FY 99 as presented in Attachment F.

# RESPONSE

Please refer to the attached pages for all the FY 1997 data I have. I do not have the complete set as presented in Attachment F. These pages are not intended to be part of my testimony and are being provided only to fully comply with this discovery request. I have not carefully reviewed the results. I believe the Docket No. R97-1 mail processing volume variability approach was followed.

In the preparation of my testimony, I did not develop the requested Attachment F information for FY 1999 and, thus, cannot provide it. ATTACHMENT TO WITNESS CRUM'S RESPONSE TO PMC/USPS-T27-9

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# FY 1997 Bulk Standard Mail (A) Enhanced Carrier Route

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Table 3A(1) Costs by Shape (\$000)

Cost Cat	egory	Sum over Shapes	Letters	Flats	IPPs & Parcels	Source / Derivation
<b>C.S. 3.1</b> 3.1a 3.1t	Mail Processing a Mail Processing Variable w/ Pigbk b Remote Encoding Costs	444,112 0	182,721 0	246,580	14,811	WS 3.1.1
3.1	Total	444,112	182,721	246,580	14,811	≈sum(3.1a,3.1b)
C.S. 3.21	Window Service					
3.21	b CRA Window Service Total	6,757	2.418	4.331	8	C.S. 3.2 Total from CRA
3.20	d Window Service Piggyback Factor	-1	1.42261	1,42261	1.42261	LR-H-77
3.20	e Piggybacked Costs		1,022	1,830	4	≍sum(3.2a.3.2c)*(3.2d - 1)
			3440	6161	12	bozzo
3.2	Totel	9,613	3,440	6,161	12	=sum(3.2a,3.2c,3.2e)
C.S. 6 &	7 City Delivery Carriers					
61	iocatt In-Office	313,504	133,136	173.161	7.207	C.S. 8 CRA total
7.1	Route	21.089	7,940	13,113	36	= CS total from CRA dist. to shape by Volume
7.2	Access	43,873	16,519	27,279	75	= CS total from CRA dist. to shape by Volume
7.3	Elemental Load	232,871	108,471	119,509	4,890	= CS total from CRA dist. to shape by ElemLoad
7.4	Other Load	0	0	0	0	= CS total from CRA dist. to shape by Volume
7.5	Street Support	96,504	43,072	52,576	1,927	= CS total from CRA dist. to shape by 7.1 - 7.4
687	7 Subtotal	707,841	309,138	385,639	14,136	= sum of 6 through 7.5
687	7 Piggyback Factors		1.30602	1.30602	1.30602	LR-H-77.
6&7	7 Piggybacked Costs	216,941	94,603	118,013	4,326	= 6&7 subtotal *( 6&7 pig. fact 1)
6&7	7 Total	924,782	403,741	503,652	18,461	= sum( 6&7 subtotal, 6&7 piggybacked costs)
C.S. 8 V	ehicle Service Drivers					
8a '	Vehicle Service Drivers	43,115	4,638	37,994	484	= CS total from CRA dist, to shape by Cube
8b	Piggyback Factors		1.55010	1.55010	1.55010	LR-H-77.
8c :	Piggybacked Costs	23,718	2,551	20,900	266	= 8a * (8b -1)
8 T	otal	66,833	7,189	58,894	749	- =sum( 8a, 8c)
C.S. 10 I	Rural Delivery Carriers					
10a	a Rural Delivery Carriers	265,830	51,491	214,259	80	= CS total from CRA dist. to shape by RuralDel
105	p Piggyback Factors	·	1.19855	1.19855	1.19855	LR-H-77.
100	Piggybacked Costs	52,781	10,224	42,541	16	= 9a * (9b -1)
10	Total	318,611	61,715	256,800	96	≕sum( 9a, 9c)

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# ATTACHMENT TO WITNESS CRUM'S RESPONSE TO DMC/USPS-TZ7-9 (PAGE 2)

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# FY 1997 Bulk Standard Mail (A) Enhanced Carrier Route

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Table 3A(1) Costs by Shape (\$000)

		Sum over			iPPs &					
Cost Category		Shapes	Letters	Flats	Parcels	Source / Derivation				
C.S	14 Transportation			16 *						
14.1a Domestic Air		1,392	200	1,189	3	C.S. Total dist to a	shape by Weight			
	14.1b Highway	38,401	4,130	33,840	431	C.S. Total dist to a	shape by Cube			
	14.1c Railroad	13,066	1,405	11,514 🗒	147	C.S. Total dist to	shape by Cube			
	14.1d Domestic Water	1,048	150	895	2	C.S. Total dist to :	shape by Weight			
	14.2 International Transportation	0	0	0	Ċ	C.S. Total dist to	shape by Weight			
	14 Total	53,907	5,886	47,438	583	= sum of 14,1a th	rough 14.2			
All	Other Costs			·,						
	A. CRA Total for Rate Category	1,883,024				CRA total attribute	able for rate category			
	B. Sum of C.S. Totals from above	1,817,857				Sum of C.S. total	sabove			
	C. Difference	65,167		-		= A - B				
	Total All Other	65,167	24,536	40,519	112	= C dist. to shape	by Volume			
Tot	al Attributable	1,883,024	689,227	1,160,044	34,824					
			36.60%	61.61%	1.85%					
Atti	butable Cost per Piece (Dollars)	0.060	0.058	0.059	0.644					
Dis	tribution Key <del>s</del>					Key Name	Source			
1	Volume of Mail (000)	31,504,820	11,861,918	19,588,836	54,066		Table 1			
2	Weight of Mail (000)	4,518,459	648,047	3,857,952	10,460		Table 1			
3	Density of Mail (pounds / cubic feet)	21.3060	28.4219	20.6526	4.4		LR-MCR-13, LR-PCR-38			
4	Cube of Mail (000)	211,980	22,801	186,802	2,377		≈ Weight / Density			
5	Key - Volume of Mail (percent by shape)	100.00%	37.65%	62.18%	0.17%	Volume	Share of (1) by shape			
6	Key - Weight of Mail (percent by shape)	100.00%	14.35%	85.42%	0.23%	Weight	Share of (2) by shape			
7 8	Key - Cube of Mail (percent by shape)	100.00%	10.76%	88.12%	1.12%	Cube	Share of (4) by shape			
9	Elemental Load Key	100.00%	46.58%	51.32%	2.10%	ElemLoad	Table 5			
10	Rural Delivery Key	100.00%	19.37%	80.60%	0.03%	RuralDel	Table 6			
	Carrier In-Office Key	100.00%	42.47%	55.23%	2.30%					
	Window Service Key	100.00%	35.78%	64.09%	0.12%					
# ATTACHMENT TO WITNESS CRUM'S RESPONSE TO DMC/USPS-TZ7-9 (PAGE 3)

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# FY 1997 Bulk Standard Mail (A) Regular

Table 3B(1) Costs by Shape(\$000)

• • •		Sum over		<b></b>	IPPs &	• • • •
Cos	t Category	Shapes	Letters	Flats	Parcels	Source / Derivation
C.S.	3.1 Mail Processing					
	3.1a Mail Processing Variable w/ Pigbk	2,526,358	1,055,498	1,174,972	295,888	
	3.1b Remote Encoding Costs	U	0			
	3.1 Total	2,526,358	1,055,498	1,174,972	295,888	=sum(3.1a,3.1b)
C.S.	3.2 Window Service					
	3.2b CRA Window Service Total	24,041	12,907	9,918	1,216	C.S. 3.2 Total from CRA
	3.2d Window Service Piggyback Factor		1.42210	1.42210	1.42210	LR-H-77
	3.2e Piggybacked Costs		5,448	4,187	513	=sum(3,2a,3,2c)*(3,2d - 1)
	CHECK		18355	14105	1729	bozzo
	3.2 Total	34,189	18,355	14,105	1,729	=sum(3.2a,3.2c,3.2e)
C.S.	6 & 7 City Delivery Carriers					
	6 Liocatt In-Office	525,293	265,332	220,838	39,123	C.S. 6 CRA total
	7.1 Route	17,206	10.323	6,465	418	= CS total from CRA dist, to shape by Volume
	7.2 Access	23 124	13.874	8,689	561	= CS total from CRA dist, to shape by Volume
	7 3 Elemental Load	186 738	92,977	56.264	37 497	= CS total from CRA dist to shape by ElemI oad
	7.4 Other Load	0	0	0	0	= CS total from CRA dist, to shape by Volume
	7.5 Street Support	116.391	60.061	45.212	12.005	= CS total from CRA dist, to shape by 7.1 - 7.4
	6&7 Subtotal	868 752	442,566	337,469	89 604	= sum of 6 through 7.5
	6&7 Piggyback Factors		1 31245	1 31245	1 31245	I R-H-77
	6&7 Piggybacked Costs	271,719	138,280	105,442	27,997	= 6&7 subtotal *( 6&7 pig. fact 1)
	6&7 Total	1,140,471	580,846	442,911	117,601	= sum( 6&7 subtotal, 6&7 piggybacked costs)
C.S	8 Vehicle Service Drivers					
	8a Vehicle Service Drivers	40,862	12,568	17,929	10,365	= CS total from CRA dist. to shape by Cube
	8b Piggyback Factors	-•	1.54487	1.54487	1.54487	LR-H-77,
	8c Piggybacked Costs	22,264	6,848	9,769	5,648	= 8a * (8b -1)
	8 Total	63,126	19,415	27,698	16,013	=sum( 8a, 8c)
C.S.	10 Rural Delivery Carriers					
	10a Rural Delivery Carriers	325,202	89,658	214,276	21,268	= CS total from CRA dist. to shape by RuralDel
	10b Piggyback Factors		1.19851	1.19851	1.19851	LR-H-77.
	10c Piggybacked Costs	64,556	17,798	42,536	4,222	= 9a * (9b -1)
	10 Total	389,758	107,456	256,811	25,490	=sum( 9a, 9c)

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# ATTACHMENT TO WITNESS CRUM'S RESPONSE TO PMC/USPS-T27-9 (PAGE 4)

FY 1997 Bulk Standard Mail (A) Regular			Table 3B(1)		•	
		Cost	s by Shape(\$000	)		
	Sum over			IPPs &		
Cost Category	Shapes	Letters	Flats	Parcels	Source / Derivat	lon
C.S 14 Transportation						
14.1a Domestic Air	19,309	8,491	8,802	2.016	C.S. Total dist to :	shape by Weight
14.1b Highway	184,333	56,694	80,881	46,759	C.S. Total dist to	shape by Cube
14.1c Railroad	63,010	19,380	27,647	15,983	C.S. Total dist to	shape by Cube
14.1d Domestic Water	5,371	2,362	2,448	561	C.S. Total dist to	shace by Weight
14.2 International Transportation	0	. 0	0	0	C.S. Total dist to	shape by Weight
14 Total	272,023	86,927	119,778	65,318	≍ sum of 14.1a th	rough 14.2
All Other Costs						
A. CRA Total for Rate Category	4,405,671		1		CRA total attribut	able for rate category
B. Sum of C.S. Totals from above	4,425,925				Sum of C.S. total:	s above
C. Difference	-20,254				= A - B	
Total All Other	-20,254	-12,152	-7,611	-492	= C dist. to shape	by Volume
Total Attributable	4,405,671	1,856,345	2,028,665	521,547		
		42.14%	46.05%	11.84%		
Attibutable Cost per Piece (Dollars)	0.135	0.095	0.166	0.661		
Distribution Keys					Key Name	Source
1 Volume of Mail (000)	32,527,735	19,515,470	12,222,726	789.53 <b>9</b>		Table 1
2 Weight of Mail (000)	4,280,468	1.882.342	1.951.316	446,810		Table 1
3 Density of Mail (pounds / cubic feet)	19.8783	28.4219	20.6526	8.18		LR-MCR-13, LR-PCR-38
4 Cube of Mail (000)	215,334	66,229	94,483	54,622	•	= Weight / Density
5 Key - Volume of Mail (percent by shape)	100.00%	60.00%	37.58%	2.43%	Volume	Share of (1) by shape
6 Key - Weight of Mail (percent by shape)	100.00%	43.98%	45.59%	10.44%	Weight	Share of (2) by shape
7 Key - Cube of Mail (percent by shape)	100.00%	30.76%	43.88%	25.37%	Cube	Share of (4) by shape
8						
9 Elemental Load Key	100. <b>00%</b>	49.79%	30.13%	20.08%	ElemLoad	Table 5
10 Rural Delivery Key	100.00%	27.57%	65.89%	6.54%	RuralDel	Table 6
Carrier In-Office Key	100.00%	50.51%	42.04%	7.45%		
Window Service Key	100.00%	<b>53.69%</b>	41.26%	5.06%		

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#### Table 1

(PAGE 5)

# FY 1997 Standard Mail (A) Bulk Regular Rate

	PERMIT Estimate			Controlled to GFY RPW				
Letters			1				Revenue per	Weight per
	Revenue	Pieces	Weight	Revenue	Pieces	Weight	Piece (cents)	Piece (oz.)
Basic	430,498	1 679 583	97.317	430,828	1.683.678	97,625	25.6	0.9
Basic BC	547,682	3.007.201	169 663	548,102	3.014.532	170,199	18.2	0.9
3/5-Digit	569,364	2 802 506	128,747	569,800	2,809,337	129,154	20.3	0.7
3/5 Digit BC	1.965.352	11,965,370	669,095	1,966,858	11,994,539	671,211	16.4	0.9
Carrier Route	1 131 260	8,216,548	405 713	1.164.483	8,480,231	428,498	13.7	0.8
High Density	41,475	326 947	21 426	42,693	337,440	22,629	12.7	1.1
Saturation	345,451	2 949 590	186 404	355 596	3.044.247	196.872	11.7	1.0
Total Letters	5,031,083	30,947,746	1,678,366	5,078,362	31,364,005	1,716,189	16.2	0.9
Flats	ł		1				Revenue per	Weight per
	Revenue	Pieces	Weight	Revenue	Pieces	Weight	Piece (cents)	Piece (oz.)
Basic	357,948	1.005.113	230.613	358,222	1.007.563	231,342	35.6	3.7
Basic BC	85,878	254 559	64,727	85,943	255,180	64,932	33.7	4.1
3/5-Digit	463,939	1 818 866	374,892	464 294	1.823.300	376.077	25.5	3.3
3/5 Digit BC	1 961 489	9 106 682	2 081 313	1 962 992	9 128 883	2,087,893	21.5	3.7
Carrier Route	1 695 089	10 019 153	2 101 877	1 734 577	10 340 684	2 219 919	16.8	34
High Density	175 433	1 173 430	223 330	180 585	1 211 087	235 872	14.9	31
Saturation	1 035 854	7 787 160	1 327 581	1 066 275	8 037 065	1 402 139	133	28
Total Flats	5,765,629	31,164,964	6,404,333	5,852,890	31,803,762	6,618,174	18.4	3.3
	• • •	• • •					• .	
IPPs and Parcels			l l				Revenue per	Weight per
	Revenue	Pieces	Weight	Revenue	Pieces	Weight	Piece (cents)	Piece (oz.)
Basic	131,410	254,677	129,926	131,511	255,298	130,337	51.5	8.2
Basic BC	-	•	-	-	•	-	1	
3/5-Digit	258,097	554,075	320,684	258,295	555,426	321,698	46.5	9.3
3/5 Digit 8C	-	-	-	-	-	-		
Carrier Route	3,271	19,700	3,594	3,367	20,332	3,795	16.6	3.0
High Density	845	5,198	1,208	870	5,365	1,276	16.2	3.8
Saturation	3,714	27 487	5,168	3,823	28,369	5,458	13.5	3.1
Total IPPs and Parcels	397,337	861,137	460,580	397,866	864,790	462,565	46.0	8.6
	r							Minisht par
Ali Snapes	<b>B</b> auman	0	10/01-04	<b>B</b>	Diana	18/-i-ht	Revenue per	Vieignuper
Perio.	Revenue		457 956	COO EE1	2046 520	450 204		
Dasic Regio BC	319,000	2,939,374	437,630	920,001	2,340,333	405,304	31.2	2.5
	033,500	5,201,700	234,350	6 202 282	5,209,7 (2	200,101	19.4	1.2
aro-Digit are Diat Do	1,291,399	0,170,447	024,323	1,292,309	3,100,003	2 750 104	19.6	2.0
	3,920,041	21,072,000	2,750,408	3,929,000	21,123,422	2,709,104	10.0	2.1
	2,619,620	18,255,400	2,511,163	2,902,428	10,091,297	2,002,212	15.4	2.3
High Density	217,753	1,505,575	240,904	224,148	1,000,092	209,778	14.4	2.7
Saturation Total All Shapes	1,385,019	<u>10,764,239</u> 62,973,847	8543279	11,329,117	64,032,556	8,796,928	12.8	2.2
	1 1,104,000	02,010,011	0,0 ,0,2, 0 ]	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	0,1002,000	01.001020		
GFY RPW Total		-						
	Revenue	Pieces	Weight					
Basic and 3/5-Digit	6,776,846	32,527,736	4,280,469					
Carrier Route	4,552,271	31,504,820	4,516,459					
1	11,343,117	<del>04</del> ,032, <del>330</del>	0,730,320					
GFY RPW Factors								
	Revenue	Pieces	Weight					
Basic and 3/5-Digit	1.00077	1.00244	1.00316					
Carrier Route	1.02937	1.03209	1.05616					

ATTACHMENT TO WITNESS CRUM'S RESPONSE TO DMC/USPS-TZ7-9

#### Table 2

# FY 1997 Standard Mail (A) Bulk Nonprofit Rate

	P	ERMIT Estimate	6	Cont	rolled to GFY R	PW		
Letters	1		[				Revenue per	Weight per
	Revenue	Pieces	Weight	Revenue	Pieces	Weight	Piece (cents)	Piece (oz.)
Basic	166,146	1,272,000	55,527	165,512	1,271,096	55,257	13.0	0.7
Basic BC	105,528	1,066,144	55,140	105,125	1,065,386	54,872	9.9	0.8
3/5-Digit	238,965	2,242,736	86,747	238,053	2,241,143	86,326	10.6	0.6
3/5 Digit BC	336,610	3,910,717	197,659	335,326	3,907,938	196,700	8.6	0.8
Carrier Route	110,049	1,488,121	65,014	110,221	1,497,748	64,508	7.4	0.7
High Density	2,519	39,677	1,027	2,523	39,934	1,019	6.3	0.4
Saturation	31,170	535,083	27,769	31,219	538,545	27,553	5.8	0.8
Total Letters	990,987	10,554,477	488,882	987,980	10,561,790	486,235	9.4	0.7
Flats							Revenue per	Weight per
	Revenue	Pieces	Weight	Revenue	Pieces	Weight	Piece (cents)	Piece (oz.)
Basic	67,935	318,690	56,290	67,676	318,463	56,017	21.3	2.8
Basic BC	9,127	48,541	8,743	9,092	48,507	8,701	18.7	Ż.9
3/5-Digit	74,075	472,690	71.070	73,792	472,355	70,725	15.6	2.4
3/5 Digit BC	107,409	811,610	128,984	106,999	811.033	128,358	13.2	2.5
Carrier Route	54,407	534,477	66,254	54,492	537,935	65,739	10.1	2.0
High Density	1,186	12,870	1.371	1,187	12,953	1.360	92	1.7
Saturation	20.164	242,313	33,627	20,195	243,881	33,365	83	22
Total Flats	334,302	2,441,192	366,340	333,434	2,445,127	364,265	13.6	2.4
IDDe and Darreis			1					Meight per
IFF3 ding Falgela	Revenue	Pieces	Weight	Revenue	Pieces	Weight	Piece (cents)	Piece (oz.)
Basic	4,743	17.704	5.875	4.724	17.692	5846	26.7	53
Basic BC	-			-	-	•,• .•		
3/5-Diait	6.030	24.318	9,734	6.007	24,300	9.687	24.7	6.4
3/5 Digit BC	-	_ ,,	•	-,	,	-		
Carrier Route	لمه	380	80	44	382	79	11.5	33
High Density	0	6	1	0	6		76	27
Saturation	47	585	111	47	589	110	80	30
Total IPPs and Parcels	10,864	42,992	15,800	10,823	42,969	15,723	25.2	5.9
All Shanes			1				Revenue ner	Weight per
al onapeo	Revenue	Pieces	Weight	Revenue	Pieces	Weight	Piece (cents)	Piece (oz )
Rasic	238 823	1 608 393	117 692	237 912	1 607 251	117 120	14.8	12
Basic BC	114 655	1 114 685	63,883	114 217	1 113 893	63 573	10.3	0.9
3/5_Digit	319.070	2 739 744	167,550	317 853	2 737 798	166 737	11.6	1.0
3/5 Digit BC	444 019	A 772 327	326 643	442 325	4718972	325.058	11.0	1.0
Carrier Route	164 499	2 022 977	131 348	164 757	2 036 065	130,326	81	1.1
High Density	3 705	52 553	2 300	3 711	52 893	2 380	70	0.7
Saturation	51 291	777 081	61 507	51 461	783 015	61 078	66	1 2
Total All Shapes	1,336,152	13,038,661	871,022	1,332,237	13,049,886	866,223	10.2	1.1
GEY RRW Total								
	Revenue	Pieces	Weight					
Basic and 3/5-Digit	1.112.308	10.177.913	672,489					
Carrier Route	219.929	2,871.973	193,734					
	1,332,237	13,049,886	866,223					
GFY RPW Factors	_							
·	Revenue	Pieces	Weight					
Basic and 3/5-Digit	0.99619	0.99929	0.99515					
A surface Marcala	1 00157	1 00647	0 00777					

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(PAGE 6)

DMC/USPS-T27-10. In the last docket, the Commission found merit in Dr. Haldi's alternative proposals that the shape costs be based on average transportation cost or, alternatively, that destination entry discounts be deaveraged by shape, because "the base rate should be consistent with the discount subtracted from it." Op. & Rec. Dec., Docket No. R97-1, para. 5483. In light of the Commission's finding:

a. Did you or the Postal Service calculate destination entry discounts based on shape? If so, please provide such calculations and explain why you decided not to employ such a methodology in this case. If not, why did the Postal Service opt to ignore the Commission's analysis?

b. Did you or the Postal Service calculate presortation discounts based on shape? If so, please provide such calculations and explain why you decided not to employ such a methodology in this case. If not, why not?

# RESPONSE

a. I calculated estimated transportation cost savings by shape. Please refer

to the attachment to my response to DMC/USPS-T27-7. Please refer to pages

15-16 of witness Moeller's testimony (USPS-T-35) for a discussion as to why

shape-based dropship discounts were not proposed in this docket.

b. It is my understanding that the Standard Mail (A) rate design includes

different presort discounts for the letter and nonletter shapes. Please refer to

USPS-T-35, WP 1, page 11.

#### DMC/USPS-T27-11.

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a. Please confirm the following figures, derived from USPS-T-28 (revised 10/1/97), Docket No. R97-1, Exhibit K, and USPS-T-27, Attachment F, Table 3. If you do not confirm, please provide the correct data.

Std. A	FY 96 Mail	FY98 Mail	FY96 Deliv.	FY98 Deliv.	
Parcels	Proc. Costs	Proc. Costs	Costs	Costs	
Regular	\$0.2901	\$0.483	\$0.1261	\$0.1818	
ECR	\$0.1462	\$0.274	\$0.2843	\$0.458	
Nonprofit	\$0.3705	\$0.7004	\$0.2229	\$0.1895	
NP ECR	\$0.3672	\$2.0193	\$0.9938	\$0.1876	

b. Please explain why mail processing costs have increased by over 70 percent for non-ECR parcels, and more than doubled for ECR parcels.

c. Please explain why Nonprofit ECR parcels' mail processing costs increased by a factor of 5.5 between 1996 and 1998, while delivery costs for the same parcels decreased by a factor of 5.3.

d. Please explain why ECR parcel delivery costs are more than twice as high as delivery costs for parcels in the other three subclasses? Is there any difference in how Commercial ECR parcels are delivered?

e. Do you have confidence in the reliability of these cost data? Please explain your answer in light of the cost variances documented above.

# RESPONSE

a. The corrected data has been provided in the table above. Like the table, I

have interpreted "Delivery" as the sum of City Delivery Carriers plus Rural

Delivery Carriers.

- b. Please refer to my responses to DMC/USPS-T27-8(b).
- c. Please refer to my response to DMC/USPS-T27-8(b).

d. Please refer to my response to PSA/USPS-T27-5(a). I am unaware of any difference in how commercial ECR parcels are delivered.

e. I have confidence in the cost results presented on page 10 of my testimony and used by witness Moeller to support the surcharge on Standard Mail (A) parcels. Please also refer to my response to PSA/USPS-T27-5.

DMC/USPS-T27-12. Please refer to your testimony at page 8 (II. 8-13), where you state that "In Docket No. R97-1, the Postal Service proposed explicit econometric-based volume variability factors as part of their mail processing cost presentation. That was not done in this docket for effectively all of the parcel operations and some portion of the flats operations. The impact of this change is to expand the cost difference between flats and parcels beyond its level under the Docket No. R97-1 volume variability proposal."

a. Why did the Postal Service not propose explicit econometric-based volume variability factors as part of their parcel mail processing cost presentation?

b. Did the Postal Service desire to expand the cost difference between flats and parcels beyond its level under the Docket No. R97-1 volume variability proposal?

#### RESPONSE

a. Please refer to pages 132-139 of the testimony of witness Bozzo (USPS-

T-15). Please also refer to my response to Postcom/USPS-T27-1.

b. It is my understanding that the choice of volume variability approach was

made without regard to its impact on the parcel/flat cost differential in Standard

Mail (A). Please refer to pages 132-139 of the testimony of witness Bozzo.

#### DMC/USPS-T27-13.

a. For each of the four Standard A subclasses, please provide the volume of Standard A parcels (i.e., pieces subject to the Standard A parcel surcharge) in FY 1999. If these data are not yet available, please provide them as soon as they become available.

b. For each of the four Standard A subclasses, what is the projected volume of Standard A parcels in Test Year 2001?

c. When projecting the parcel volume for FY 2000, is the higher percentage increase in rates for parcels proposed by witness Moeller taken into account? If so, please explain how, and to what extent. If not, please explain why not.

#### RESPONSE

a. The numbers below represent Permit volumes tied to 1999 official RPW

totals. They are calculated in a manner identical to the 1998 volumes presented

in Attachment F, Tables 1 & 2 of my direct testimony.

Regular = 766,487,000 ECR = 22,747,000 Nonprofit = 33,352,000 NP ECR = 927,000

b. The Test Year 2001 estimates of the volume of pieces paying the ...

surcharge by subclass can be found in the workpapers of witness Moeller

(USPS-T-35, WP1, page 14).

c. I am informed that there is no FY 2000 parcel volume forecast.

DMC/USPS-T27-14. Since Docket No. R97-1, has the Postal Service conducted any studies of any kind whatsoever on Standard A parcels, including, but not limited to, the effect of the Standard A parcel surcharge? For example, a study of the effect of the surcharge on volume, or a survey

to ascertain whether (or how many) firms repackaged the contents so as to be able to qualify as flats and migrate to the flats category? If so, please provide as a library reference copies of all such studies.

#### RESPONSE

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I am unaware of any such studies.

DMC/USPS-T27-15. Other than the cost data which you present in your testimony, has the Postal Service conducted any other study or studies on the cost of processing and delivering parcels? Such a study or studies could be, for example: (i) an engineering-type study; (ii) an MTM study; (iii) a detailed cost model for Standard A parcels; (iv) an IOCS-based study of the cost of handling parcels classified in different ways, such as IPP Machinable, IPP Non-machinable, Parcel Machinable, and Parcel Outsides (i.e., using the IOCS-based definitions); and/or (v) a study regarding the cost of processing and delivering parcels with detached address labels ("DALs") versus the cost of handling parcels without DALs. If so, please provide as a library reference copies of all such studies.

# RESPONSE

I assume you are referring specifically to Standard Mail (A) parcels. The only

additional study I am aware of was originally presented in Appendix C of LR-

PCR-38 in Docket No. MC97-2. It was called the Standard Mail (A) Bulk Parcel

Characteristics Study and is most similar to option (iv) above. Additional portions

of the study were also presented in LR-PCR-50 and LR-PCR-53.

**DMC/USPS-T27-16**. As between the four subclasses within Standard A, the unit costs of processing and delivering parcels exhibit wide differences.

a. Are these cost differences due chiefly or solely to vagaries in IOCS sampling, and the relatively small volume of parcels?

b. Unless your answer to the preceding question is an unqualified affirmative, please itemize and discuss the principal cost drivers (e.g., shape, weight, other) and explain how they account for the substantial cost differences exhibited by your data.

#### RESPONSE

a. I believe the unit cost differences relating to Nonprofit ECR parcels are due to the lack of volume in that category and the variability associated with that low volume. Please also see my response to DMC/USPS-T27-8(b).

b. As stated in my response to subpart (a), Nonprofit ECR unit cost

measurements are heavily impacted by their low volume, however, I do not rule out the possibility that other characteristics may be involved because of the historically high unit costs in Nonprofit ECR.

I think it makes sense to focus my discussion on the three major cost categories (Mail Processing, City Delivery Carriers, and Transportation) and am looking at the attachment to my response to RIAA/USPS-T27-1 as I respond here. Mail processing costs are much higher in Regular and Nonprofit than in ECR principally because ECR pieces are already presorted to carrier route. I do not know exactly why Nonprofit and Regular mail processing costs differ. Nonprofit and Regular unit delivery costs are quite similar. Please refer to my response to DMC/USPS-T27-11(d) for a discussion of ECR delivery costs.

Nonprofit and Regular transportation costs are quite similar and exceed ECR transportation costs by a comfortable margin. This is predominantly because ECR pieces are more heavily dropshipped than Nonprofit or Regular pieces. Please refer to LR-I-225 for additional detail regarding dropship profile by subclass and shape.

#### DMC/USPS-T27-17.

a. For Standard A parcels, have you studied the relationship of weight to cost? If so, please provide a copy of any such study and the results.

b. For Standard A parcels, have you studied the relationship of different shapes to cost? If so, please provide a copy of any such study and the results.

#### RESPONSE

a. I have not specifically studied the relationship of weight to cost for

Standard Mail (A) parcels. For general discussion regarding weight,

machinability and cost of these pieces please refer to Docket No. R97-1 (Tr. 5,

2369-2370). The only study presented in this case that I am aware of relating

weight to cost in Standard Mail (A) parcels can be found in USPS LR-I-92.

b. I have conducted no such study. Because weight is limited to 1 pound, I expect the cost variance due to various shapes and sizes would be smaller than in a subclass such as Parcel Post where the weight limit is 70 pounds.

**DMC/USPS-T27-18**. Other than the cost data which you present in your testimony, please provide a brief recap of all efforts which you have made to investigate the costs of handling parcels. Include in your recap visits to parcel handling operations at Postal Service Plants, discussions with or briefings from operations personnel who specialize in or are familiar with the processing and delivery of parcels, visits to facilities of mailers that regularly enter Standard A parcels, etc.

#### RESPONSE

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Since the fall of 1995 when I began my career with the Postal Service, I have been involved in the Standard Mail (A) parcel issue (then known as bulk Third-Class parcels). I will make a good faith effort to briefly describe my investigations over the last 5 years, but can not guarantee where or from whom I learned each piece of information I have picked up. Most of my planned operational investigations preceded the filing of Docket No. R97-1, though I have continued to observe the handling of these pieces as a matter of course while focused on other duties.

Focused on the Standard Mail (A) parcel issue in the fall/winter of 1995, I visited approximately five delivery units in Arlington, Virginia and several delivery units in the Denver, Colorado area. I also visited the Washington Bulk Mail Center (BMC) and the Denver Bulk Mail Center and Processing and Distribution Center (P&DC). The Arlington visits were led by a local manager of delivery. The Washington BMC trip was led by a member of the Headquarters BMC Operations group and former BMC manager. The Denver trip was led by Docket No. R2000-1 witness Kingsley. I also spoke with numerous people local to these facilities regarding the handling of parcels.

During 1996 and 1997 I met frequently with various members of the Headquarters BMC Operations Group and attended a meeting of BMC managers in Springfield, Massachusetts. I continued to visit various postal plants, BMCs, and delivery units as part of my cost study preparations and desire to learn more about postal operations. To date, I have been to 9 of the 21 BMCs and a larger number of plants and delivery units.

In 1995/1996, I called several meetings involving postal volume and cost experts to determine the most reliable approaches to developing unit cost estimates by shape.

Throughout the period 1995-2000, I worked with numerous people at Postal Headquarters regarding Standard Mail (A) parcel issues. Besides the BMC Operations group mentioned previously, I also spoke with various other people in Operations. I spoke with a former manager of carriers who also has experience in costing. I have worked closely with other member of my current department including my manager. I have had numerous meetings with members of the Pricing group. I have spoken with a former manager of data collectors who spoke with current data collectors regarding these pieces. I visited RJ Reynolds and Sara Lee Direct mailer plants in North Carolina. In December 1998 I visited a Cox Direct facility in Greenville, North Carolina.

#### DMC/USPS-T27-19.

a. Based on your studies of the cost of parcels in Docket No. R97-1 and this Docket, and your knowledge about parcels in general, would it be your opinion that (i) the Postal Service loses a small amount of money on all, or almost all, Standard A parcels, or (ii) the Postal Service makes money on a significant subset of its Standard A parcel volume, but loses a substantial, offsetting amount on other parcels? Please discuss.

b. If your answer to part (a) is to the effect that the Postal Service loses a small amount of money on all, or almost all, Standard A parcels, please explain how this can be in light of the very different costs you present for the four Standard A subclasses.

c. If your answer to part (a) is to the effect that the Postal Service makes money on a significant subset of its Standard A parcel volume, but loses a substantial, offsetting amount on other parcels, please explain which types of parcels are generally profitable, which are highly unprofitable, and explain the principal factors that cause some parcels to be highly unprofitable.

#### RESPONSE

a. My testimony does not calculate contribution for individual pieces.

However, at current rates it is my belief that the Postal Service loses money on

the vast majority of Standard Mail (A) parcels. As mentioned in my response to

DMC/USPS-T27-17(b), I believe Standard Mail (A) parcels are relatively more

homogeneous than a subclass such as Parcel Post. Revenue considerations

aside, there would need to be large cost variations within subclasses if option (ii)

was indeed the case.

If costs do not vary substantially within subclass and shape, then changes in revenue must be key in determining contribution. I suspect heavier pieces might lose somewhat less than lighter pieces because they pay higher rates. Regular parcels are the heaviest on average, pay the most in revenue,

and have the smallest average loss per piece. Witness Daniel attempts to
develop costs by ounce increment in USPS LR-I-92. Quickly scanning the
existing rate schedule and her analysis of Standard Mail (A) parcels, only
Regular parcels weighing 10-13 ounces appear to be close to covering their cost.
b. While the estimated loss per piece is indeed higher in ECR, Nonprofit, and
Nonprofit ECR (not meaningful - please see my responses to DMC/USPS-T278(b) and DMC/USPS-T27-16) than it is in Regular, the volumes are vastly
skewed towards Regular. Please refer to the data presented below gathered
from my testimony.

Category	1998 Estimated Loss/piece	Volume Share
Regular	\$0.29	89.8%
ECR	\$0.59	5.3%
Nonprofit	\$0.73	4.7%
Nonprofit ECR	\$2.12	0.2%

If the figures above are weighted together, the average pre-surcharge estimated loss per piece for parcels in all of Standard Mail (A) is \$0.33. This number is very close to the \$0.29 loss for Regular. Therefore, regardless of any variation (real or due to low volumes) in the other categories, the results for Regular will basically determine the results for all of Standard Mail (A). In regards to your question, I do not believe unit cost variation between subclasses is a major issue in that the final results are not greatly impacted by any variation. c. Not applicable.

# U.S. POSTAL SERVICE WITNESS CHARLES L. CRUM RESPONSE TO INTERROGATORIES OF NEWSPAPER ASSOCIATION OF AMERICA

NAA/USPS-T27-1: Please refer to your testimony at page 4, lines 16-19.

a. Please confirm that you suggest that volume could serve as an appropriate proxy in determining non-transportation savings.

b. Please confirm that Witness Daniel converts your cost per pound estimates by destination type into cost per piece. If you used volume as a proxy, instead of weight, would your calculated costs per piece correspond with Witness Daniel's? Please explain your answer.

# RESPONSE

a. Confirmed that I am suggesting that *cubic* volume could serve as an appropriate proxy in estimating non-transportation savings. I make no comments regarding volume (as in number of pieces) as an appropriate proxy.

b. In USPS LR-I-96, witness Daniel multiplies my estimated non-

transportation savings per pound by pounds to get total estimated non-

transportation cost savings by entry point. She then divides by pieces to get an estimated cost savings per piece.

I am not sure I would necessarily reach the same total results as witness Daniel if I used volume (number of pieces) as a proxy. I use a conversion factor (pieces/pound) at a greater level of detail than witness Daniel. For example, in Attachment D, Table 1, I use pieces per pound for Origin AO sacks. Witness Daniel's calculations are at a more aggregated level.

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# U.S. POSTAL SERVICE WITNESS CHARLES L. CRUM RESPONSE TO INTERROGATORIES OF NEWSPAPER ASSOCIATION OF AMERICA

NAA/USPS-T27-2: Please refer to your testimony at page 6, lines 13-16.

a. Please confirm that these estimates are neither rate category- nor shape-specific.

b. Please explain whether rate category and shape influence dropshipped proportions, and justify your response.

C. If rate category and shape influence drop proportions, please justify the appropriateness of using non-specific cost per pound estimates.

#### RESPONSE

a. Confirmed.

b. The attached sheet attempts to describe briefly how rate category and

shape vary with dropship proportions. I have no information regarding any

influence rate category and shape might have beyond simple correlation.

c. Not applicable.

# U.S. POSTAL SERVICE WITNESS CHARLES L. CRUM RESPONSE TO INTERROGATORIES OF OFFICE OF THE CONSUMER ADVOCATE

report. They were not chosen independent of the CRA analysis. Also, please see witness Bozzo's response to OCA/USPS-T27-3(a).

b. Yes.

i. Please see Table 1 of Witness Van-Ty-Smith's (USPS-T-17) direct testimony, pages 24-25.

ii. NA

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c. My treatment of costs is fully consistent with the Postal Service's broader presentation in this case. To the extent that the volume variabilities presented in Table 1 of witness Van-Ty-Smith's testimony are an accurate understanding of how mail processing costs for the types of operations I model vary with volume, my worksharing savings are not overstated. If one were to use the Postal Service's volume variability estimates as presented in Docket No. R97-1, the costs avoided by workshared mail would tend to be lower.

# U.S. POSTAL SERVICE WITNESS CHARLES L. CRUM RESPONSE TO INTERROGATORIES OF OFFICE OF THE CONSUMER ADVOCATE

#### OCA/USPS-T27-2.

Please refer to your testimony at page 19, lines 4-8. You state that:

The productivities used in this analysis are adjusted only by implicit volume variability factors that are near 100 percent. This is done to be consistent with Postal Service assumptions in this docket and differs from the Postal Service presentation in Docket No. R97-1 where explicit volume variability factors ranging between about 50 percent and 100 percent were used.

- (a) Please list, and describe in detail, all Postal Service assumptions in this docket with which you endeavor to be consistent. Include citations to document, page, and line for each such assumption.
- (b) In the R2000-1 proceeding, does the Postal Service present explicit volume variability factors less than 100 percent? If so, then identify such explicit volume variability factors and fully explain your rationale for not using them.

#### RESPONSE

a. I endeavor to be consistent with the Cost Pool volume variability factors presented in Table 1 of Witness Van-Ty-Smith's (USPS-T-17) direct testimony, pages 24-25.

b. Yes. Please see witness Bozzo's response to OCA/USPS-T-27-3(a) and witness Van-Ty-Smith's testimony (USPS-T-17), page 8. The question's implication that I do not use the econometrically estimated ("explicit") volume variability factors to the same extent as the Postal Service's mail processing CRA methods is incorrect. See also the response to part (a) of this interrogatory.

#### OCA/USPS-T27-3.

Please refer to your testimony at page 8, lines 7-13. You state that:

The second change from my presentation in Docket No. R97-1 is the calculation of mail processing costs. In Docket No. R97-1, the Postal Service proposed explicit econometric-based volume variability factors as part of their mail processing cost presentation. That was not done in this docket for effectively all of the parcel operations and some portion of the flats operations. The impact of this change is to expand the cost difference between flats and parcels beyond its level under the Docket No. R97-1 volume variability proposal.

(b) Please present your justification for "expand[ing] the cost difference between flats and parcels beyond its level under the Docket No. R97-1 volume variability proposal."

#### RESPONSE

b. In my testimony at Attachment F, Tables 3.1 through 3.4, I directly input Mail Processing Costs By Shape. Mail Processing Costs By Shape is an output of the Postal Service's mail processing volume-variability cost methods from the CRA. This is a cost input that I have no involvement in producing. The result of this input is that the cost difference between flats and parcels is higher than it was under the Docket No. R97-1 presentation. In the quoted text I am merely trying to explain one of the reasons why parcel costs would be different (higher) than they were in my Docket No. R97-1 presentation.

# U.S. POSTAL SERVICE WITNESS CHARLES L. CRUM RESPONSE TO INTERROGATORIES OF OFFICE OF THE CONSUMER ADVOCATE

# OCA/USPS-T27-4.

Please refer to your testimony at page 15, lines 1-3. You state that:

If one were to assume explicit volume variability factors similar to those presented for these types of operations by the Postal Service in Docket No. R97-1, the estimated savings would be lower.

Please present the economic rationale for assuming volume variability factors in this proceeding that lead to higher savings for DBMC-entered Bound Printed Matter.

#### RESPONSE

Please see the testimony of Witness Bozzo (USPS-T-27), pages 132-139 and his

response to OCA/USPS-T-27-3(a). I have made no choice in assuming volume

variability factors. I have merely made my testimony consistent with the Postal

Service's overall presentation in this docket. This presentation puts, for example, all

BMC and platform volume variability factors at or near 100 percent. The mathematical

outcome of using higher volume variability factors (other things equal) is higher

measured cost savings for workshared mail.

# U.S. POSTAL SERVICE WITNESS CHARLES L. CRUM RESPONSE TO INTERROGATORIES OF OFFICE OF THE CONSUMER ADVOCATE

#### OCA/USPS-T27-5.

Throughout your testimony and attachments, you use the abbreviation "MTM." What does "MTM" represent?

#### RESPONSE

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"MTM" stands for Methods Time Measurement. MTM is defined as a procedure which analyzes any manual operation or method into the basic motions required to perform it and assigns to each motion a predetermined time standard which is determined by the nature of the motion and the conditions under which it is made. It has historically been used in the Standard Mail (A) dropship models to derive productivities used to estimate nontransportation cost savings. It is discussed in detail in Docket No. R87-1, Tr. 9 / 5729-30, 5782-84, and Tr. 29 / 22309-24. . .

# OCA/USPS-T27-6.

In the introduction to Attachment C, Tables 5-7, you state that: "[E]ngineering standards were used to estimate the time needed for each operation." Are the engineering standards the same as the "MTM" productivity figures? If not, please explain all differences.

#### RESPONSE

Yes.

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# OCA/USPS-T27-7.

Please refer to Attachment E, Table 5, note. You state that the MTM productivities are the same ones used in Docket No. R97-1. Please give precise citations (including document title, page number, and line number) for all MTM figures obtained from Docket No. R97-1.

#### RESPONSE

Library Reference USPS-H-111, Appendix E, Tables 5-7.

#### U.S. POSTAL SERVICE WITNESS CHARLES L. CRUM RESPONSE TO INTERROGATORIES OF OFFICE OF THE CONSUMER ADVOCATE

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#### OCA/USPS-T-27-8.

Please refer to your testimony at page 5, lines 1-11.

- (a) Please define the terms "implicit volume variability" and "cost pool adjustment factor" as you use these terms in line 5 and provide an example of each.
- (b) Have you assumed the mail processing variabilities to be at or near 100 percent for the purpose of calculating mail processing cost savings? Please explain fully any negative answer.
- (c) Please provide a representative calculation of a cost savings for Standard (A) mail using the variabilities contained in USPS-T-17, Table 1.
- (d) What is the economic justification for using volume variabilities of less than 100 percent to calculate attributable costs of mail processing on the one hand, and using variabilities at or near 100 percent to calculate cost savings for discounts on the other hand? Please explain fully.

#### RESPONSE

a. I mean no difference between the terms "implicit volume variability" and "cost pool adjustment factor". Both mean the same thing as "Pool Volume-Variable Factor" as described in the testimony of witness Van-Ty-Smith. These factors are listed in the testimony of witness Van-Ty-Smith, pages 24-25. An example of both would be PSM (BMC Group - Parcel Sorting Machine) = 1.000.

b. Please see my response to OCA/USPS-T-27-1(b) and witness Bozzo's response to OCA/USPS-T-27-3(a).

c. I have reproduced and attached a sheet similar to Attachment E, Table 7 in a printed format that will provide representative calculations.

d. I use the identical variabilities in my cost savings for discount calculations as those used to calculate the volume-variable costs of mail processing. Please see my response to OCA/USPS-T-27-1(b). The premise of the question is incorrect and there

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# U.S. POSTAL SERVICE WITNESS CHARLES L. CRUM RESPONSE TO INTERROGATORIES OF OFFICE OF THE CONSUMER ADVOCATE

is no difference in methodology to justify.

# TO CRUM'S RESPONSE TO OCA/USPS-TZ7-86 ATTACHMENT

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#### Attachment E, Table 7 (Reproduced) Productivities and Conversion Factors used in Pallet Models

	(1)	(2) BMC	(3) SCF	(1*2)	(1*3)	
Operations	MTM Prod. (min per pallet)	Pool Vol. Var. Factor	Pool Vol. <u>Var. Factor</u>	BMC Prod. (w/ yariab.)	SCF Prod. (w/ variab.)	
Transport	1.9704	0.946	0.896	1.8840	1.7655	
Transport	0.6426	0.917	0.917	0.5893	0.5893	
Transport	1.3877	0.946	0.896	1.3128	1.2434	
Transport	1.2852	0.948	0.896	1.2158	1.1515	

#### From USPS-T-17. Table 1. pages 24 and 25.

0.946 = Pool Volume-Variability Factor for BMC Group - Platform

0.917 = Pool Volume-Variability Factor for NON-MODS Group - Allied Operations 0.896 = Pool Volume-Variability Factor for MODS 1 & 2 Facilities - Platform

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# U.S. POSTAL SERVICE WITNESS CHARLES L. CRUM RESPONSE TO INTERROGATORIES OF OFFICE OF THE CONSUMER ADVOCATE

## OCA/USPS-T-27-9.

Please refer to your testimony at page 8, lines 3-6. What would change in your analysis if you used 1999 data for the purpose of calculating Standard (A) mail nonletter cost differences? Please explain fully.

#### RESPONSE

Because of the uncertainties related to the issue described on page 7, lines 18-22 of my testimony, it might be difficult to accurately separate the volumes, revenues, and CRA costs by shape using 1999 data. At this point, I believe I could best estimate the 1999 unit cost difference between flats and parcels in Standard Mail (A) by taking the 1998 data and adjusting those results by the change in average postal wages between 1998 and 1999. My estimate of the Test Year 2001 unit cost difference between flats and parcels in Standard Mail (A) would remain unchanged.

PostCom/USPS-T-27-1.

You testify, at page 8, lines 8 - 11, that:

In Docket No. R97-1, the Postal Service proposed explicit econometricbased volume variability factors as part of their mail processing cost presentation. That was not done in this docket for effectively all of the parcel operations and some portion of the flats operations.

(a) What do you mean by the word "effectively"; identify all parcel operations in which explicit econometric-based volume variability factors were employed with citations to the presentation of this analysis.

(b) Identify the portions of flats operations for which econometric-based volume variability factors (i) were, and (ii) were not proposed with citations to the presentation of each variety of analysis.

#### RESPONSE

a. The cost pools and their associated volume variability factors are listed in the direct testimony of Witness Van-Ty-Smith (USPS-T-17), pages 24 and 25. The cost pools with econometric-based volume variability factors are marked with an asterisk. What I mean by "parcel operation" or "flat operation" are those cost pools that contribute the most to the total costs of that shape of mail. In the statement that you reference above, I was trying to get across a complicated point with language that was probably too brief.

There are 54 separately calculated volume variability factors each corresponding to a separate cost pool. Of those 54, 12 have econometricallyderived volume variability factors. While one could do a comprehensive analysis of this question by comparing the volume variability factors referenced in witness Van-Ty-Smith's testimony above with the Base Year cost pool costs of flats (pages V-33 through V-36) and parcels (pages V-37 through V-40) presented in

USPS LR-I-81, a relatively simple example would better get at the point I was trying to make. In the Regular subclass, of the five cost pools with the highest costs for flats, two of them (#1 highest - FSM/ and #3 highest - MANF) have econometrically-derived volume variability factors. The others do not. Of the five cost pools with the highest costs for parcels, none of them have econometrically derived volume variability factors. That is what I meant by "effectively". Other cost pools that contribute fewer costs to parcels may indeed have econometrically-derived volume variability factors and this could vary somewhat by subclass. All the information necessary to confirm or deny this is available in the data sources cited above.

b. See my response to (a).

PostCom/USPS-T-27-3.

You indicate at page 9 lines 1 - 4 that you "have chosen to use the average density for all Standard (A) parcels from that study . . ."

(a) Please describe every alternative measure of density that you analyzed, with citations to the source of that density and, if created by a calculation done by you, the calculation and sources of every factor in it.

(b) Disclose the basis on which you came to believe that each of the alternative densities disclose (sic) above was less reasonable than the average density that you employed.

#### RESPONSE

a. For this docket, the only two options I considered were using subclass specific densities from the referenced study or using the average density for all subclasses. As described in my testimony, I chose the latter. The relevant sheet from the MC97-2 study is attached for your convenience. It was also provided in response to AMMA/USPS-T28-8 in Docket No. R97-1.

b. The purpose of this section of my testimony is to estimate the average cost difference between parcels and flats in all of Standard Mail (A). Whether I use the one average density or subclass specific densities should not affect my final total results. The subclass specific results in Tables 3.1 through 3.4 are included because external parties expressed an interest in those numbers in Docket No. R97-1.

Over 90 percent of the pieces in the sampled universe in the MC97-2 study were in the Regular subclass (labeled Bulk Reg Other). Thus, that subclass might be less subject to variation than other subclasses. Some of the other subclasses (for example NP Other) had results that seemed to be more

variable by processing category. The difference between the Bulk Reg Other results and the averaged total results is very small (8.18 versus 8.12). I therefore chose to simply use the averaged total results of 8.12 for all subclasses. Again, this decision should not have any significant impact on the final total results.

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# TO CRUM RESPONSE TO POSTCOM 3(4)

# Table C-1 Third-Class Parcel Characteristics Study Average Weight and Average Cube by Subclass

	Rate Category		IPP Non- machinable	Parcel Machinabie	Parce) Outside	Total
Discas	Bulk Des COT		4 948 519	-	_	
	Bulk Rog Citor	332,283	210,012		0	4,547,805
		0,122,312	22,700,632	35,231,517	9,606	64,153,967
		3,173	3,637	0	. 0	7,010
	Total Bulk 3C	23,840	692,747	694,544	39,091	1,450,222
			•			10,238,004
Weight	Bulk Reg CRT	47,828	607,037	. 0	0	654,865
(pounds)	Bulk Reg Other	2,347,715	5,387,507	23,468,088	6,472	31,209,782
	NP CRT	1,196	1,489	0		2.685
	NP Other	9,613	250,847	483,160	11.338	754,956
			·	-		32,622,288
Cube	Bulk Reg CRT	12,305,720	244.924.839	0	0	257,230,559
(inch3)	Bulk Reg Other	552.562.275	1.424.744.955	4.611.017.833	1.883.677	6 590 208 740
	NP CRT	190,394	230.244	• 0	0	420 638
	NP Other	582.174	33.376.536	55,158,815	8.540.693	97.638 218
	Total Bulk 3C				-10.01000	6,645,498,156
			•			
Avg Weight	Bulk Reg CRT	2.30	2.25			2.25
(ounces)	Bulk Reg Other	6.14	3.78	10.66	10.78	7.78
	NP CRT	5.03	6,21			6.13
	NP Other	6.45	5,79	11.13	4.64	8.33
	Total Bulk 3C					7.43
Avg Density	Bulk Reg CRT	6.72	4.28			4.40
(Ibs/ft5)	Bulk Rep Other	7.34	8.53	8.79	5 04	A 18
	NP CRT	10.85	11.18		9.04	41.03
	NP Other	29.55	12 00	15 14	<b>2 2</b> 0	11.03
	Total Bulk 3C	40,00	12.00	10.14	2.28	13.30
				-		0.12
#### U.S. POSTAL SERVICE WITNESS CHARLES L. CRUM RESPONSE TO INTERROGATORIES OF ASSOCIATION FOR POSTAL COMMERCE

#### PostCom/USPS-T-27-4.

You testify, at page 9 lines 14 - 15 that "Window service costs by shape were developed from a new analysis . . . taken from the testimony of witness Daniel."

(a) Please disclose each element of witness Daniel's testimony that you took in this regard with citation to the place(s) in her testimony where that material appears.

(b) Witness Daniels (sic) testifies that one purpose of her presentation is to supply "a general indication of how costs are influenced by weight." USPS-T-28 at 1, line 7. Do you believe that the material taken from her testimony is appropriately used by you given that general disavowal of specificity? Please explain any affirmative answer.

#### RESPONSE

a. This section of my testimony is not intended to supply exact citations, but is presented only to give a general idea where the data I used in my analysis is coming from. More precise citations can be found in Attachment F, Tables 3.1-3.4 of my testimony. Regardless of my intent, please see witness Daniel's testimony at page 6, lines 10-20. She refers to USPS LR-I-99 as the direct source of the numbers. The numbers presented in Attachment F, Tables 3.1-3.4 of my testimony can be found in Section IV, page 2 of USPS LR-I-99. Dividing the costs by shape (Letters, Flats, and Parcels) by the Total for each subclass gives the percentages presented in my testimony.

b. Yes. I use only the total Window Service costs by shape and not the across-the-board costs by weight increment that witness Daniel uses and is referring to in the passage you cite.

#### U.S. POSTAL SERVICE WITNESS CHARLES L. CRUM RESPONSE TO INTERROGATORIES OF ASSOCIATION FOR POSTAL COMMERCE

PostCom/USPS-T-27-5.

In the portion of your testimony cited in interrogatory cited in USPS-T-27-4 above, you testify that the "new analysis [was] presented in the testimony of witness Degen." Supply citations to every place in witness Degen's testimony in which the analysis to which you refer appears.

#### RESPONSE

4

My testimony should have cited a new analysis presented in the testimony

of witness Van-Ty-Smith (USPS-T-17) and not witness Degen (USPS-T-16).

Witness Van-Ty-Smith references the Window Service cost presentation on

pages 20-21 of her testimony and further refers to Part IV of LR-I-106. Please

also see my response to Postcom/USPS-T-27-4(a) above.

### POSTAL SERVICE WITNESS CHARLES L. CRUM RESPONSE TO INTERROGATORY OF ASSOCIATION FOR POSTAL COMMERCE

PostCom/USPS-T-27-6. Please provide the Cost Segment costs for each element within each Cost Segment on a per piece basis for Letters and Flats in each of Tables 3.1, 3.2, 3.3 and 3.4.

## RESPONSE

**.**..

Please refer to my response to RIAA/USPS-T27-1. I have provided the attached

sheet for your convenience.

# ATTACHMENT TO WITNESS CRUM'S RESPONSE TO POSTCOM/USPS-T27-6

# Letter Unit Costs (cents)

Segment	Table 3.1	<u>Table 3.2</u>	Table 3.3	Table 3.4
C.S. 3.1 - Mail Processing	1.5	5.8	2.4	4.7
C.S. 3.2 - Window Service	0.0	0.1	0.0	0.1
C.S. 6&7 - City DeliveryCarriers	3.4	3.4	2.3	2.7
C.S. 8 - Vehicle Service Drivers	0.1	0.1	0,1	0,1
C.S. 10 - Rural Delivery Carriers	1.1	0.9	0.6	0.7
C.S. 14 - Transportation	0.0	0.2	0.1	0.3
All Other Costs	0.1	0.0	0.1	0.0
Total	6.2	10.8	5.6	8.6

Flat Unit Costs (cents)

Seament	Table 3.1	<u>Table 3.2</u>	<u>Tebie 3.3</u>	Table 3.4
C.S. 3.1 - Mail Processing	1.2	11.7	2.8	11.7
C.S. 3.2 - Window Service	0.0	0.1	0.0	0.2
C.S. 6&7 - City DeliveryCarriers	3.6	5.1	3.3	4.7
C.S. 8 - Vehicle Service Drivers	0.3	0.3	0.2	0.3
C.S. 10 - Rural Delivery Carriers	1.2	1.8	0.7	1.5
C.S. 14 - Transportation	0.2	1.4	0.5	1.4
All Other Costs	0.1	0.0	0.1	0.0
Totel	6.6	20.5	7.6	19.7

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#### PSA/USPS-T27-1

Your testimony states that the Postal Service excludes parcels between .75 inches and 1.25 inches from the shape charge applicable in Standard (A) where the parcels are prepared in compliance with Postal Service criteria for the flat automation rate.

(a) When did the Postal Service implement this exclusion?

(b) Were any Federal Register Notices issued in connection with the proposed exclusion?

(c) Is it the Postal Service's position that it is free to determine unilaterally . which Standard (A) parcels are subject to the shape surcharge without a recommendation of the Postal Rate Commission?

(d) Does the Postal Service have any cost data to support its assumption that, as you testify, these types of parcels "are the most similar to flats and will likely have the most similar cost characteristics to flats?" (pp. 7 and 8) If the answer is in the affirmative please supply whatever cost data you have to support your assumption.

#### RESPONSE

a. The applicable rule was implemented on October 4, 1998. Therefore, it

was in place before the surcharge was implemented on January 10, 1999.

b. Yes.

c. I am unaware of the Postal Service's position regarding implementation of

the surcharge and the involvement of the Postal Rate Commission.

d. My statement that these types of parcels are the most similar to flats was

merely a recognition based on the size of the pieces. Since flats have a

maximum thickness of .75 inches, parcels with a thickness between .75 inches

and 1.25 inches would physically resemble flats more than parcels of a greater

thickness. We do know that increases in cubic volume relate to cost increases in

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non-piece distribution mail processing, highway and rail transportation, and vehicle service drivers. Beyond that I am not aware of any cost data that shows that the parcels with a thickness below 1.25 inches are less costly than the parcels with a thickness greater than 1.25 inches.

#### PSA/USPS-T27-2

Т

On page 9 of your testimony you state that you have chosen to use the average density for all Standard Mail (A) parcels from the parcel density study (PCR-38,Appendix C) as opposed to separating the densities by sub-class because you believe that that represents the most reasonable estimate available for Standard Mail (A) parcels overall.

(a) Is it your belief that using that density represents the most reasonable estimate available for the Bulk Regular Standard Mail (A) category of IPPs and parcels? Please explain any affirmative answer.

(b) Would the study you have used provide sub-class specific densities? If that study would provide such densities, please explain whether using the subclass specific density for the Regular Bulk rate parcel category would result in greater or lesser allocation of cost.

#### RESPONSE

a. The data presented in Figure 2 on page 10 of my testimony shows my

estimate for the costs for all of bulk Standard Mail (A). My intention was to

estimate the density for all of bulk Standard Mail (A) and not the Regular

subclass of Standard Mail (A). Hypothetically, if I were estimating the density

only for Regular, I would probably use the subclass specific density for Regular.

The difference, however, is very small. The average density estimate used in

this docket is 8.12 while the subclass specific density estimate is 8.18.

b. Yes. Please see my answer to (a). Using the subclass specific density for Regular parcels would result in slightly (unchanged to the nearest tenth of a cent) lesser costs allocated to that category.

#### PSA/USPS-T27-3

In your Attachment F, Table 6.1, you display the revenues, costs, and contributions per piece for Regular and ECR flats and parcels, as well as all shapes. Please supply, and provide the source for, the same information for FY 1998 for each of the four sub-classes for flats, and IPPs and parcels, specifically, for Bulk Standard Mail (A) Enhanced Carrier Route, Bulk Standard Mail (A) Regular, Bulk Standard Mail (A) Nonprofit ECR, and Bulk Standard Mail (A) Nonprofit. Also, please supply the same information for each of these subclasses for the Test Year After Rates, and provide the source of that information.

#### RESPONSE

1

I have attached a chart reformatting the Base Year 1998 information you ask for.

The source for this data is found in my testimony in Attachment F - Table 1,

Table 2, and Tables 3.1 through 3.4. Test Year After Rates data is not available.

Please also see Witness Moeller's response to PSA/USPS-T-35-2.

# Attachment to Response to PSA/USPS-T-27-3

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Subclass	Re (\$.pi	venue er piece)	( <b>S</b> .p	Cost er <u>piece</u> )	Contrit <u>(S p</u>	oution(Loss) erpiece)
Regular flats	\$	0.234	\$	0.205	\$	0.029
ECR flats	\$	0.154	\$	0.066	\$	0.088
Nonprofit flats	\$	0.153	\$	0.197	\$	(0.044)
Nonprofit ECR flats	\$	0.095	\$	0.076	\$	0.019
Regular parcels	\$	0.478	\$	0.768	\$	(0.290)
ECR parcels	\$	0.156	\$	0.746	\$	(0.590)
Nonprofit parcels	\$	0.255	\$	0.984	\$	(0.729)
Nonprofil ECR parcels	\$	0.147	\$	2.262	\$	(2.115)

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### PSA/USPS-T27-5

Your Exhibit F Tables 3.1, 3.2, 3.3, and 3.4 purport to show the per piece costs and revenues for flats and parcels. Those Tables show that the per piece cost for Bulk Standard (A) ECR parcels is \$.746, for Nonprofit-ECR it is \$2.26 and for Bulk Regular it is \$.768.

(a) Can you rationalize why the ECR parcels, in the regular category, would seem to cost as much as the non-ECR parcels, and why the nonprofit-ECR would appear to cost three times as much as either?

(b) Isn't it obvious at that the ECR costs for parcels are on their face unreliable?

(c) Isn't it the case that the amount of volumes are so tiny as to guarantee that there will be statistical anomalies from your sampling systems? Please explain any negative answer.

(d) Is it not the case that the volumes of all IPPs and parcels are so statistically insignificant that the results from your samples cannot be given any credibility? If the answer is in the negative, please explain why your sample volumes are sufficient to give reliable results.

#### RESPONSE

a. By going to Attachment F, Tables 3.1 and 3.2 of my testimony, one could

calculate that while ECR parcels do have lower mail processing costs than

Regular parcels, ECR parcels have higher City Carrier In-Office costs (Cost

Segment 6). I did not conduct my study with the intention of fully describing the

unit cost results in every subclass and cost segment. However, based on my

visits to delivery offices and discussions with carriers, carrier supervisors, and

other delivery personnel, the following might possibly account in part for the City

Carrier In-Office results.

Regular parcels usually come in one at a time and are processed as part of the carrier's normal daily activities. ECR parcels come in larger groups, and,

thus can cause the carrier to deviate from his/her normal routine, adding to the resulting costs. Also, ECR parcels require a detached label card. This card must be cased with the letters and flats while the parcel must also be prepared for delivery. This too could cause higher costs for ECR parcels.

Additionally, there could be differences in average physical and/or location characteristics that might possibly have an impact. Finally, high Carrier In-Office costs for ECR parcels were also noted in Docket No. R97-1 and spurred an intervenor to ask a similar question.

While the Nonprofit ECR parcel costs have been historically quite high, the very high number in this docket could be the result of a variance due to the difficulties associated with estimating and calculating extremely small volume categories. Fiscal Year 1998 Nonprofit ECR parcel volume was only about .2 percent (1,914/904,090) of total bulk Standard Mail (A) parcel volume.

b. I do not believe they are "on their face unreliable". The ECR cost data for parcels have been somewhat variable over the years, but have invariably far exceeded the associated revenues.

c. The fact that carrier route parcel volumes are lower than non-carrier route parcel volumes does contribute to their unit cost variability, but the intent of my testimony is to estimate the unit costs of the combination of all bulk Standard Mail (A) parcels and not just ECR and Nonprofit ECR. Nonprofit ECR unit cost estimates will likely remain variable as long as they continue to comprise only a very small percentage of Standard Mail (A) parcels.

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d. No. The overall flat and parcel unit cost data, which is what I present in the body of my testimony to support witness Moeller's surcharge, has been consistent from year to year. Please see the attached table for cost data across the years.

#### BULK STANDARD MAIL (A) UNADJUSTED UNIT COSTS BY SHAPE

	<u>FY 1993*</u>	EY 1994*	EY 1995*	BY 1996**	BY 1998***
Parcels	\$ 0.519	\$ 0.572	\$ 0.541	\$ 0.516	\$ 0.780
Flats	\$ 0.112	\$ 0.113	\$ 0.115	\$ 0.113	\$ 0.122
Diff.	\$ 0.407	\$ 0.459	\$ 0.426	\$ 0.403	\$ 0,658

\* Source: Response to NDMS/USPS-T28-18 (Tr. 2229-2234) Docket No. R97-1.

\*\* Source: USPS-T-28, page 11. Docket No. R97-1. \*\*\* Source: USPS-T-27, page 10. Mail Processing costs are calculated under a different methodology than in the four previous cost numbers. See USPS-T-27, page 8, lines 7-13.

RIAA/USPS-T-27-1. Please provide the Cost Segment costs for each element within each Cost Segment on a per piece basis for IPPSs & Parcels in each of Tables 3.1, 3.2, 3.3 and 3.4.

#### RESPONSE

The data you ask for could be found by dividing the cost segment costs in the IPPs and Parcels column by the parcel Volume of Mail listed in the Distribution Keys section in each table. I have provided the attached sheet for your convenience. Please note that the purpose of my testimony is to estimate the total cost difference between parcels and flats in all of bulk Standard Mail (A). That data is contained in Table 3 and reproduced on page 10 of my testimony. I have provided Tables 3.1 through 3.4 because external parties expressed an interest in those numbers in Docket No. R97-1 and to present a more complete record.

# ATTACHMENT TO WITNESS CRUM'S RESPONSE TO RIAA/USPS-T27-1

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### Parcel Unit Costs (cents)

Seament	<u>Table 3.1</u>	Table 3.2	Table 3.3	<u>Table 3.4</u>
C.S. 3.1 - Mail Processing	27.4	48.3	201.9	70.0
C.S. 3.2 - Window Service	0.0	0.3	0.3	0.4
C.S. 6&7 - City DeliveryCarriers	45.5	16.1	18.5	17.4
C.S. 8 - Vehicle Service Drivers	0.7	1.8	1.6	1.6
C.S. 10 - Rural Delivery Carriers	0.3	2.1	0.3	1.6
C.S. 14 - Transportation	0.6	8.2	3.5	7.4
All Other Costs	0.1	0.0	0.1	0.0
Total	74.6	76.8	<u>226.2</u>	98.4

RIAA/USPS-T-27-2. In your answer to OCA/USPS-T-27-9 you referred to "the uncertainties related to the issue described on page 7, lines 18-22 of my testimony ... "

- (a) What are the "uncertainties" to which your response refers?
- (b) Please confirm that for all of 1998 mail pieces meeting the dimension and preparation requirements for flats in all particulars but thickness and having a thickness between .75 inches and 1.25 inches were categorized as parcels.
- (c) Please confirm that mail pieces described in subpart (b) above were at and after October 4, of 1999 categorized as flats.
- (d) Please provide the mail processing costs for the mail pieces described in subpart (b) above for (i) FY 1998 and (ii) FY 1999.
- (c) What do you project the mail processing costs for the mail pieces described in subpart (b) above to be in the FY 2001?

#### RESPONSE

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- If I were to use 1999 data, the existing regulations for the flat automation rate could cause uncertainty in my present cost study methodology for the .75 inch to 1.25 inch thick qualifying pieces regarding what is a parcel and what is a flat. This would make it more difficult to accurately estimate the cost difference between the two shapes.
- b. Confirmed in all respects.
- Not confirmed. All pieces exceeding .75 inches in thickness are still considered parcels in the costing systems. The pieces having a thickness between .75 inches and 1.25 inches and meeting all

the dimension and preparation requirements of the FSM 1000 Flat Automation rate (including bearing a barcode) are considered flats for postage payment purposes. These pieces generally continue to be treated as parcels operationally. Please refer to the testimony of witness Kingsley (USPS-T-10, pages 16-17).

 d. This data is not available. Please also see my response to PSA/USPS-T27-1(d).

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e. I have no Test Year 2001 estimate of mail processing costs specifically for these pieces.

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RIAA/USPS-T-27-3.

Please refer to your attachment to your answer to RIAA/USPS-T-27-1.

(a) Do you have an explanation for the disproportionately high mail processing cost reflected in Table 3.3?

(b) Do you have an explanation for the fact that cost segments 6 and 7 in Table 3.1 are substantially (almost three times) higher than those in Table 3.2 but the same costs are close to equal in Table 3.3 and 3.4?

### RESPONSE

a. This is likely due to variability associated with the low volume of Nonprofit

ECR parcels. In Fiscal Year 1998, Nonprofit ECR parcels constituted only about

.2 percent of total bulk Standard Mail (A) parcels. Please also refer to my

response to PSA/USPS-T27-5 (c).

b. The limited volume of Nonprofit ECR parcels discussed in my response to

(a) makes it unlikely that comparisons involving Table 3.3 will yield useful

information. The only other information I have related to this question can be

found in my response to PSA/USPS-T27-5(a).

RIAA/USPS-T-27-4. Please refer to your response to PSA/USPS-T-27-5. You there say "Also, ECR parcels require a detached label card."

(a) Please provide a DMM citation to the provision containing this requirement.

(b) Your answer goes on (in the same paragraph) to intimate though not really to say that this characteristic increases costs. Is this the conclusion that is intended by this portion of your answer?

(c) If so, please provide copies of, or citations to evidence in this case containing, all documentation and analysis on which you rely to support this conclusion.

(d) In subpart (d) of your response to this interrogatory you say that "unit cost data . . . has been consistent from year to year" and attach a table that shows the cost increasing by five cents between FY 1993 and FY 1994, decreasing by 3.3 cents between FY 1994 and FY 1995, decreasing by further 2.3 cents between FY 1995 and FY 1996 and increasing by 25.5 cents between FY 1996 and FY 1998. Please explain how these data support the quoted conclusion.

#### RESPONSE

Please refer to my response to VP-CW/USPS-T27-1.

b. My intent was to present one possible explanation for the higher

costs noted.

c. I have reached no conclusion. I am pointing out a possibility

described in my response to PSA/USPS-T27-5(a) "based on my visits to

delivery offices and discussions with carriers, carrier supervisors, and

other delivery personnel". I have conducted no studies or analysis.

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d. Between 1993 and 1994, costs rose 10.1 percent. Between 1994

and 1995, costs fell 5.4 percent. Between 1995 and 1996, costs fell 4.6

percent. The PSA interrogatory you refer to suggested variability so great that the numbers could not be trusted. Given the thrust of the question, then, I fully stand behind my response as worded. I do not believe results must be identical to be consistent particularly given real data in an everchanging and non-homogeneous section of the postal mail-stream.

The large change between 1996 and 1998 reflects the Postal Service's change in mail processing volume variability assumptions. This was mentioned in the footnotes of the attached table to which you refer. Please refer to the testimony of witness Bozzo (USPS-T-15) for more information regarding the Postal Service's mail processing approach in this docket. Since the two mail processing methodologies are so different, I did not consider 1998 data part of the statement regarding costs as consistent. While the underlying costs may have been consistent, those presented will vary substantially.

#### U.S POSTAL SERVICE WITNESS CHARLES L. CRUM RESPONSE TO INTERROGATORY OF UNITED PARCEL SERVICE

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UPS/USPS-T27-1.

Identify all instances in which you have relied on or used in your testimony in any way any FY 1999 cost, revenue, volume, or other data, and state in each such instance why you used FY 1999 data instead of data for BY 1998.

### RESPONSE

The Standard Mail (B) Bound Printed Matter Mail Characteristics Study contained in USPS LR-I-109 was conducted during FY 1999. However, the data presented in Attachment H, Tables 1 through 2.1 of my testimony and the entirety of the study tie the entry profile data collected to the official volumes from FY 1998.

Both the "Percent Sorted to 5-digits ..." and the "Destinating BMCs will feed ..." mail flow operating assumptions contained in Attachment J, Table 1.3 of my testimony use data from FY 1999. Please see the third paragraph of witness Eggleston's response to UPS/USPS-T26-4 for an explanation of why 1999 data was used.

#### U.S. POSTAL SERVICE WITNESS CHARLES L. CRUM RESPONSE TO INTERROGATORY OF VAL-PAK, et. al.

#### VP-CW/USPS-T27-1.

Please refer to your response to PSA/USPS-T27-5(a), where you assert that "Also, [all] ECR parcels require a detached label card."

a. Please cite section(s) of the DMM on which you rely for your abovequoted statement.

b. Please refer to DMM Section A060, Detached Address Labels ("DALs"), subsection 1.3, Standard Mail (A) Merchandise Samples, and confirm that this section of the DMM does not require that all ECR parcels require a DAL. If you do not confirm, please explain fully.

### RESPONSE

a. Please refer to DMM section C600.1.1d. It is my understanding that ECR pieces exceeding the maximum ECR flat shape dimensions must be mailed with a DAL.

b. It is my understanding that although DMM section A060 does not explicitly say "all ECR parcels require a DAL", it does, in conjunction with DMM section C600.1.1d, effectively result in a requirement that all ECR parcels be mailed with a DAL. DMM section A060 1.3 says "Merchandise samples more than 5 inches wide (high) or 1/4 inch thick, or nonuniform in thickness, mailed at bulk Standard Mail (A) rates, must be mailed with DALs when prepared for general distribution on city delivery routes." Parcel-shaped merchandise samples (the only parcels allowed in ECR) would exceed the maximum thickness in the quoted section presented here and therefore require a DAL.

CHAIRMAN GLEIMAN: Is there any additional written 1 2 cross examination for Witness Crum? 3 [No response.] 4 CHAIRMAN GLEIMAN: If not, that brings us to oral 5 cross examination. There are five parties who have requested oral cross examination, the Association of 6 7 American Publishers, District Photo, Mystic Color Lab, Cox Sampling -- that's all one party; Parcel Shippers 8 9 Association, the Recording Industry Association of America, 10 and ValPak Direct Marketing Systems, ValPak Dealers Association, Carole Wright Promotions, again, all one party; 11 12 are there any other parties that wish to cross examine? 13 [No response.] 14 CHAIRMAN GLEIMAN: There do not appear to be. Ι 15 hope I get your name right, Mr. Przypyszny. 16 MR. PRZYPYSZNY: Correct. 17 CHAIRMAN GLEIMAN: If you would begin when you're 18 ready? 19 CROSS EXAMINATION 20 BY MR. PRZYPYSZNY: Good morning, Mr. Crum. My name is John 21 0 22 Przypyszny. I am counsel to the Association of American 23 Publishers. How are you this morning? Α Good. 24 25 Q I would like to begin by asking you a few

- 1 questions regarding your response to AAP/USPS-T27-1.
- 2 have that with you?3 A Yes, I do.

4 0 In that interrogatory you were requested to 5 provide a full description of your personal involvement in 6 the preparation of Library Reference 109, which is the Bound 7 printed Matter Mail Characteristics Study, is that correct? 8 Α Yes. 9 I would just like to refer you to a few --0 10 COMMISSIONER LeBLANC: Counsel, I'm sorry. I am

11 having trouble hearing you. Can you just maybe bring the 12 mike down just a little bit?

13 MR. PRZYPYSZNY: Be happy to.

14 COMMISSIONER LeBLANC: I'm sorry.

MR. PRZYPYSZNY: There we go. Is that better?
COMMISSIONER LeBLANC: Much better, thank you.
MR. PRZYPYSZNY: Okay, thank you.

18 BY MR. PRZYPYSZNY:

Q In your response to AAP/USPS-T27-1 you state I think with respect to the study that you contracted with Christensen Associates to assist you with the sample selection, design, and data collection portion of the analysis. I take it by the word "analysis" you mean the study, is that correct?

25 A Yes.

ANN RILEY & ASSOCIATES, LTD. Court Reporters 1025 Connecticut Avenue, NW, Suite 1014 Washington, D.C. 20036 (202) 842-0034 Do you

1 The bound printed matter characteristics study. 0 Well, actually I meant analysis in the broader 2 Α 3 sense of the bound printed matter analysis but it would probably apply to the study as well. 4 5 And I take it that the study is composed of 0 primarily there is a survey of bound printed matter that was 6 7 conducted by Christensen Associates, is that correct? 8 Α Yes, that is the study. 9 Ο Okay. Now I take it in choosing Christensen 10 Associates for the purposes of the study that you took bids 11 from other firms or were they the only firm that you 12 contacted regarding this work for the Postal Service? 13 А I believe --14 MR. COOPER: I would object on the grounds of 15 relevance. 16 COMMISSIONER LeBLANC: Do you care to comment, 17 sir? 18 MR. PRZYPYSZNY: We just generally just believe 19 that we would like to know how the study was put together, 20 the basis for it. We are trying to test the credibility of 21 the study and it is helpful to know how the Postal Service 22 selected Christensen Associates, but I will withdraw the 23 question. It is not that important. 24 COMMISSIONER LeBLANC: Thank you, moving right 25 along.

1	BY MR. PRZYPYSZNY:
2	Q Now would it be correct to say that you had a high
3	level of involvement with the study, is that correct?
4	A Yes.
5	Q And you visited Christensen Associates I think in
6	Madison, Wisconsin to oversee the study at one point?
7	A Well, to discuss the study results.
8	Q Discuss the study results, so you visited them at
9	the conclusion of the study or during the performance of the
10	study?
11	A After the study was completed.
12	Q After the study was completed, but you routinely
13	checked the progress of the study, is that correct?
14	A Yes, we were in frequent contact both before and
15	during the study.
16	Q Okay. Now in your response to AAP/USPS-T27-1 you
17	also state that, quote, "I reviewed the draft Library
18	Reference and provided comments and suggested changes." So
19	then I take this statement to mean that you did not yourself
20	draft the Library Reference, is that correct?
21	A That's correct.
22	Q So assuming you did not draft LR-109, who did?
23	A Christensen Associates were the ones who drafted
24	the Library Reference.
25	Q Now in your response to AAP/USPS-T27, you also
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state that, "When I was planning my analysis I determined 1 that there was no entry profile data available for bound 2 printed matter and that it would be required to complete my 3 costing work." 4

Just curious as to what is the approximate date, 5 when did you determine that this information in the study 6 would be needed? 7

I don't remember the exact date. If I recall 8 Α correctly it would be very early in 1999, perhaps 9 January-February timeframe of '99. 10

And the study itself was conducted I believe in 11 0 the summer of 1999, June through July, is that correct? 12

> Yes, June 21st through July 21st, I believe. А

Now was the study your idea only or were there 0 14 15 others who were involved in the decision to go ahead with 16 the study?

17 There were others involved in the decision to Α ahead with the study. 18

19 Q Can you identify who those individuals were? 20 А Yes, I could. If I remember correctly it was 21 Mohammed Adra, who was a member of the Pricing Group, his 22 manager at the time -- I assume you want the names, is that correct? 23

- 24 Q That's fine.
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Ashley Lyons, his manager, and Doug Madison, my А

1 manager.

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2 There may have been other people involved but I 3 believe those were the four people I remember being 4 involved.

5 Q Thank you. Was a similar study ever conducted for 6 purposes of prior rate cases?

7 A No, I believe this was the first study of that 8 related to bound printed matter

9 Q And then could you please clarify again why in 10 this particular rate case it was determined that such a 11 study should be conducted when such a study had never been 12 conducted for prior rate cases?

13 A Right. Previous to us planning the study, postal 14 management had decided to go ahead with a program for bound 15 printed matter drop ship, and I was assigned to be the cost 16 witness to determine the costs of bound printed matter drop 17 ship.

18 To produce my analysis, this data would be19 required.

20 Q This decision to go ahead and explore drop ships 21 for bound printed matter, if I understand your testimony 22 that then predated your decision to do the study?

23 A Yes.

Q When was that determination made to go ahead with the drop shipments or to explore drop shipments?

1 MR. COOPER: Mr. Chairman, I am going to object 2 again. I am having trouble determining the relevance of all 3 these timeframe questions. Where is he going with this? 4 Does the timing of these decisions really matter?

5 CHAIRMAN GLEIMAN: Well, I frequently have 6 difficulty telling where attorneys are going with their 7 questions and I thought that was part of the game plan when 8 they cross examine, that they got better answers that way.

Do you want to respond?

MR. PRZYPYSZNY: Well, without disclosing the extent of our strategy to the Postal Service here, I guess I would just say that I think the dates are relevant because there are some significant changes that have been made to the structure of bound printed matter and we need to know why those changes were made and when they were begun.

CHAIRMAN GLEIMAN: You have convinced me.

17 MR. PRZYPYSZNY: Thank you.

18 BY MR. PRZYPYSZNY:

Q Would you like me to ask that question again?
A If you don't mind, just to get it clear in my
head.

Q I guess the question is at what point did the Postal Service make a decision to explore drop shipments for bound printed matter?

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A Okay. The first that I heard about this was

1 actually about a week before the filing of the Docket R97-1 2 case. A memo, some kind of request, came down to our group. 3 It was explained to the individual or group -- I have no 4 idea. You know, I was kind of at the end of this line and 5 we explained that five days is not enough to prepare cost 6 testimony for a new drop ship program, so we said that 7 during the next postal rate case we would investigate bound 8 printed matter drop ship.

9 After the completion of R97, then a more formal 10 and more reasonable request was made to cost bound printed 11 matter drop ship and that is how that project began. I 12 believe that happened some time during 1998.

Q With respect to your costing work that you did for this rate case, that began before the study, you began the study, or did you have to wait for the study to be completed to complete your costing work? I am just trying to get a sense of whether you needed this study to complete your costing work.

19 My -- the broader costing analysis, if you could Α 20 think of that perhaps as a shell, and this is data that I 21 needed to have to populate that shell, so to complete the 22 costing work, the analysis of that study, that data was required to fulfill that shell and to complete the cost 23 24 work. I'm sorry, does that answer your question? Q Well, let you ask you, did you begin any costing 25

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work prior to the study?

A Yes.

3 Q Okay. What was the extent of that costing work, 4 in summary?

Α That could probably be better described as a 5 6 costing plan, however, a number of the models -- again, I am 7 trying to -- I don't remember the timing exactly of all 8 this, given that this wasn't the only thing I was working There were a number of things kind of all happening at 9 on. 10 once. But I certainly had begun the study before -- I had begun my analysis before the completion of the study, but I 11 12 don't remember the exact dates or how everything came together. But it certainly was started before the study 13 results were completed. 14

Q Well, let me ask you this, at the time that you determined that the study was necessary, and I think you said that was maybe in January of 1999.

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A Approximately.

Q Were you aware that there were going to be
significant increases in the rates for bound printed matter,
that those lie ahead? Did you have any knowledge of that?
A No, I was not.

Q At what point did you become aware of the increases, of whatever magnitude, that would be requested by the Postal Service for bound printed matter in this case?

Let's see, again, I believe the CRA -- this was A 1 2 going to be base year 1998, I believe that the CRA results 3 for base year 1998 are available in approximately April to 4 May timeframe, so that would make it about April and May of 199. 5

So, I take it, at that time, you also were not --6 0 7 when I say at that time, I mean January 1999, you weren't aware of any increases in cost or possible increases in 8 costs that may exist for bound printed matter? 9

Α I think there might have been some increases in 10 '97, but since the base year, I don't believe there being 11 12 any discussion of the base year being '97. I didn't certainly consider that in any way. 13

Thank you. I would like to move on to a different 14 0 15 topic, and I would like to refer you to the notice of United 16 States Postal Service filing a second of errata to testimony of Witness Crum. This document contains the revisions to 17 18 your testimony filed on April 14th, 2000. Do you have a copy of that filing with you? 19

20 Α Yes, I do.

Okay. Thank you. I want to confirm that you have 21 Q 22 seen this document as it has been filed by the Postal Service. 23

- Yes, I have. 24 Α
- 25

0 And I want to confirm that this statement

2 Ά I would say it represents changes to my testimony, 3 albeit the only material change to my testimony is the change of one number by one-tenth of a cent. 4 0 I would like to also confirm that this notice was 5 6 only filed on April 14th, 2000. 7 А That's correct. Okay. Now, the notice, and I am speaking to the 8 Q pleading portion of the notice, it states that substantive 9 changes were made, though, to Attachments H and I of your 10 testimony. Is that correct? 11 А Yes. 12 13 Q And, in general, Attachment H, in particular, that really constitutes a summary of the bound printed matter 14 survey results that was performed by Christensen Associates, 15 16 is that correct? 17 Α I think that sounds mostly correct, yes. 18 You say mostly, is there any doubt you have? Ø The changes, I guess, didn't broadly impact 19 А 20 Attachment I, just certain portions. That's why -- that is the only reason I put in that qualifier. 21 But as to Attachment H? 22 0 Attachment H, it would be considered one of the 23 Ά 24 major outputs of that study. 25 Now, would it be a correct statement that you made 0

represents changes to your testimony, is that correct?

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these changes to your testimony, and I am particularly 1 2 speaking to the changes to Attachments H and I, because you determined that certain portions of those attachments were 3 4 incorrect upon your review of your response to AAP/USPS-T27-35? 5 6 Α Let me just check that one quickly. 7 Q Okay. 8 Α Yes, that was the interrogatory which started the 9 discussion to make us realize there had been -- that a 10 change needed to be made. 11 0 Discussion, what discussion are you referring to? 12 Among the Postal Service? Α The discussion I was referring to at that point 13 14 was between myself and several of the members of Christensen Associates. 15 So I take it then that Christensen Associates 16 0 17 reviewed the interrogatory in question, AAP/USPS-T27-35, and 18 your response? Yes, as a matter of course, in my interrogatory 19 А 20 responses, I will usually have one or more people review them for comments and that is how -- that is when the 21 22 discussion started there. 23 0 With respect to Attachment H, can you please walk me through what the thought process was here that caused 24 you, upon review of your response to AAP/USPS-T27-35, to 25 ANN RILEY & ASSOCIATES, LTD.

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conclude that those revisions needed to be made?

2 A I'm sorry. Did you want me to go through the 3 response to 35 or to the Attachment H?

Q Let me clarify. What I would like you to do is explain what exactly caused you to make revisions to Attachment H as, upon your review of your response to AAP/USPS-T27-35, the notice that was filed on April 14th states that the changes to Attachment H resulted from the response to AAP/USPS-T27-35?

10 A If I remember correctly, it was me providing a 11 draft response, Christensen reading that draft response, and 12 then a series of e-mails and then phone calls got to why 13 they perhaps didn't like my initial wording, and then we got 14 down to the core, like, oh, okay, well, this is the small 15 thing that is going on here.

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Q What wording did they not like?

17 A Again, I don't -- this was a series of back and 18 forths, and there are obviously a number of interrogatories 19 in there, so I don't remember, you know, Draft 1, which 20 probably went through of iterations. So I am not going to 21 be able to trace through exactly how we got to the final 22 point, but I can explain to you the final point.

Basically, what had been assumed was that, as described in response to T27-35, I can go through, it says, "The mail processing version will be slightly different. It

.1 was assumed the containers sorted to a more aggregate level than the office where they are entered or first processed at 2 the facility representing their sortation level. For 3 example, SCF sacks first entered into an origin AO would 4 5 first be handled at an SCF. In the example presented, if 6 the mail was on BMC pallet, the entry zip code would be the zip code of the parent BMC of the SCF at which the mail was 7 deposited." 8

9 Basically, -- the miscommunication was that 10 Christensen had interpreted that for all of the four entry 11 types in Attachment H, whereas, I meant it to apply only for 12 the plant load of the four entry types, not to -- let me 13 just make sure I read these correctly.

14

Q Take whatever time you need.

A Not to BMEU entry, BMEU verified drop shipment or plant verified drop shipment.

17 So, to the extent that there were changes to Q 18 Attachment H, that was something that you believe was caused by Christensen Associates. If there was an error in the 19 original version of Attachment H, that was an error that 20 resulted from the study performed by Christensen Associates, 21 22 or did that result from -- I am just a little bit confused here. Did that result from the interpretation of a response 23 to AAP/USPS-T27-35? 24

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A I would hesitate to call it an error on
Christensen Associates' part. I don't -- I probably
 shouldn't consider myself blameless in that respect. I
 would perhaps call it a miscommunication between myself and
 the technicians at Christensen Associates.

5 Q And that miscommunication occurred at the time of 6 -- at what time?

- 7 A In August.
- 8 Q In August.
- 9 A Yes.

10 Q I just want to confirm that you did not 11 discover -- I guess I call them errors at the time the 12 testimony was originally filed or at the time that you 13 responded in your initial response to AAP/USPS-T27-35, is 14 that correct?

15 A The response to 35 went out with us knowing 16 that -- how do I? -- let's see. The due date for that 17 coincided with the discussions of this and as those 18 discussions progressed we were moving toward a definitive 19 understanding of what had happened.

I believe that this answer is consistent with -- I know that this answer is consistent with the facts as we understand it but we did not have, we certainly did not have the new results at that point, because that took, even after -- then again maybe we fully -- again, I don't remember the exact timing of this.

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I know we did not have the numbers available to 1 2 file our corrections until that day because it involved them 3 reinterpreting the results as I had understood them. Reinterpreting the results of what exactly? 4 0 How we would in the mail processing version, how 5 А 6 we would get the entry point based on the survey data that 7 we had. I want to also confirm that your response to 8 Q AAP/USPS-T27-35 was filed on April 4th, 2000 and if I 9 10 understand you --11 THE REPORTER: That is a yes? THE WITNESS: Yes, it was, 4 April 2000. 12 13 BY MR. PRZYPYSZNY: And if I understand you, at the time you filed 14 0 that response you had some understanding that you were 15 16 probably going to need to make revisions to Attachment H? 17 Α I can't say that we knew we were going to have to file but that was at the point where perhaps we both thought 18 19 that the other person was just rephrasing the thing that we understood in another way, so I can't say -- there was some 20 confusion out there but I can't say we knew there was 21 definitely a problem. 22 Confusion? Can you elaborate on what confusion 23 0 means in this context? 24 It would be analogous to perhaps me saying that 25 Α

that wall was blue and you thinking that well, of course he
knows the wall is white but he is calling the wall blue.

3 Q Well, not being color blind, I think I understand 4 that.

5 A I just assumed that my interpretation was the only 6 possible interpretation and had -- and they had saw that 7 their interpretation was the obvious interpretation, and it 8 took us a number of discussions to realize, oh, perhaps you 9 look at this in this way and I looked at it in this slightly 10 different way.

11 Q So just to summarize, the study -- you 12 conceptualized the study back essentially in I think January 13 of 1999?

14 A Yes.

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Q The study was conducted in the summer of 1999, in June, July, maybe August time period. What actually was the approximate end date of the study in terms of the survey being completed?

19 A I believe it was July 21st of '99.

20 Q Okay, and when was the study actually completed 21 and in your hands?

A I'm not certain, but I believe that was September of '99.

Q So you essentially had a completed version of the study since September of 1999 that was filed as Library

Reference-109 in this rate case and it wasn't until last
 Friday that you all finally determined that this anomaly or
 error existed in Attachment H?

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A Yes, that's correct. That is the truth.

5 Q Thank you. My next question really goes to again 6 these attachments, and I want to know if you have really 7 with respect to Attachment H, do you have the original 8 version and do you have the revised version as that was 9 filed last Friday? I would like to walk you through some 10 questions.

11 A The only version I have is the version as revised 12 April 14, 2000.

13 MR. PRZYPYSZNY: Mr. Chairman, I would like to 14 approach the witness and provide him with a copy of the 15 original version of Attachment H.

16 CHAIRMAN GLEIMAN: Certainly. If you could try 17 and speak up a little bit, it would be very helpful.

18 MR. PRZYPYSZNY: I will try.

19 CHAIRMAN GLEIMAN: Thank you.

20 BY MR. PRZYPYSZNY:

Q For purposes of making my next questions a little bit more simple to follow on everybody's part I would also like to pass out a copy of the revised version of Attachment H, which I believe Witness Crum already has, if I may do that.

1 A Yes, I already have a copy of the revised version. 2 Q Now Table 1 of both versions of Attachment H is 3 titled, quote, "Bound Printed Matter Survey Results: 4 Volumes by Entry Profiles and Zone Distribution Mail 5 Processing Version" -- is that correct?

A Just to be correct, I believe you misspoke slightly. It is the "Bound Printed Matter Survey Results: Mail Volume by Entry Profile and Zone Distribution Mail Processing Version."

10 Q I did misspeak, thank you. I would like to 11 confirm that Table 2 of both versions of Attachment H, 12 meaning the revised and the original version, is titled, 13 "Bound Printed Matter Survey Results: Mail Volumes by Entry 14 Profiles and Zone Distribution Transportation Version" -- is 15 that correct?

16 A Yes.

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Q Now I take it that there is a difference between the mail processing version of the survey results and the transportation version of the survey results, is that correct?

21 A Yes, there is a small difference between those 22 two.

23 Q What is that difference?

A The difference is for the -- I can probably explain this best in two ways.

The more layman's version of this is that we were 1 trying to get at the difference in plant loaded mail between 2 3 where mail joins the postal network, where mail joins the postal transportation network versus where mail joins the 4 Postal Service mail processing network, so for example if a 5 6 piece is -- if a mailing is picked up from a mailer's plant, which could very possibly be in a small, remote, rural area, 7 the Postal Service will choose to go pick that mail up 8 9 rather than having the mailer just deposit it -- you know, 10 swamp a local post office or similar facility, so the transportation version says that when the truck picks up at 11 the mailer's facility in that small town, the closest 12 13 associated perhaps post office, plant, whatever it may be, that is where the mail joins the Postal Service's 14 15 transportation network.

That truck leaving the small, perhaps rural 16 facility will then drive to another postal facility, often 17 18 the local Bulk Mail Center. Thus the mail has been on the 19 postal transportation network, say, from a facility close to 20 the origin post office but it does not enter the Postal 21 Service's mail processing network until it enters that origin BMC and is unloaded from the postal transportation 22 vehicle that took it from the mailer's plant to the Postal 23 Service's Bulk Mail Center. 24

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Q So if mail was on pallets and it is being loaded

1 onto trucks, those trucks would be the mailer's trucks?

2 A No, in the case of plant load it is actually the 3 Postal Service's or Postal Service's contracted trucks.

Q It would be the contracted trucks?

5 A Yes.

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6 Q But there would be -- what would be the difference 7 if it was the mailer's trucks?

A Well, if it was the mailer's trucks by my 9 understanding that would not be plant load. That would be 10 one of the other four entry practices such as plant-verified 11 drop shipment.

In that case that would be mailer's trucks 12 because -- again I am looking at the item down at the bottom 13 of Attachment H, for example, Table 1. It says three equals 14 15 plant verified drop shipment. That means that there are postal employees at the mailer's plant and they verify the 16 mail, which then goes on the mailer's truck and they drive 17 18 it to whatever postal facility they choose to, but then that 19 would be the mailer's truck, whereas four equals plant load, 20 that would be the Postal Service's truck.

21 Similarly, with BMEU entry or BMEU verified drop 22 shipment, I believe that would be mailer or mailer 23 contracted trucks also.

Q I'd like to walk you through now, a comparison of what was provided to us on Friday as part of the April the

14th changes, and the original version of Attachment H. 1 2 Do you have both in front of you? 3 А Yes. You specifically mean Table 1. There shouldn't have been changes to Table 2, I don't believe. 4 Okay, let's refer to Table 1 of Attachment H, and 5 0 6 let's refer to the original version, and under the column that's identified -- strike that. 7 Let me rephrase that. 8 COURT REPORTER: Can you keep your voice up, 9 10 please? 11 MR. PRZYPYSZNY: Okay. BY MR. PRZYPYSZNY: 12 13 I'd like you to refer to the row on the original Q 14 version of Attachment H, Table 1, which is the mail processing version of Attachment H. 15 16 The row is titled Destinating BMC. Do you see 17 that? 18 Α Yes, I do. Okay, now, under the column that's identified as 19 0 20 grand total, the amount of destinating BMC pieces is stated as 204,818,209; is that correct? 21 22 Α Yes. Again, for purposes of the exercise, I am assuming that the sheet that you're giving me titled 23 24 Original Version, is the original version, since I do not have that. But I can certainly assume that for purposes of 25

1 this cross examination.

2 Q I understand, and the only difference would be 3 that I have typed in the upper right-hand corner, Original 4 Version.

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Q Now, I'd like to refer you to the row on the revised version of Attachment H filed on April 14th, Table 1, the mail processing version, and it's the row, again, entitled Destinating BMC.

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Do you have that?

Okay.

11 A Yes, I do.

12 Q Okay, now, under the column identified as Grand 13 Total, the amount of destinating BMC pieces is stated as 14 being 190,527,357; is that correct?

15 A Yes, it is.

Q Okay, now, this reflects a decrease in destinating BMC pieces, as between the two versions, of, by my calculation, 14,290,852. I'd like to ask you if you believe that's correct as well?

20 A I have not made that calculation, but for the 21 purpose of this exercise, I will assume that you've done 22 that math correctly.

Q I understand. I'd like to ask you if you consider
that as a significant change as between the two versions?
A Well, how I would answer it is that I would answer

that in two ways: That if you're talking about Attachment H, Table 1, 14 million could be construed as a large change, and that perhaps is a significant change, I believe, is how you characterized it.

5 If you go through to Attachment I, Table 3, the 6 bottom line impact of that significant change is an 7 insignificant change, just from .384 to .385.

8 So while the significant change in the input 9 results -- and there may be a significant change in the 10 input results -- there is a completely insignificant change 11 to the output results.

12 Q Can you explain now why you made that adjustment 13 in Attachment H, and, if you would, if you'd also tell me 14 how you made that adjustment?

15 [Pause.]

16 A I'm not sure exactly what you're asking for. Are 17 you talking about the technical way that adjustment was 18 made, or how that flowed through my testimony?

19 Q Well, let me ask it in two steps: First, why did 20 you make that adjustment?

21 A Well, you're talking about the difference between 22 the 204 and the 190 number?

Q Yes, that would be the destinating BMC row of the revised -- original and revised versions of Attachment H under the column identified as Grand Total.

1 A Right. This gets back to the miscommunication 2 between myself and the technicians at Christensen 3 Associates.

Once we realized there had been this, I went back to them and asked them, once we determined that there was a miscommunication, to rerun it, based on the interpretation that I had had all along.

8 So they actually did the -- they have all the 9 survey results. It fills up pretty much an entire room. I 10 certainly don't have that much room in my cubicle.

When they went back and went through the survey forms and reanalyzed that, they actually then reran it and e-mailed that spreadsheet back to me. That was the technical way of how that change happened.

15 And that happened for each grand total or each 16 line item that changed.

MR. PRZYPYSZNY: I'd like to know if it would be possible for us, as a followup, to get a copy of the spreadsheet you just referred to.

20 MR. COOPER: That shouldn't be a problem.

21 MR. PRZYPYSZNY: Thank you.

22 CHAIRMAN GLEIMAN: Seven-day rule.

23 BY MR. PRZYPYSZNY:

Q Now, I'd like to refer you to the row on the original version of Attachment H, Table 1, which I'll call

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the mail processing version. It's the row titled SCF Destinating BMC Service Area. Do you have that?

A Yes, SCF BMC Service Area.

3 4

Q I'm sorry, SCF Destinating BMC Service Area.

A Okay, right, that's how it's worded on -- yes, on Attachment H, Table 1, as revised April 14, 2000, yes, so SCF Destinating BMC Service Area.

8 Q So, to clarify, on the original version, it's 9 actually -- the item is titled SCF BMC Service Area, but on 10 the revised version it is now titled SCF Destinating BMC 11 Service Area; is that right?

12 A But there's no difference meant between those two. 13 Q Now, as to the original version, under the column 14 identified as Grand Total for the row, I guess, SCF BMC 15 Service Area, the amount of pieces stated is 5,986,923; is 16 that correct?

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A Five-nine-eight-six-nine-two-three, yes.

18 Q Now, I'd like to refer you to the revised version 19 of Attachment H, Table 1, again, the mail processing 20 version, and to the row on that version that's titled SCF 21 Destinating BMC Service Area.

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A Yes, I'm there.

Q Under the column again identified as Grand Total, I have the amount of SCF Destinating BMC Service Area pieces as 16,526,027; is that correct?

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A Yes.

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2	Q Okay. Now, as I see this, this appears to reflect
3	a positive variance between the two versions, meaning an
4	increase that is reflected on the revised version of
5	Attachment H for SCF Destinating BMC Service Area pieces of
6	10,539,104, which I calculate to be a 176-percent change.
7	Is that
8	A For purposes of this analysis, I'll assume your
9	math is correct.
10	Q Now, surely that's a significant change; is it
11	not?
12	A I would answer that the same way I answered the
13	previous one; that the changes to the Attachment H Table 1
14	could certainly be described as significant, but the outputs
15	from the testimony, those changes, again, are insignificant
16	and change only by one-tenth of a cent.
17	Q And now I'd like to compare the same line items on
18	Table 2 of Attachment H, the original versus the revised
19	versions. And I'd just like you to confirm that there are
20	no changes to the revised version of Attachment H as to the
21	transportation version, and that would be for the
22	destinating BMC row, the grand total, and for the SCF
23	destinating BMC Service area total.
24	A Yes, this shows no changes between the two for the

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-- there are no changes between those two.

0 So you -- by your revisions, you changed the mail 1 processing version of Attachment H, but you made no 2 revisions to the transportation version? 3 That's correct. Α 4 5 0 Would you agree that the mail processing version most accurately shows where mail enters the Postal Service 6 7 or service system or is it the other way around? From a perspective of how the mail is actually 8 entered, which is more accurate? 9 10 А I wouldn't characterize either one as any more accurate. Again, it gets back to the difference of plant 11 load is kind of a complicated entry practice to describe. 12 13 So, again, if you're talking entering the Postal Service's mail processing network, then the mail processing 14 version describes it better. 15 16 If you're talking about it entering the broader 17 Postal transportation network, then the transportation version would describe that better. 18 19 So I -- depending on what you're looking for, I 20 wouldn't characterize either one as more or less accurate. 21 0 But you needed to make adjustments to the 22 transportation version in order to create the mail processing version of Attachment H? 23 24 А I don't believe we had to change the 25 transportation version to do the mail processing version.

1 It was more or less -- the reason for the two versions was 2 to try to get at this complicated nature of plant load and 3 just don't assume the same for both.

We thought that was an improvement to the study output results and believe that was actually my suggestion to do that, that it would get more to the complicated nature of plant load than perhaps similar historical studies, not in bound printed matter but that have ignored that difference.

10 0 I just want to understand the relationship between the transportation version and the mail processing version 11 of Attachment H a little bit more and what I would like to 12 know from you is are any adjustments made? Is there some 13 sort of formula or calculation or changes that you make when 14 15 you look at the transportation version that lead you to the 16 numbers in the mail processing version, or does this relate 17 basically back to the survey and different responses that you receive in categorizing those? 18

A If you are talking about the technical means by which a roomful of paper becomes survey results on one sheet, I am uncertain as to exactly how that is entered, if that is done via programs or if they are entered separately -- I am uncertain as to the technical nature of how again that full room of survey results entered this point although based on my discussions would most likely be

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1 through a computer program in changing a couple of lines in
2 that computer program.

3 Q So some adjustment was made by Christensen4 Associates?

5 A Yes.

6 Q But you are not particularly sure what that 7 adjustment is?

8 A I don't know the technical details of the program. 9 Q And that adjustment results in the difference 10 between the transforation version and the mail processing 11 version?

12 A I am not sure exactly what you are asking there. 13 Could you just --

Q I am trying to understand and what I am trying to get to is the relationship between the transportation version and the mail processing version particularly as to those grand total amounts and if the transportation version is used as a baseline of some sort to get you to the mail processing version.

20 A I don't believe either version is used as a 21 baseline. They both are separate and distinct, although 22 they use the same source data.

Q So interpreting that source data they reach -different determinations were made about entry points?
A Exactly.

1 Q And that source data again is held by Christensen 2 Associates?

A Yes, the source survey result data is held at
Christensen Associates' facility.

5 Q By the way, have you reviewed all that source data 6 or were you involved to that extent?

7 A Again, it is a large amount of survey data. I 8 certainly have not gone through every single piece of the 9 survey. I looked through, I probably looked through the raw 10 survey results for about an hour would be my guess at the 11 time spent reviewing the actual handwritten responses of 12 those survey forms.

MR. PRZYPYSZNY: Mr. Chairman, would it be possible for me to have a moment to consult with a colleague before I continue my questioning? It would be about a minute.

17 CHAIRMAN GLEIMAN: Yes, if it would be just a 18 minute or two.

19 MR. PRZYPYSZNY: I'll continue. That's fine.

20 CHAIRMAN GLEIMAN: I'm sorry, I couldn't hear you.

21 MR. PRZYPYSZNY: I will continue.

22 BY MR. PRZYPYSZNY:

Q I would like to refer you to your response to
AAP/USPS-T27-36.

25 A Okay. I'm there.

- 1 Q Now that question pertains to standard error 2 estimates provided in Appendix A of Library Reference-109, 3 is that correct?
- 4 A Yes.

5 Q Could you briefly just give me a very, very brief 6 description of what standard error estimates are in the 7 context of this survey?

8 A As that is more of a statistical term, I am not 9 sure I feel comfortable discussing the technical details 10 related to standard errors in this setting.

11 Q Is there another Postal Service witness who would 12 be more familiar with the standard error estimates in this 13 survey that we should direct questions to?

14 A I am not sure if there is someone in this docket. 15 I assume there, I believe there would be statisticians that 16 could describe that.

17 MR. COOPER: I would point out, Mr. Chairman, that 18 this Library Reference has been available for many months.

19CHAIRMAN GLEIMAN: I think I am going to allow20counsel to continue.

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BY MR. PRZYPYSZNY:

Q Actually, I only have one more question and I am not sure, given what you have just told me, that you can answer this, but I will ask it anyways.

Based on the changes that you made to Attachment H

ин Г dated April 14th, 2000, do you believe that there will need 1 2 to be changes made to the standard error estimates that are contained in Library Reference-109? 3 I believe that those changes would perhaps 4 А Yes. result in changes to some of those standard errors as 5 presented on pages 41 through 56 of Appendix A of the 6 7 } Library Reference. 18 But you don't know those specific changes today or Q 9 the extent of those changes? Α That is correct. 10 MR. PRZYPYSZNY: Mr. Chairman, I have no further 11 12 questions. 13 CHAIRMAN GLEIMAN: Thank you. Next we will hear from District Photo, et al. 14 CROSS-EXAMINATION 15 BY MR. OLSON: 16 Mr. Crum, I am Bill Olson, District-Mystic-Cox. I 17 0 18 want to begin by directing you to your testimony at page 7 19 where you discuss the Standard A non-letter cost differences that are used to support the residual shape surcharge 20 changes in this docket. Do you have that? 21 Α Yes, I do. 22 Okay. You have two factors that you discuss, one 23 0 on page 7, one on page 8, as to how your analysis has 24 25 changed since the testimony you presented in R97-1, and the

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first has to do, does it not, with the FSM 1000 issue and how pieces that qualify for the FSM 1000, even though they are between .75 and 1.25 inches, can be thereby exempted from the surcharge. Is that the essence of what is?

A I believe that, yes, expanding the thickness limits for the flat automation rate, I believe is related to the FSM 1000.

Q Okay. And if those pieces which are between three-quarters of an inch and an inch-and-a-quarter are taken out of the parcel mix, then are you saying that the remaining parcels would have a higher unit cost?

12 A I am saying that is a logical conclusion, although
13 I don't know that definitely to be the case.

14 Q You haven't attempted to quantify that in any way 15 then, it is just an analytical offering you give us in your 16 testimony?

17 A I have not tried to quantify that difference,18 that's correct.

19 Q Okay. And when did the residual shape surcharge 20 go into effect?

A I believe that was with the implementation of Docket R97-1, and that would have been January 10 of 1999.

Q And as you point out, that was after the end of base year '98, so that would not account for any changes in parcel costs in '98, would it?

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That's correct.

2 Q And it wouldn't account for any changes in the 3 parcel flat cost differential in '98, correct?

A That's correct.

А

Q Now, the other one that you discuss there, beginning on line 7, I do not understand. I have read your responses to some interrogatories. Could you explain in a few sentences what you are talking about?

9 A I have gotten a number of interrogatories on that. 10 If you have read those, maybe I will try a different tack 11 there. "In R97-1," -- I can just, let me start by reading 12 through this here. "In R97-1, the Postal Service proposed 13 explicit econometric based volume variability factors as 14 part of their mail processing presentation."

Now, in this docket there were only -- only in 12 cost pools were explicit econometric based volume variability factors. There were only -- in this docket. So the remaining cost pools were -- those costs were estimated based on pre-R97-1 mail processing costing assumptions.

20

Q Why was that change made?

A I am going to have to refer you to the testimony of Witness Bozzo, pages 132 through 139. I don't believe he has appeared yet, and you should probably talk to him about that.

25

Q

When you, in line 7, say that the change from your

presentation in R97-1 is in the calculation of mail processing costs, do you mean the calculation of mail processing costs for base year?

A Yes.

4

5 Q So, in other words, unlike the factor we just 6 discussed, which would not affect base year costs, this 7 factor does affect base year parcel costs?

A Yes, this factor does impact base year costs, base year costs in R2000.

10 Q So, in that way, it is different from the effect 11 of the FSM 1000 that we discussed a minute ago, which would 12 not affect base year costs?

13 A That's true, it is -- if you are talking about the 14 base year costs, yes, those two would be different.

Q Okay. Now, do you have any order of magnitude as to how much of the increase in parcel handling costs is due to this change by Witness -- I'm sorry, how do you pronounce his name?

Α 19 Are you talking about -- all he would do, his 20 testimony describes why econometric based volume variability 21 factors were proposed for certain cost pools and not for 22 others. He did not produce those numbers as far as I 23 understand it. Those numbers are presented in the testimony 24 of Witness Van-Ty-Smith and the cost numbers that I use come 25 from Witness Smith, not Van-Ty-Smith, Smith.

Q Well, I guess what I am asking, though, is if you have attempted to quantify how much of the increase in parcel mail processing and carrier in-office costs which occurred between, say, base year '96, which was the base year in R97-1, and base year '98, the base year in this docket, is accounted for by this analysis on lines 7 to 13 of your testimony?

A First of all, it wouldn't be carrier in-office, it is just related to mail processing. And, no, I have no calculated the specific difference due to the changes in cost pool factors.

12

Q Do you know how you would determine that?

13 A I believe it would be possible to go into those 14 cost pools. It is not something that I could do, but that 15 the further upstream in the process, someone would have to 16 put in the R97 factors and compare them to the docket number 17 R2000 factors, then run the model and produce the results 18 that I would then feed into my analysis.

Q Are you describing something simple and easy orincredibly complex and laborious?

21 A Since I am not the one that would do it, I 22 probably shouldn't answer that question. I don't know.

MR. OLSON: Mr. Chairman, having not asked for anything yet from a witness verbally, I would ask that if this is something that can be done easily, that this might

be information that explains changes in parcel handling costs that might be worth quantifying. I ask if the Postal Service could provide that, if it is not too cumbersome. CHAIRMAN GLEIMAN: Can the witness prepare that material?

6 THE WITNESS: I cannot prepare that material, no. 7 CHAIRMAN GLEIMAN: Can the Postal Service, can 8 someone at the Postal Service prepare that material? 9 MR. COOPER: Mr. Chairman, I think that is unclear 10 at the moment. We would have to talk to the relevant 11 parties back at headquarters and see what that would entail. 12 CHAIRMAN GLEIMAN: Mr. Volner.

13 MR. VOLNER: Mr. Chairman, on behalf of the RIAA, 14 I would request that counsel for the Postal Service contact 15 the relevant party and see whether it could be done, and 16 that we get an answer to that opportunity as quickly as 17 possible.

18 MR. COOPER: I would also point out, Mr. Chairman, 19 that the opportunity to ask for this has existed for many, 20 many months. And waiting till --

21 CHAIRMAN GLEIMAN: Well, I think many, many -- a 22 couple of months maybe, but not many, many. Be that as it 23 may, as we search for truth, virtue and the American way, 24 could you please find out who, if anyone, at the Postal 25 Service can produce the material?

1 MR. COOPER: I suspected you would say that, and 2 for the clarification of the record, I would ask counsel to 3 restate specifically what it is he would like us to do.

MR. OLSON: Sure. This witness, in his testimony, 4 page 8, lines 7 through 13, has identified a change in his 5 6 presentation from that which he made in Docket R97-1 in 7 calculating mail processing costs in the base year, and he attempts to explain, I guess, that other witnesses have 8 ceased using explicit econometric based volume variable 9 factors as part of the mail processing cost presentation and 10 that the effect of that was to expand the cost differences 11 12 between flats and parcels beyond the level in Docket R97-1. And my question is, is there some way to quantify how the 13 methodological changes have affected costs as presented in 14 this docket? 15

16 CHAIRMAN GLEIMAN: And could someone prepare the 17 analysis that shows what those differences would be?

18 MR. OLSON: Yes. And what we are trying to do is 19 to determine how parcel -- how unit parcel mail processing 20 costs are affected by the change in methodology.

MR. COOPER: If we could limit it to parcel mail processing costs, that would be helpful. But if there are any specific shapes or types of parcels that are of interest, it would be helpful if those could be identified at this time.

CHAIRMAN GLEIMAN: That may come yet. 1 MR. OLSON: I don't think it has anything to do 2 3 with shape of parcel, Mr. Chairman. I think it has to do 4 with the testimony of this witness, and we are just trying to find out whether it is significant or insignificant, and, 5 if so, how much. 6 7 MR. COOPER: We will try to get an answer to that 8 question. CHAIRMAN GLEIMAN: Will you let us know by the end 9 of the week whether you can get use an answer and at that 10 point tell us when we might have the answer? 11 12 MR. COOPER: We will report back as to whether we 13 think it is feasible to get an answer and what that would 14 entail, and how soon that could be provided. 15 CHAIRMAN GLEIMAN: I would expect that somebody 16 probably did the calculation and it is lying around in one 17 of those cubicles. MR. COOPER: We shall see. 18 CHAIRMAN GLEIMAN: Or perhaps at Christensen in a 19 20 bigger room full of paper. So, we look forward to hearing 21 back. 22 BY MR. OLSON: 23 Mr. Crum, could you look at your testimony? Just 0 24 one second. 25 [Pause.]

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BY MR. OLSON: 1 I'm sorry, page 2 of your testimony, and this is 2 0 shifting to the section of your testimony that deals with 3 the development of destination entry cost savings. Do you 4 5 see that? 6 Α Yes, I do. 7 Okay. And you talk about two kinds of avoided 0 costs, the first being transportation savings and the other 8 is non-transportation savings, correct? 9 А 10 Yes. 11 0 Okay. Let's start with transportation savings. 12 There you say that, somewhere in lines 11 to 17, you talk about how the cost driver is cubic feet and not weight, 13 14 correct? 15 Α For most of the costs, not for all of the costs. 16 0 But then you say weight is a good proxy, correct? 17 Α Yes, I say weight can generally be considered a qood proxy. 18 And the reason you say that is that the majority 19 Ο of volume in bulk Standard A mail consists of the same 20 material paper and has a relatively similar density pounds 21 per cubic feet, correct? 22 Α Yes. 23 24 Q Now you give a parallel section of your testimony 25 dealing with non-transportation savings on page 4, which ANN RILEY & ASSOCIATES, LTD.

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reads just about the same, as I analyze it.

You say that the costs are described on a per container basis and consist of unloading containers in inbound docks, movement of containers through the facilities to outbound docks, loading of containers to trucks at the outbound docks. Is it your testimony that cubic feet is the main cost driver for these non-transportation cost savings?

A Non-transportation is a little bit more complicated in that there are probably also piece elements, particularly with letter trays, because I believe there are certain volume minimums, therefore a tray may be filled up volume-wise while not necessarily being filled up cubic volume-wise, so it is a little more complicated there.

14 Q Is cubic feet the main cost driver, pieces being 15 secondary?

16 A I believe it is an important cost driver. I don't 17 believe I have done analysis to more fully describe the 18 breakout between pieces and cubic volume. I can certainly 19 say it is an important cost driver.

Q Then you go on in a section that is parallel to what you say about transportation savings and you say cubic volume -- excuse me -- "Weight can be a good proxy and is used here because of the relative similarity and density for the majority of Standard A mail pieces" and that section is comparable to what you say about transportation, correct?

A Yes.

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Q If you had concluded that the densities are not relatively similar for letters and flats and parcels, what would be the consequence to your methodology of that conclusion?

A I would say that the density of parcels is not relevant to that statement because that comprises, if I remember correctly and it varies on the year, about one and a half percent by volume of the mail in Standard Mail A, so that would go back to the question of between letters and flats.

12To the extent that their densities are drastically13different, that would have an impact on that statement.

Q Well, let's not throw parcels away quite so quickly. Let's talk about parcels. I mean they may be a small percentage of the volume but putting aside the fact that they are perhaps small and can disappear in the rounding for some purposes, if you look at the -- you are saying that letters, flats and parcels have -- are relatively similar in density, do you not?

21 A Well, no. I actually say that --22 Q You say the majority of pieces.

23 A Yes, meaning letters and flats.

Q Okay, so you disregard parcels when you make that statement?

Yes. I don't believe that parcels are relatively 1 А 2 similar in density. 3 As a matter of fact, we asked you that question, 0 did we not, in Number 5 --4 5 Α I think someone did, yes. DMC Number 5, and we asked you to verify the 6 0 . 7 density numbers and I think they are around 8 for parcels, 8 20 for flats, and 28 for letters, roughly, correct? 9 Α Yes, roughly. 10 And I think you said that the 20 for flats and 28 Ο for letters were -- I think the term is "relatively 11 similar" -- correct? 12 А Yes. 13 14 Q But that the 8 for parcels was not relatively 15 similar to flats, correct? Α 16 Yes. 17 And was certainly not relatively similar to 0 letters, correct? 18 19 А Yes. 20 Q Okay, so there when you try to figure out what 21 type of surcharge you want to put on parcels, you do treat parcels separately. Why don't you say, well, they are only 22 1.5 percent of the volume, as you did a minute ago, in 23 24 destination entry discounts, and ignore them in your 25 analysis?

1 A I believe that is what happened up from the 2 beginning of the Postal Service up until January 10 of 1999.

Q Right, and what is the rationale for ignoring them as being de minimis when you work on destination entry savings but focus on them when you come to this part of your testimony to try to develop the bases for a surcharge?

. 7 Α Well, let me go back to the, if you will go back to page 1 of my testimony and go towards the purpose of my 8 testimony: "The purpose of my testimony is to supply × 9 Witness Moeller with cost data necessary to support the 10 Standard Mail A destination entry discounts. Witness 11 Moeller determines how the destination entry discounts are 12 to be set up and the surcharge on Standard Mail A pieces 13 that are neither letter nor flat shape." 14

15 So again I do the cost analysis. It is not my job 16 to determine whether pieces consider shape or how that 17 works. It is to do the cost work, and for another person to 18 determine how that feeds into the rates.

Q No, I know that, and we will have our shot next week, but I am trying to deal with your testimony because you do, in response to our interrogatories, say that these densities are not relatively similar, parcels to letters, or parcels to flats.

24 Yet when you deal with destination entry cost 25 savings then you say, well, we are not going to think about

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them as to whether they are relatively similar or not. We will just look at letters and flats and say those are relatively similar, and I am asking you, is that not an inconsistency in the way that you treat these densities?

5 A If you will notice in my response to 6 DMC/USPS-T27-6(c), I also did that analysis including all 7 those densities.

Q Yes, and I appreciate that, but is it not true, if I could get an answer to the question, that the way you treat densities is different for the development of cost savings for destination entry and the development of the residual shape surcharge?

13 A The treatment between those two is different as14 presented in my testimony, yes.

Q Now just taking a look at that chart -- and I appreciate your having provided those data in response to 6(c) -- did you have those or did you develop that data? Did you have those before we asked you for them --

19 A Yes.

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20 Q -- or did you develop them for us?

A That was prepared this summer and all I did was make a copy of that sheet. Probably the only change I made was to slide over the far right column because the last two numbers slid over onto another page. Other than that, all I did was make a copy of numbers that I had produced.

And that attachment is only transportation 0 . 1 savings, correct? 2 3 Yes, that's correct. Α Did you do a similar chart for non-transportation? 4 0 5 А No, I did not. Did you provide this to Witness Moeller, this 6 0 Attachment to 6(c)? 7 Yes, Witness Moeller was aware that I did, that I 8 А produced the analysis in 6(c). 9 Do you know if you gave it to him? 10 0 11 Α I know that we had a meeting. I don't know if he walked away with that particular sheet or not. 12 In response to our Interrogatory 18, you gave a 13 0 rather complete list of what you'd done to study partial 14costs. Do you recall that? 15 Yes. I'm not sure it's complete. It was meant to 16 Ά be a brief analysis. 17 Okay, are there additional items you'd like to add 18 0 to that list as to what you've done to study partial costs? 19 If you go through five years of working at the 20 Α Postal Service, the number of things I believe I would 21 probably -- could, if asked to, fill up another 50 pages, 22 but I believe that for purposes of this testimony, that 23 briefly describes what I've done. 24 25 0 And this shows you've been out to delivery units

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and processing and distribution centers and BMCs. You've talked to people at Headquarters, talked to people in the field, and attended meetings, called meetings, visited mailer facilities.

5 I mean, you have done all those things; have you 6 not?

7 A Yes, I've done all of those things as presented in
8 that response.

9 Q And one would think that you probably know as much 10 about costs of parcels as anyone at the Postal Service, 11 based on that. Do you think that might be true?

12 A I'm not sure I'd want to say that, but that's a 13 possibility, I guess.

14 Q Okay. How many ways are parcels sorted in the 15 field? In other words, on what equipment, manually, and 16 what are the different ways parcels can be sorted?

A Well, I believe questions discussing how parcels
are sorted would probably have been better asked of Witness
Kingsley.

If you'd like me to give you a very brief rundown,I'd be glad to do that.

22 Q Thank you.

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23 A Parcel sorting machine is the main piece of 24 equipment that's sorts parcels in bulk mail centers.

Q Okay, now, we'll talking about Standard A parcels

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under a pound?

A Yes.

3 Q And parcel sorting machines are used on parcels 4 under one pound?

5 A Yes. I've seen literally thousands of Standard A 6 parcels on parcel sorting machines.

They generally -- parcel sorting machines -- I
don't want to get into the testimony of Witness Kingsley,
but briefly, they sort parcels down to the five-digit level.

10 They can also be sorted manually, both at BMCs and 11 at Postal Service plants. It's also possible that they 12 could run on small parcel and bundle sorters or other 13 machines like the LIPS machine, which is, I believe, a 14 Postal-developed machine as opposed to a commercially 15 available machine.

16 Q What are those initials?

17 A L-I-P-S.

18 Q And what does that stand for?

19 A I don't know for certain.

Q Okay. Now, you said it's possible that they could go on an SPBS. Isn't that something that's likely? Is that a rarity?

A I can't speak to the percent. I don't know the percentage of Standard A volume that goes on an SPBS. I only know that, based on my personal observations, I have

1 seen more of it on PSMs than on SPBSs.

I make no claim that that's representative of the
broad array of the Postal Service.

Q But when you've been out in the facilities and you've seen small parcel and bundle sorters, have you seen that they're mostly handles bundles of letters and bundles of flats as opposed to parcels?

A I have seen in my experience with the SPBS --9 again, I'm not saying that this is representative of the 10 Postal Service -- there have been more bundles than parcels 11 on the SPBS. That's just my personal experience.

12 Q Have you heard people discuss shortages of SPBSs 13 to handle available work, and certain work gets pushed over 14 to manual operation because of inadequate amount of 15 machinery?

16 A I have not heard that discussion, but I probably 17 wouldn't be in the type of meetings where those things would 18 be discussed.

19 Q Do you know if there are shortages of SPBSs in the 20 field?

21 A I have no idea.

Q Have you or anyone you know at the Postal Service done any modeling of parcel costs of the sort that we've seen for letters and flats at other times, you know, taking like 10,000 pieces and tracking them through and reporting

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on downflow densities and all those types of analyses as to 1 where these -- how the various parcels can be handled? 2 Α There are parcel models in the testimony of 3 Witness Eggleston, but that was for the purpose of Parcel 4 5 Post and not for parcels under one pound, the Standard A 6 parcels. 7 So, no, I do not believe there has been any similar modeling as in letters and flats for the Standard A 8 parcels. . 9 10 0 In other words, there's not only nothing that has been introduced before the Commission in this docket, but 11 that there is nothing that the Postal Service has done; is 12 that what you mean? 13 Yes, there are no models similar to, for example, 14 А the flats models that I'm aware of. 15 16 0 Have you considered doing that as a cost expert to 17 try to track these costs and understand them better? That topic of discussion has come up, yes. 18 А 19 Q Anything we could do to help it along? [Laughter.] 20 THE WITNESS: Briefly, the results of that 21 22 discussion got at why are those types of models done, given that they're very expensive in individuals' time and 23 24 complicated. 25 That you need a purpose behind that, and the

purpose behind that is to get at the differing values of
 presort.

If letters, flats, and parcels were to have separate rate schedules, then a study like that would need to be done. If what you're doing is trying to get the cost difference between flats and parcels, a study like that doesn't add anything because you generally tie these studies back to CRA data.

9 If your goal is just to get the CRA unit cost 10 differences, for example, between flats and parcels, the 11 model is just a needless exercise since you would come back 12 with the total anyway.

You would only need that if you were separately,
as in letters and flats, if those were completely separate,
separate rate categories.

16

BY MR. OLSON:

Q Let me just ask you to postulate for a second, the situation where parcel costs are escalating rapidly at the Postal Service, parcel mail processing costs and in-office carrier costs.

And the Postal Service would like to not only know what those costs were, but figure out how to control them.

Would this kind of a modeling study be useful for that purpose?

25

A Well, first, let me say I'm only accepting this on

a theoretical. I don't necessarily agree with your points.

Q I'm sorry, what do you disagree with?

A You just said, let's postulate that parcel costs are out of control. I'm just saying that I agree with you for purposes of your question. I'm not taking that as a fact.

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Q Oh, okay.

A There are a number of ways that costs could be analyzed. If that was my task and it said certain costs are growing or falling, please investigate that, that would not be the first thing I would do, although that might be a piece of evidence that would be valuable if it had been done for other purposes.

14That's not the first thing I'd do, although the15evidence out of study such like that could be helpful.

16

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And the first thing you would do is?

17 A I would probably look at a more -- at a very 18 drilled-down analysis of mail processing costs, perhaps 19 geographically, and go across the country by facility and by 20 cost pool, and see specifically where these pools had 21 changed to see if you could then determine, theoretically, 22 the Western Area has changed from mechanized to manual 23 processing, something like that.

That's opposed to a model which is just meant to get a snapshot of how pieces are processed in general. If

you could actually go to the costs, rather than just saying
 these are the total parcel costs, let's go to all the
 elements that feed up to that, and more or less work
 backwards.

Q Okay, have you had occasion to analyze Standard A parcel processing changes like that, I mean, as to whether fewer pieces are now being handled on machinery and more pieces are being handled manually?

9

A No, I have not done that.

10 Q Do you know anyone who has at the Postal Service? 11 A I don't know of anybody that has done that, but 12 that is certainly -- there are a lot of things I don't know 13 that happen at the Postal Service, so there certainly could 14 be somebody, but I certainly -- I do not know of any study 15 like that that has been going on.

Q Okay. Let's go to the premise of my question about costs and as to whether they are in control or not, and I am going to show you some charts that I think you may have seen before. Let me ask you first, did you help prepare the Postal Service's response to Presiding Officer Information Request 4?

A I'm sorry, I don't know them by number. If you
have a --

Q It had to do with unit costs of handling letters,
flats and parcels, mail processing costs.

Mail process handling of letters, flats and 1 Α 2 parcels. Okay, I know the one you are talking about and, 3 no, I did not -- I don't believe -- let's see. I know the • 4 individual that prepared that. I might have commented on their draft, but I was not the one responsible for that, , 5 although I have seen pieces of that. I am not sure I saw 6 7 the final report, but I knew of it.

8

Who prepared the response? 0

9 Α The person I spoke to about it was Witness Smith. 10 0 Okay. We took those numbers that were filed by 11 the Postal Service, probably prepared by Witness Smith, and tried to see what was happening with respect to First Class 12 parcels and Standard A parcels, and actually filed a motion 13 before the Commission. I don't know if you have seen the 14 charts that we prepared or, if not, I could --15

I did see what you filed to the Commission. 16 Α 17 [Pause.]

18

BY MR. OLSON:

19 What I have handed you is what we appended to the 0 20 motion we filed. Is this what you have seen before? 21

Α Yes, I have seen this.

22 Okay. And what this is designed to be, and, as 0 23 the caption says, "Mail processing plus city carrier in-office units costs, cents per piece, wage level adjusted 24 to fiscal '89." And what we did for smoothing purposes is 25

1 do a three year moving average there. Do you see?

A Yes.

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Q Now, I know you haven't -- they are not your numbers, and you didn't develop them, but I am going to ask you to accept the validity of the numbers there for purposes of the cross-examination, if you don't mind.

7 A Yes, for purposes of the cross-examination, I will 8 accept that.

There are certain -- just take a look at 9 0 Okav. First Class parcels for a second, there are certain points 10 11 where the lines begin to sharply increase. There is -- and I know, since these are three year averages, they sort of 12 obscure in some ways the year-to-year changes. But in '94, 13 14 the First Class single piece parcel costs began to go up dramatically, and in '96, the presort costs began to go up 15 16 dramatically. Do you see that?

17 A Yes.

Q Anything you can think of from your time in the field and DDUs and processing and distribution centers, and BMCs, that might have happened to cause any of this?

A Well, yeah, let me first say that I certainly did not mean my response to 18 to -- I can't say that I know much about First Class parcels. While I have certainly seen them, I have never really paid a lot of attention to First Class parcels when I have seen them, so I am not going to

feel comfortable answering any questions on your page 1 of 3
 here.

Q Well, let's skip right past it and go to the Standard A parcels. I didn't really know if you had looked at First Class parcels, also.

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NO.

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7 Okay. Let's just deal with Standard A then. 0 There you can see that in '95, I guess, the ECR, which are 8 9 the more presorted, I quess one could say, of those Standard A commercial parcels, they began to take off, and on the 10 next sheet, the same thing is true for non-profit ECR, and 11 12 they are also -- that is also sort of break point for regular and non-profit. Anything you know of that happened 13 in '95 that might have caused those costs to begin to 14 dramatically increase? 15

16 A No, I don't know of anything. Are you 17 specifically looking at ECR? I'm sorry, did I confuse the 18 question?

19 Q I am looking at all of it, all four lines on both 20 page 2 and 3.

A I guess what struck me reading these was the regular and non-profit, there didn't seem to be as dramatic increases as there were in ECR. To answer your question on ECR and non-profit ECR, I am not aware of anything that would have caused that increase in costs. When I looked at

this, the important thing to me was if you combine regular and non-profit, that comprises 95 percent of the volume in Standard A. So, large increases, although, as your chart shows, are very large, that comprises approximately 5 percent of the volume.

Q Right. What I am trying to do is find out what is happening and try to elicit from you what you can -- what input you can give me. I mean, for example, would you have an expectation as to whether Standard A commercial parcels which were regular or ECR would have a higher unit cost? And, again, all these are wage level adjusted.

A Right.

12

13 Q So the inflation has been wrung out of them, 14 correct?

15 A If the brunt of your question is, do I have a way 16 to describe why, for example, ECR parcels have gone up, and 17 if they should -- if I would expect them to be, their cost 18 to be higher than regular, then the answer to both of those 19 questions is no. If there is --

20 Q In other words, --

A If there has been any piece of everything I have looked at that has caused a question, then that would be it. I don't know the answer to why ECR parcel unit costs have gone.

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Q Would you consider that to be counter-intuitive

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#### that ECR unit costs would be higher than non-ECR unit costs?

2 A I am not sure if I would use the word 3 counter-intuitive. I don't understand their results, let me 4 stick with that.

5 Q Well, if pieces are more finely presorted, they 6 are supposed to permit the avoidance of certain steps in 7 processing and, therefore, avoid certain costs, and if the 8 pieces that are more finely presorted and incurring more 9 costs, wouldn't you call that counter-intuitive?

10 A Perhaps. I would probably call it surprising or11 unexpected, might be the words I would use.

Q We asked you a question about your confidence in your data, and this, I think, was 11(e), you said, "I have confidence in the cost results presented on page 10 of my testimony." And I think those are the ones where you aggregate all four subclasses of Standard A parcels, correct?

18 A Yes.

19 Q Okay. At least in the aggregate, you do have 20 confidence in your data for fiscal '98, the base year, 21 correct?

22 A Yes.

Q Okay. How about for prior years? Now, I know you haven't been there forever and haven't been doing this forever, but it has been several years, do you have equal

1 confidence in the data for prior years?

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A I would say I have equal confidence in the base year '96 numbers that I presented in R97, because I was able to look through those carefully. Perhaps also I would have confidence in the results presented in Docket Number MC97-2 that were then recalled. Beyond that, I have not checked the numbers carefully enough to be confident in them.

Q What was the base year in Docket MC97-2?A I don't remember if that was '95 or '96.

10 Q So a few minutes ago I asked you a question and I 11 prefaced it with a comment about parcel handling costs being 12 out of control, and you recoiled from acceptance of that 13 premise.

Looking at these numbers, do you have any comment as to whether those costs are in control or out of control? A Given the variety of definitions of "in control" or "out of control" again if you look to the 95 percent of the volume in nonprofit and in regular, that would certainly be in control to me. Those are very close to straight lines.

For ECR and nonprofit ECR they comprise approximately 5 percent. They do appear to be going up rapidly.

Q Do you know from your visits to the field, do you have any insights as to what is driving those cost increases

for -- let's deal with everything except Standard A
 commercial regular, which I'll get back to.

A Right. If you go to my response to PSA/USPS-T27-5, that would describe my only supposition as to what could be going on there. I have asked this question of people. My response in PSA/USPS-T27-5 represents the responses that I have gotten to that question of people in the field and by my own witnessing of their handling of those pieces.

10 Q So every analytical assist you could give us as to 11 why these costs are going up is contained in your response 12 to PSA-5?

13 A Yes. As I said before, I would say that would be 14 the one area where I don't feel like the numbers are clearly 15 consistent with what I have seen in the field, although 16 there are pieces that could perhaps get at describing some 17 differences.

18 Q Okay, then let's go back to the Standard A 19 regular, or commercial regular. I think it is about 90 20 percent of the volume, correct?

21 A Yes, just shy of 90 percent, I think, depending on 22 which year you are talking about.

Q And you describe this as a flat line. Could you tell us what the beginning and end points are here of that line from 1990 through 1998 in terms of unit cost?

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A Again, given the numbers presented here, which I am taking for purpose of this analysis -- those two numbers are 15.3 and 22.9.

Q And considering the fact that these are inflation-adjusted or wage level adjusted, would you still stand by your characterization of that as a flat line from 15.3 to 22.9?

A Again I am not making an analytical description of this. I just merely, based on looking at it, it appears to go approximately across the sheet. If you saying the numbers are 15.3 and 22.9 that would speak to more accurately where the numbers have gone.

Q The only reason it looks like a flat line is that we needed the height of the sheet to make up for a place to put the ECR costs, correct?

16 A Then it could be a flat line relative to the ECR 17 costs.

18 Q But looking at the numbers, 15.3 to 22.9 -- that 19 is a pretty dramatic increase in parcel handling costs, 20 would you not say?

A I don't know I would call that a dramatic increase. Again, even just looking at these numbers -- but again, more carefully if I were to know exactly how they were produced in the background, there might be perhaps a number of reasons.

1 Whenever you do historical data trends going back, 2 there are a number of changes in the way costs are analyzed. 3 Usually with each rate case there's new understanding and 4 new studies. Certainly some of this information could 5 theoretically be explained based on that, although i don't 6 know off the top of my head.

I am going to give you another number, 7 0 Okay. which I know you don't have in front of you and you didn't 8 develop, but this is the 1995 unit cost of Standard A 9 10 parcels, again wage adjusted, just for '95, and the unit cost was 15.1 cents. For 1999, I would ask you to accept 11 this, that the -- for purposes of the cross -- that the 12 comparable number is 29.0. 13

14 How would you compare those two unit costs? Is
15 that in control?

A That would be a large difference. Again for purposes of the cross I will take those two numbers. I would expect there are methodological differences associated there, but I don't know that, but if you are talking about a change between 15 and 29 over the course of four years that would suggest uncommon growth, growth beyond expectations.

Q Have you ever developed these numbers before as a cost witness to try to get at what is driving these costs that I have just given you, or is this new news? A Are you talking about the Attachment A -- I'm

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sorry, which numbers are you referring to?

Q Well, either -- not the three-year moving average. I mean I am not necessarily saying you would develop that, but I am asking if you have ever taken a look at year by year wage adjusted unit costs of handling parcels, Standard A parcels.

A Let's see. I can tell you what I have looked at. If you go to my response to PSA/USPS-T27-5, there is an attachment to Crum Response to PSA-5, and that goes back for all of Bulk Standard Mail A unadjusted unit cost by shape.

11 Q This is your -- I'm sorry -- your response to 12 PSA-5?

A Attachment to my response to PSA-5.

14 Q Now those of course are unadjusted unit costs, 15 correct?

16 A Yes.

Q And so once you wring out of it the changes in wage level you can get very different numbers, correct, as we have demonstrated?

A I am not sure I would say "very different." I
would perhaps say "different."

Q Let me give you one more number for that little chart. The 1989 unit cost differential -- excuse me, the 1989 unit cost of parcels, Standard A, was 13.6. Between '89 and '99 therefore it went from 13.6 to 29.0 -- more than

1 doubled.

I am just trying to get as to whether these --A Are you going back to the response to POIR? I just want to make sure --

5 Q Yes.

A -- we are going to the results of the numbers. Q The numbers are pulled from there and then they are spread-based on -- well, that is the source of the parcel unit costs, yes.

Again I am just asking you if this were true, if this was demonstrated to you -- well, I guess I am not even asking if it were true but if it were demonstrated to you, I am asking if you have ever done this yourself, have you ever looked at the wage level adjusted unit cost of parcels and said what's happening out there?

A I have not looked at the wage level adjusted. The increase in postal wages, particularly back in the mid-'90s -- I don't think there were drastic, I don't remember there being drastic changes from year to year, so I have not gone through wage adjusted changes. I haven't gone back to '93.

I don't know that we have gone back before that, but again looking at '93 -- I don't remember the exact numbers, exact years I looked at, again first starting in the results presented in MC97-2 and then in R97-1. We did

1 look at previous years and the variation of the years that 2 we looked at did not appear to be that large. I do remember 3 that. I don't remember the specific numbers we looked at, 4 although these are numbers taken from a response in R97-1.

I certainly had not seen the '89, '90, '91 or '92 numbers until the results from POIR were released, and again having not produced them or even know more fully how they were produced, I can't comment to them, and had not seen them and had not looked at them.

10 Q Do you have anything you could tell us about 11 trends of changing shape of Standard A parcels over the 12 years you have observed them?

13 A You mean for example a changing -- when you mean 14 by shape a difference between a long pole versus a square 15 object, that type of thing?

16 Q Exactly.

17 A I have not noticed any change. That does not mean 18 it hasn't happened, but to my eye and going to facilities I 19 have not seen a dramatic change that caught my eye.

That certainly does not exclude the possibility or likelihood that something could have happened.

Q When I cross examined Witness Kingsley she said
something about video boxes being prevalent.

Do you have any opinion as to whether video boxes have been prevalent five years ago as much as they are now?

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1 A No, I don't have an opinion. I know I have seen 2 them kind of all along. I don't have any feeling for the 3 relative presence of those.

Q Have you done any type of study or anyone else in the Postal Service done a study of the change in shape within parcels over time?

7 A The only study we did took a snapshot, and I No. 8 believe that was during 1996, but we have not done a new 9 study to, for example, compare any changes that may have occurred, so the answer to that is no, I am not aware of any 10 although certainly people in Operations who are at mail 11 12 facilities every day and see it come in would probably be more able to provide an anecdotal response, such as Witness 13 14 Kingsley was able to.

15 Q The snapshot study you just referenced, was that 16 made a matter of record in some prior docket, do you know? 17 A Yes.

18 O Which?

A In R97 -- it was first presented MC97-2 and I can't speak to -- basically you are asking me in what case was it evidence. I mean all I know is that I answered a number of questions and put it out there. I don't know exactly what the state of it is now, but I answered a number of questions and provided Library References and as far as I know gave everything we had.

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Right. I didn't mean for you to speak on the 1 0 evidentiary status, but rather, I think there was one that 2 was appended to a Library Reference and maybe that's it. 3 Do you know what the study is described as, 4 entitled, or the timeframe for it? 5 6 Α I believe that in one of my interrogatory responses, I get to the exact title. 7 If that's the one you're referencing, then you 8 0 don't need to find it, because I do recall. 9 Yes, there has only been one Standard A-specific 10 Α parcel study that we put out. 11 Okay, what studies have you done or anyone else at 12 0 the Postal Service done about Standard A parcels in terms of 13 14 changes in average weight, or changes in weight? Other than looking at the weight numbers each year 15 Α as they become available, I haven't done any study. I don't 16 know of any studies that have been done. 17 18 0 Do you think these costs are being driven by any changes in weight that you have observed? 19 That's a possibility, but to my knowledge, weight 20 Α doesn't have as large an impact on Standard A parcels, per 21 22 se, as it does in other categories. It doesn't have as much of an impact on costs as it does in other subclasses. 23 Okay, what studies have you or anybody else at the 24 Q 25 Postal Service done with respect to changes in point of

1 entry for Standard A parcels?

A I'm not aware of any studies, other than each time -- point of entry, specifically to Standard A parcels, when I remember when the mail characteristics studies, because of the relative volumes, they found it difficult to capture Standard A pieces.

I don't know that there is any statistic or
reliable entry profile available for parcels, in particular.
That could be wrong, but to my understanding, I don't know
of any.

11 Q Do you know if more pieces are being 12 destination-entered now than before in terms of Standard A 13 parcels?

14 A I don't know that off the top of my head. There 15 may be data somewhere available that would get at that.

16 MR. OLSON: Mr. Chairman, I'm almost done, if 17 you'd like to stay with us for a second.

18

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BY MR. OLSON:

19 Q On the charts that I have given you, Mr. Crum, is 20 there -- as the Postal Service's expert on Standard A 21 parcels and their cost witness, is there any other guidance 22 you can give us as to what is driving these costs upward, 23 besides the things you've discussed already today with me? 24 I point out, by the way, that there are no street 25 costs in this analysis, correct, carrier street costs? This

1 is just in-office?

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2 A I'm taking this as the title describes mail 3 processing plus carrier, in-office.

Q Right.

A Street costs are calculated separately.

Q Right.

7 A Off the top of my head, I don't have any reason 8 for that. I don't know why those have gone up somewhat.

Q Do you believe there are limitations in understanding the factors that are driving costs when one does studies that are primarily IOCS tally-based?

12 A I would say there are limitations in any study, so 13 I would say that's true.

Q Okay, but is it not true that when you base cost studies on IOCS tallies, as the Postal Service has been doing, that it doesn't tell you really anything about where the piece has been entered or the shape of the piece within the category of Standard A parcel or many of the other cost drivers we've discussed today?

A Right, the purpose of IOCS is merely to get costs by subclass, so it doesn't drill down to any of the more specific characteristics that someone might be looking for, in general, although there they can be used for a variety of things.

25

MR. OLSON: Mr. Chairman, I'd like to ask that the

charts which we've discussed today be marked as a cross examination exhibit, not as evidence but solely for the purpose of clarifying the cross exam, that it be marked as DMC-Crum-XE-1. CHAIRMAN GLEIMAN: They are so marked. [Exhibit Number DMC-Crum-XE-1 was marked for identification and transcribed into the record.] ANN RILEY & ASSOCIATES, LTD. Court Reporters 1025 Connecticut Avenue, NW, Suite 1014 Washington, D.C. 20036 (202) 842-0034

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DMC CRUM XE-1

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Attachment A Page 1 of 3

# Mail Processing Plus City Carrier In-Office Unit Costs Cents per piece, Wage Level Adjusted to FY 1989 (three-year moving average)



Attachment A Page 2 of 3

# Mail Processing Plus City Carrier In-Office Unit Costs Cents per piece, Wage Level Adjusted to FY 1989 (three-year moving average)

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Attachment A Page 3 of 3

### Mail Processing Plus City Carrier In-Office Unit Costs Cents per piece, Wage Level Adjusted to FY 1989 (three-year moving average)

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MR. OLSON: Yes, and I can provide those to the 1 2 Reporter. Other than that, I have no --3 CHAIRMAN GLEIMAN: I take it that you want them 4 transcribed into the record? 5 MR. OLSON: Yes, I'd like to task that, too. 6 CHAIRMAN GLEIMAN: So be it. 7 MR. OLSON: Other than that I have no further questions, Mr. Chairman. Thank you, Mr. Crum. . 8 9 CHAIRMAN GLEIMAN: I'm probably going to 10 disappoint some people and make other people happy, but I think we're going to take a break for lunch now and come 11 12 back at quarter after the hour, and we will pick up 13 according to my list, with Parcel Shippers Association, if 14 they're present and ready to roll. 15 [Whereupon, at 12:25 p.m., the hearing was 16 recessed, to reconven this same day at 1:15 p.m.] 17 18 19 20 21 22 23 24 25

1	AFTERNOON SESSION
2	[1:16 p.m.]
3	CHAIRMAN GLEIMAN: Parcel Shippers Association
4	doesn't appear to be in the room. We will move on to the
5	next party, Recording Industry Association of America. Mr.
6	Volner.
7	Whereupon,
8	CHARLES L. CRUM,
9	the witness on the stand at the time of the recess, having
10	been previously duly sworn, was further examined and
11	testified as follows:
12	CROSS-EXAMINATION
13	BY MR. VOLNER:
14	Q Mr. Crum, my name is Ian Volner and I will be
15	examining you this afternoon for the Recording Industry
16	Association of America, and I hope we can get you out of
17	here quickly. Could you start at page 8 of your testimony,
18	please?
19	A Okay.
20	Q I want to ask you some questions about the
21	statement you make on lines 3 and 4 of that page in which
22	you say, it is also important to note that the definition of
23	a parcel has not changed in the Postal data systems, and
24	that all the data from the base year presented in this case
25	precedes the implementation of the surcharge. Let's start

A....

with the definition of a parcel in the Postal data systems. 1 2 I assume you are talking about the cost systems? 3 I believe that sentence got at the cost and the А 4 volume systems. It got at cost and volumes. Okay. Now, what is 5 0 6 the definition of a parcel for purposes of the cost and 7 volume systems? 8 А Boy, I know that was a big discussion back in the Docket Number R97 case, but I don't have those numbers here 9 10 with me. If you are talking about the exact dimensional characteristics, there is a page out of the DMM that is 11 relevant, but I don't have that with me. 12 13 0 You were using the DMM definition? 14 Α Yes. Now, will you accept, subject to check, that there 15 0 16 are, in fact, two DMM definitions of a flat at the present time? 17 18 А Yes. And that one of them stops at three-quarters of an 19 0 inch and the other one goes an inch-and-a-quarter? 20 21 Α Yes. 22 Well, then let's take a look for a moment at your 0 response to RIAA Interrogatory 2(c). 23 24 А Okay. I am there. And you say, all pieces exceeding .75 inches, 25 Q

three-quarters of an inch, in thickness are will still considering parcels in the costing systems. Now, are they still considered parcels in the volume systems as well? If you don't know --

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A No, not necessarily.

Q Not necessarily.

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A It would depend, it is a -- this is based on PERMIT with a mailer identified piece, and if the pieces were entered as automation flats between .75 and 1.25, I believe they would be marked as automation flats.

11

12

For volume purposes?

A For volume purposes.

13 Q But for costing purposes, if the piece was between 14 .75 and 1.25, it would be treated as what?

A Those pieces would still -- should still be treated as parcels, whereas, in the volume system, while, again, this is -- I haven't done any data to go in to make sure it is being done correctly now with these new rules, but in the IOCS, any piece exceeding .75 inches should be considered a parcel is the way the rules are set up.

Q Now, you used the word "still" in this answer. All pieces exceeding .75 inches in thickness are still considered parcels in the costing systems. Now, I don't want to get too literal about the word "still," but I have a couple of questions. Did you mean in FY 1998, which was the

1 base year?

2	A Probably the best way to answer that is there has
3	been there has never been a change in the costing systems
4	over what is considered a parcel. Anything exceeding .75
5	inches is a parcel, in thickness.
6	Q Regardless of how it is prepared?
7	A Regardless of how it is prepared.
8	Q And that continued to be true in the base year
9	1998?
10	A Yes.
11	Q And that was true in FY 1999?
12	A Yes.
13	Q And that is true in the current fiscal year?
14	A As far as I understand now, there is an employee
15	being sampled in IOCS and they have a piece that is, for
16	example, one inch thick, that piece will be considered a
17	parcel regardless of how it was entered.
18	Q And that will be true, continue to be true in the
19	test year?
20	A Unless a change would be made between now and the
21	beginning of test year 2001, that would be the case.
22	MR. VOLNER: Mr. Chairman, may I approach the
23	witness? We are going to do a little illustrative
24	examination here.
25	CHAIRMAN GLEIMAN: Most certainly. I always enjoy

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seeing what types of little surprises you have in your 1 2 briefcase -- or sticking out of your briefcase. MR. VOLNER: Well, that one is later. 3 BY MR. VOLNER: 4 5 0 Mr. Crum, what I have handed you, just so the record is clear, is four video boxes of different 6 dimensions, and in two cases, different weights that matter, 7 8 and I have marked them A, B, C and D. And what I would like you to do is just accept, since I am not going to try to 9 10 introduce these into the record, that Box A is three-quarters of an inch thick. 11 12 Α Okay. I can assume that. 13 And let me ask the question then, under the 0 14 costing systems, that box is treated as a flat? It does not exceed three-quarters of inch. 15 16 А Yes, that is my understanding. Again, I may have a slight misunderstanding over what would happen if the 17 18 piece was to some like exactly .75, I don't know whether it is up to .74999. But I will assume that that is inclusive 19 20 of those pieces. Okay. 21 0 I see what the problem is. Then let's hypothesize, since the measurement of these boxes is not the 22 easiest thing in the world, --23 24 Α Exactly. I have tried to do that before. 25 0 -- .7499.

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1 A Yes. Then that piece would be considered a flat 2 in the costing systems.

Q And that would be true whether I bundled it, whether it runs across a flat sorting machine or not? A Exactly. It does not have to do -- should not have to do with where it is being sorted, it should be the actual size of the piece.

Q Okay. The next two items, the next two boxes are B and C. And assume with me that Box B is seven-eighths of an inch thick and Box C is also seven-eighths of an inch thick, in other words, an eighth of an inch more than Box A. A Okay.

Q Now, let us suppose -- you would agree that that is less than an inch-and-a-quarter? I am not very good at that particular provision of the DMM.

16

A Yes, I would agree.

It is less than an inch-and-a-quarter. Now, let 17 0 us suppose that Columbia House, which produced those boxes, 18 bundled those and sorted them in accordance with the flat 19 20 sortation rules, and they were presented to the Postal 21 Service on pallets and they were run across the FSM 1000, 22 which is capable of handling pieces up to an inch-and-a-quarter, they would, for costing purposes, 23 24 nonetheless be a parcel, is that correct? Α Regardless of any of the pieces in your 25

1 assumption, yes, those pieces would be considered parcels in the costing systems. 2 3 Okay. Now the last piece is -- I got lucky -- it 0 4 is not an inch and a quarter. It is one and a half inches 5 thick. COMMISSIONER LeBLANC: Now just to make sure I am 6 7 with you, you say you want to put B and C together? MR. VOLNER: Yes. I am going to come back to B an 8 C in a moment. 9 COMMISSIONER LeBLANC: Okay, but that was what you 10 were alluding to, not individually? 11 MR. VOLNER: Putting them together in a bundle. 12 COMMISSIONER LeBLANC: Okay, thank you. 13 MR. VOLNER: Or producing a bundle of 10 of either 14 B or C. Either way I have got a bundle of 10 pieces, which 15 16 is the minimum you have to have for a sort level --17 COMMISSIONER LeBLANC: Right. THE WITNESS: Both B and C are separate, but 18 within the same bundle, for example. 19 20 MR. VOLNER: That would be one possibility, though there is a complication there and that is that B -- and this 21 is accurate, because we did it on the Pitney Bowes scales in 22 our office. 23 24 COMMISSIONER LeBLANC: I was just trying to make sure I understood whether he was separating them, combining 25

1 them or and/or.

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2 MR. VOLNER: And/or is really what I am doing. 3 COMMISSIONER LeBLANC: Okay.

BY MR. VOLNER:

5 Q Will you accept that B weighs 3.6 ounces and C 6 weighs 5.5 ounces?

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Okay, I can assume that -- it is 3.6 and 5.5. Okay, we will come back to this.

9 Item D is one and a half inches thick and just so 10 I understand what you are telling me is that for costing 11 purposes and the way in which you derive the 78 cents that 12 you show on page 10 of your testimony, the piece that is one 13 and a half inches thick is a parcel and the pieces, plural, 14 that are seven-eighths of an inch thick are also parcels?

15 A Let me just go back to page 10. Well, we need to 16 be a little careful there, because that has unit costs which 17 has volume as the denominator so if you are talking about --

18 Q In order to get the unit cost you do need a 19 denominator --

A Yes.

Q -- and the denominator is the volume.

A Yes. If you are talking about the costs that feed into the numerator then, yes, both the seven-eighths of an inch piece and the one and one-half inch piece would be considered parcels.

1 Q And a three-quarter inch piece would not be 2 considered a parcel?

A Exactly.

Q Even though the three-quarter inch piece might in fact be handled as a parcel in the operations of the system? A Correct.

Q Well, that raises a question, raises two questions8 I guess.

9 You were asked this morning by Mr. Olson about the 10 question of modeling, and as I understood your response you 11 said that a functional mail flow really didn't produce 12 anything of value except when you are dealing with separate 13 rate categories such as letters and flats.

14

3

A Yes.

Α

Q Now I take it implicit in that statement is the proposition that you do not consider parcels for costing purposes to be a separate rate category?

18 A That is the way it is set up now. If that were to 19 change then a functional mail flow model would be required 20 to help produce the costs necessary for the pricing witness.

Q Well, now a functional mail flow model might tell us a great deal more about how the mail is moving and what the associated cost is other than simply the dimension of the piece, mightn't it?

25

If we were to do a functional mail flow model,

yes, we would know -- we would try to get where those pieces were entered and how those pieces flow through the system, be it manual or a parcel sorting machine or any of the other options that they could go through, yes.

Q And it might turn out, to go back to my hypothetical, that the piece that is seven-eighths of an inch thick but is prepared and entered as a flat is less costly than the piece that is three-quarters of an inch that is not being prepared and entered as a flat, mightn't it?

10 A That is possible and the reverse is also possible. 11 That would have to be done to determine that.

12 Q Now why do you conclude that the parcels are not a 13 category for purposes of doing a functional mail flow?

A That would be something that the people in Pricing determine how the rates are going to be set up.

Unless there are separate rate categories with separate presort discounts and drop ship discounts such as letters and nonletters are currently, then the functional mail flow model would not serve that purpose because the tie is back to total CRA costs.

Q Well, we will take the rate design up on Monday with Mr. Moeller, but my question to you is from a costing standpoint your purpose was to derive data for the purposes of developing what with respect to parcels? A surcharge. A Exactly. My purpose of my testimony is to develop

the cost difference, the average cost difference between
flats and parcels for purposes of a surcharge. If I had had
a different goal of my testimony I would perhaps have
produced different studies and different cost results. That
was my assignment.

Q I understand that was your assignment but what I don't understand -- I mean you do recognize that as a result of your assignment parcel mailers will pay more than flats mailers?

10 A Right. Parcel mailers right now are paying more 11 than flats mailers --

12 Q Right.

A -- under the current rates.

14 Q And they will pay still more if the rates based on 15 your costs go into effect as proposed.

16 A Right, but that has --

17 Q That has nothing to do with the creation of a rate 18 category?

A I was going to say that the change in the surcharge, that was not anything that I am speaking for in my testimony and whether that -- whether to have parcels be a surcharged subsegment of nonletters or whether parcels are to be their own rate category, that is also outside the scope of my testimony.

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If it was determined that parcels were to be a
rate category, additional costing work would need to be done
 including mail flow models to get separate presort discounts
 by the different category but that is not the way the rates
 are currently set up or proposed in this case.

5 I want to go back for a moment to this question of 0 6 the definition and I guess the first question is suppose 7 instead of video pieces I had put in front of you a catalog. 8 I don't want to use a particular name. I might represent 9 them or them might not like it, in either event. The XYZ 10 Catalog that was three-quarters of an inch thick, that 11 catalog would qualify as a flat for purposes of your costing 12 demonstration?

A Yes. We're talking about our hypothetical .7499
thick piece, yes. That would be a flat.

15 Q Right, and if it was seven-eighths of an inch 16 thick, it would be a parcel?

17 A Yes.

Q

Q Regardless of the fact that -- will you accept subject to check that other than the thickness, all of those pieces that I have handed you meet the dimensional requirements of a flat? Will you accept that for purposes of --

A Yes, I will assume that for purposes of thisdiscussion.

25

And my XYZ Catalog meets all of the dimensions of

1 a flat.

2 A Okay, yes, I am assuming that for purposes of this 3 discussion, both the catalog and your Exhibit A.

Q You may be the wrong witness and if you are don't hesitate to say so, and I will take it up on Monday with Mr. Moeller, but it seems to me that for costing purposes, would you agree that for costing purposes only you have got to have a clear definition of what a parcel is and what it applies to if you are going to impose a surcharge.

What the surcharge applies to? Would you agree?
A I would think that would be more appropriately
dealt with with the rate witness.

Q I will take it up with the rate witness.

14 And this question may also need to go to the rate 15 witness, but let me do it just in case.

16 The piece that I have marked as Exhibit D is too 17 thick to be even an FSM-1000 flat?

18 A Yes.

13

19 Q The piece that I have marked as Exhibit B is a 20 parcel for costing purposes, but could be entered as a flat 21 because it's below an inch and a quarter?

22 A That's correct.

Q Now, let's suppose, as is the case, obviously with Columbia House, whose boxes those are, that they're mailing both, and that because the surcharge does not apply to

pieces that are a flat and prepared and entered as flats, they sort -- they go to the expense of sorting the 7/8ths of an inch-thick piece and making sure that it's set up so that it can be run on the flat sorting machine.

5 And that happens. But they also have to mail that 6 one and a half inch-thick piece because there are some 7 customers who like more than one CD or more than one 8 cassette, as the case may be.

9 Isn't your definition such that for costing 10 purposes, the preparation of these pieces as flats is a 11 waste of time, because they're going to be treated as 12 parcels anyway when the time comes to cost?

13 A Yes, I think if you go to the testimony of Witness 14 Kingsley, she describes that these pieces, for example, the 15 7/8th inch thick pieces, are still generally being treated 16 as parcels, operationally.

Q That wasn't quite my question. My question is, for costing purposes, isn't it a waste of time to prepare pieces for flat sortation, to put the bar code on them and do all those nice things that have to happen to get onto the FSM-1000, if the net effect is that for costing purposes, you treat it as a flat anyway -- as a parcel anyway, I'm sorry.

A Again, this, to me, is more of an operational question, but if you're talking about is there additional

1 value to that if those pieces are treated as parcels, I 2 don't know if I would characterize that as a waste of money. I don't know what effort Columbia House would go З 4 to do that, but it would not add value, would not help the 5 Postal Service save costs. It may not. 6 0 Okay. 7 It may not. I would be a very complicated Α 8 question. 9 Q And so far as you're concerned for purposes of 10 this discussion, everything except B of that -- I'm sorry, 11 everything except Exhibit A of that set is a parcel? 12 А Yes. 13 Q Now, would you indulge me for a moment? Would you hold up or stack A and B side-by-side on the table, upright, 14 15 so that the Commission can see it? They're not standing up, but I can hold them there 16 А for a second if that will be helpful. Is that what --17 18 0 Is that A and B? 19 Α A and B. Do you want to hold them at whatever 20 angle --21 I'm sorry A and C. Just so that the record is 0 22 clear, there is absolutely no difference in the external dimensions of these. 23 Of B and C, right. 24 Α 25 B and C. But there is a difference in weight; 0

1 isn't there?

2

A You said 3.6 versus 5.9.

Q Okay. But for costing purposes, they're both in excess of 3/4 of an inch, an they're fungible; is that correct?

I'm not sure exactly what you mean by fungible. 6 Α For purposes of defining whether they're a parcel. 7 Ο Yes, they would both be considered parcels. 8 Α 9 0 Okay. Let's change subjects. You've answered 10 this in several places, and I'm not going to bother to take you to the interrogatory, but I take you did not use FY 1999 11 12 data at all in the development of the costs of the 13 surcharge?

14

A That's correct.

Q Now, since 1998, as the Chairman pointed out, I think, in his first Presiding Officer's Inquiry, or it may have been the first Notice of Inquiry, was before the implementation of the 1997 rate case rates.

What we're dealing with here is volume as to parcels that reflects no surcharge at all.

A Yes, the base year, 1998, has costs before the surcharge was implemented in January of 1999.

23 Q And the mix of the mail in terms of parcels shows 24 no effect of the surcharge at all?

25 A That's correct.

Now, the Parcel Shippers Association in PSA-3 --1 0 2 if you could turn to that for a moment? [Pause.] 3 They provide some information which we're going to 4 come back to. But they asked you to provide it for test 5 6 year after rates, and you said that information is not 7 available. 8 Is that because in order to develop test year after rates volumes in this case, you'd need to know what 9 10 the surcharge was? 11 Α I don't believe so, because I know that in the past, we've not been able to supply test year after rates 12 data as far as costs. It's -- that gets into a complicated 13 way of what comes -- you know, chicken and eqgs of which is 14 first. 15 16 But I don't believe that cost information is 17 generally available in test year after rates. I'm probably 18 not the correct person to describe exactly why that's not available. 19 I think we may be focusing on two different 20 0 things. Costs are a function of volume. I'm not asking 21 22 about costs. I can understand the problem of developing test year after rates costs because it is a chicken and the 23 24 eqq problem. You don't know what the costs are until you know 25 ANN RILEY & ASSOCIATES, LTD.

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what the mix is going to be, and you don't know what the mixis going to be until you know what the rate is.

A Right.

3

4 Q What I'm asking you here is, what about test year 5 after rates volumes?

6 A Test year after rates volumes should be available 7 for Standard A overall, but I'm not -- I don't believe they 8 forecast parcels separately.

9 Q Okay. What we're dealing with here is test year 10 --

11 A I don't believe the forecast those separately. 12 Q So we don't have past year after rates volumes for 13 parcels? We don't have, I take it, based on your 14 conversation with Mr. Olson earlier today, in this case, we 15 don't have data about parcels, however, you choose to define 16 it, by the content.

17Do you recall you discussed with Mr. Olson, a --18ABy content, you mean, for example, CDs versus19boxes of checks or some other similar type thing?

20 Q Right.

A Correct. We did a -- the study that was done in MC-97-2, I don't believe that got at costs. I know it presented data of different shapes, but I don't believe it got a cost by those shapes, and certainly not based on any changes that have happened.

1 0 Do you recall whether it presented data by different shapes, or whether it also presented, or primarily 2 presented data by assessment of what was in the box? 3 I remember some of the categories. For example, I 4 А know that CD box was one choice, but I don't remember 5 exactly how that data was broken out. I do remember that CD 6 box was one choice. 7 And did you make the decision not to use that 8 0 9 study in this case for any reason? Well, I mean, the only thing -- I did use data, Α 10 the density data from that study. 11 You did use the density data? 12 0 The rest of it was more or less general Α Yes. 13 information that wouldn't have had an impact on my cost 14analysis. 15 Including dimensions? Q 16 I believe there was some dimensional data in 17 Α 18 there. Well, in view of your definition of the term, 19 0 parcel, wouldn't that have been a useful tool? 20 Again, since my analysis was done for '98, base 21 Α year '98, I'm not sure. I don't see how that data would 22 have been helpful. 23 Now, the other thing we don't have here is any 24 0 cost data correlating shape and weight; do we? 25 ANN RILEY & ASSOCIATES, LTD.

Court Reporters 1025 Connecticut Avenue, NW, Suite 1014 Washington, D.C. 20036 (202) 842-0034 1 A I did not present any -- did not present that 2 data. I do believe some other Postal Service witnesses have 3 broken out volumes by weight increment.

Q By weight increment, that is not my question. My question was, correlating weight increment to shape, that is to say, a piece, hypothetically, being 5.9 ounces and seven-eighths of an inch thick, in the case of one of our exhibits.

9 A Right. I don't believe that is available. 10 Q In the case of Exhibit C. That data is not 11 available

A Right.

12

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13 Q And we also don't have, do we, data by bar code, 14 that is the extent to which there are bar codes on parcels 15 now?

16 A But I believe we measured, again, in the study 17 which I think took place during '96, I believe there was 18 data as of then as far as how many pieces were machineable 19 and had bar codes, but I don't believe we have any 20 information for now.

21 Q Okay.

A Someone might have assumed that in their testimony, but I don't believe that there has been a study. Q That someone might be Mr. Moeller?

A That is who that that someone would likely be, if

1 that were to be available.

2 Q Now, is it fair to conclude that bar codes will 3 yield -- that the application of a bar code will yield cost 4 savings to the Postal Service?

5 A I would say yes, the presence of a bar code would 6 be beneficial as far as savings. For example, at the parcel 7 sorting machine, the piece could be swiped rather than 8 keyed.

9 Now, is it also fair to conclude that, to the 0 10 extent that they are eligible to do so, the migration of 11 those CDs, or the heavier weights of them, to Special Rate 4th would reduce cost savings in Standard A? Would reduce 12 13 costs? I'm sorry, I didn't mean to say cost savings. Would reduce the costs, the total accrued costs and the total 14attributable costs of Standard A? 15

MR. COOPER: The migration of which two?
MR. VOLNER: Of the CDs that are on that table.
MR. COOPER: Any particular ones or all of them?
MR. VOLNER: Well, let's take it at the one that
is an inch-and-a-half thick.

THE WITNESS: So you are saying if certain pieces, and I believe this is Special Fourth Class rate on here, if that piece were to go Special Fourth Class rate and not Standard A, because of the rates that are charged, and this -- and in one scenario, this piece is a Standard A piece and

- 1 then it is mailed Special Rate 4th, you are saying, will the 2 removal of that lower Standard mail A cost?
- 3 BY MR. VOLNER:

4

Q That is my question.

A Well, certainly, any time a piece is removed from the mailstream, those costs would go down. Whether the unit costs would go down would be another question. I am not sure what the answer to that would be.

9 Q And let us suppose, hypothetically, that there are 10 some books that weigh less than a pound, that are an 11 inch-and-a-quarter thick -- an inch-and-a-half thick, to 12 keep this simple. Those books could conceivably migrate to 13 bulk bound printed matter in the test year, in this case, 14 isn't that correct?

15 A Again, I have not compared that, but, 16 theoretically, it is possible that pieces under a pound, 17 formerly mailed as bulk Standard A could move to bulk bound 18 printed matter, given the change in the minimum weight that 19 I believe is implemented.

20 Q That is exactly what I was getting at, and you 21 made it easier for me. But these possibilities are simply 22 ignored in your costing study?

A Yes. Since my analysis is base year 1998, any changes to the mix would not be in my cost analysis. Now, let's go back -- well, let me, just so that

we have a clear record here, state the hypothetical obvious, that a piece, regardless of its dimension, that migrates to Standard -- to Special Rate 4th, now called Media Mail Service, or to bulk bound printed matter, which hasn't changed its name, will no longer be a parcel for purposes -in a cost study done for Standard A, is that correct? If it migrates.

8 A Right. It would be a Special Fourth Class rate or 9 bound printed matter parcel.

10 Q Would you turn to your response to part (a) of 11 RIAA-T-27-2?

12

A Okay.

13 Which was really a follow-up to an earlier OCA 0 14 interrogatory, but the answer stands on its own, and I must 15 confess I don't understand it. You said that you couldn't 16 use the 1999 data because, to do so, in view, I presume, of 17 the change in the regulations, would make it more difficult to accurately estimate the cost difference between the two 18 19 shapes. The two shapes being flats and parcels?

A Yes, but I didn't say I could not use 1999 data. I just said if I were to use 1999 data, there could be uncertainty.

Q And you maintain that your current study iscertain as to the cost of parcels?

25

A It is my testimony in '98, that, yes, this

confusion is not there, albeit, with 900 million pieces, I
 am not saying that every piece has been categorized
 correctly, but I believe that for 1998, these uncertainties
 did not exist and there are not problems.

So that we just ignore the existence -- well, what 5 0 we know happened in 1999, on January 10 or 11, 1999, that is 6 7 to say, a surcharge went into effect and, at the same time, according to answers to a number of interrogatories, pieces 8 up to an inch-and-a-quarter were held by the Postal Service 9 10 because of the dimensions, definitional dimension of a flat, no longer to be treated as a flat, but not for -- except for 11 12 costing purposes.

I'm sorry, I misstated that question.

14 A Yes.

13

Q Let me try that again. In January of 1999, there were two changes that occurred. The first is that the surcharge went into effect and the second is that the surcharge did not apply to pieces up to an

19 inch-and-a-quarter.

20 A If, with filing in all the details, if they were 21 prepared on the flat automation rate and had a bar code, et 22 cetera, et cetera.

Q Correct. Okay. Well, let's go back to page 8 of your testimony for one moment, and then we can conclude this line. On lines 1 and 2 of your testimony, you say that the

logical conclusion -- let's not be unfair because it is important, if we go back over to page 7 for a moment, you explain that parcels with thicknesses, at lines 22 and 23, parcels with thicknesses between three-quarters of an inch and an inch-and-a-quarter, and fully prepared as automated flats, are the most similar to flats and will likely have the most similar cost characteristics to flats.

8 You say, go on to say that the logical conclusion 9 then is that the pieces still subject to the surcharge will 10 have a higher cost that those presented in this analysis. 11 Let me do this mildly. Is it fair to conclude that your 12 logical conclusion is not based upon any cost study, nor is 13 it based upon any empirical observation of what actually 14 happened to mail after January 10, 1999?

15 A That is correct, it is merely a logical 16 conclusion.

Q Okay. And isn't it just as logical to conclude that if migration occurred at that time, and if a large volume went to flats and, in fact, was handled as flats, that the cost of the remaining pieces declined, in the absence of any empirical study?

22 A I assume that one could develop a stream of logic 23 which, to them, could make that a logical conclusion.

24 Q Thank you. Let's turn --

25 MR. VOLNER: Fortunately, as I explained, Mr.

1	Chairman, Mr. Olson has made my life simpler in one respect,
2	and I am now on my last line and I will be done very
3	quickly, I hope.
4	BY MR. VOLNER:
5	Q Could you turn to the attachment to your response
6	to PSA-3?
7	A Okay.
8	Q And this is base year revenues, base year costs,
9	and base year contribution?
10	A Yes.
11	Q Now, that means that the revenue does not include
12	the 10-cent surcharge?
13	A That's correct.
14	Q And, of course, we know nothing about what
15	happened to the flats, the cost of flats in 1999, of the
16	cost of either parcels or flats for these purposes.
17	But let me ask a question: Assuming all things
18	remain constant, except for the implementation of the
19	surcharge, am I being unreasonable in concluding that the
20	loss of contribution among regular parcels was not 29 cents,
21	as you indicated here, but, in fact, 19 cents?
22	A [No audible response.]
23	Q I recognize that
24	A Right, exactly. If you're saying in the I
25	mean, a simple way for me to answer this is, the revenue per

ł

piece that I show there, does not include the surcharge. 1 2 And if you add ten cents to the minus 29, then you get minus 19; that's correct. 3 4 0 That's fine. Let's turn to RIAA-3, if you will 5 indulge me? 6 Α Okav. 7 In order to do this, we're going to need RIAA-1 as 0 8 well. I guess, let's start with the Attachment to RIAA-1, because there is something that I need to make sure that 9 I've got right. 10 11 The Attachment to RIAA-1 shows four tables which 12 are labeled Table 3.1, 3.2, 3.3, and 3.4. 13 Δ Yes. 14 Am I correct that Table 3.1 depicts the ECR Q 15 segment cost there? 16 А Yes. 17 Q And the Table 3.2 depicts the regular or what is 18 sometimes referred to as other, used to be referred to as 19 other? 20 Α Yes, regular is what I call it now. 21 And Table 3.3 is the nonprofit ECR? Q 22 Α Yes. 23 Q And Table 3.4 is the nonprofit regular? Yes. 24 Α 25 Okay, good. Now, looking at this data, there are Q

-- and you've been asked a number of interrogatories about
 this, but I just want to make sure that we understand.

There are some significant differences among these four subclasses in the cost segments you've depicted; aren't there?

A Yes, because the numbers here vary.

Q And, in fact, for example, the mail processing costs of nonprofit regular is almost three times the mail processing cost of ECR commercial, and one and a half times the mail processing cost of its most closely corresponding class, regular?

A Right.

6

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Q Now, in response to RIAA-3(b), if you'd look at that for a moment, you explain that Table 3.3, the nonprofit ECR category, is not to be used for comparisons because why? A The volumes there are so small they comprise only

17 .2 percent of Standard A parcel volume. Standard A parcel18 volumes are only 1.5 percent of all of Standard A.

19 The volumes there are so low that you would expect 20 wide variations from year to year, and we've seen that.

Q Right, now, but that is not true, is it, of the volumes of regular nonprofit? They comprise almost five percent.

- 24 A Correct.
- 25 Q Of the total.

A much -- approximately ten times as much volume. 1 A Ten times as much volume. And yet one and a half 2 0 times the cost, when compared to the most closely 3 corresponding class in mail processing alone? 4 Yes, you're comparing nonprofit Table 3.4, with 5 Α 6 regular Table 3.2. Right. So that the sampling error problem cannot 7 0 explain that difference; can it? 8 Α Well, the volume of regular is more than ten times 9 the volume of nonprofit, so it's -- to exclude that as a 10 possibility, I don't think is accurate. 11 It certainly -- the low volume is certainly going 12 to be less of a problem for nonprofit than it was for 13 nonprofit ECR. But to suggest that it's no problem at all, 14I don't think is fair, either. 15 16 0 But you don't know? I don't know. 17 А And you don't know whether the revenue format with 18 0 its content limitations on parcels in the nonprofit category 19 20 may influence the costs of either of those two subclasses; do you? 21 22 Α That's correct. Well, then, let me ask you the question flat out: 23 Q 24 Given the fact that you don't know what may be causing these rather marked differences in cost, why did you consider it 25

to be your purpose to do the calculations as you did for total, that is to say, all of the subclasses, in aggregate? Could you not have presented cost data that showed it separately, as you have done here for each of the subclasses?

A I believe -- I mean, this data, as I say in my response to T-27-1, the data you asked for could be found by dividing the cost segment costs and the IPPs and parcels column by the parcel volume of mail listed in the distribution keys in each section of my tables.

11 So this data -- I did present this data in my 12 testimony. So, to suggest that it's only here because of 13 the attachment, is not correct.

The reason that the numbers are presented in my testimony as such is that the pricing witness has determined that there is to be, you know, a -- there was to be a set surcharge, so I would do all my costs together.

Q That is very helpful. Let me make sure that I understand this absolutely. What you're saying is that the pricing witness said to you, Mr. Crum, you're doing my costing data. I don't want separate surcharges for each of the four subclasses; I want you to give it to me in aggregate.

- 24 A Right.
- 25 Q Did you?

1 A I don't know if those were his exact words, but 2 the discussion went along lines as we're not planning to 3 institute --

Q Separate surcharges for separate subclasses.
A That was my original understanding. Now, I know
that they are actually proposing different surcharges in the
ECR versus regular categories, and I believe that more or
less just has to do with the bar code discount and to
prevent anomalies.

But the idea was certainly to have one surcharge, and the only intervening issue was the bar code discount. Q And, in fact, you do not have one surcharge,

13 despite the fact that you've got one set of costs, for 14 precisely the reason you just gave; isn't that the fact?

15 A Could you just run over that last part again? I 16 was unsure where the question started.

17 Q The rate design witness ultimately did not produce18 a single surcharge for all four subclasses?

A That's correct, the rate design witness did
ultimately -- there are different surcharges.

Q Now, two further questions: When the rate design witness suggested to you that you wanted aggregate data for all four subclasses, did you point out to him, this data which did, indeed, appear in your testimony? And the only reason we had to ask it as an interrogatory was, we were not

able to open that page of the workpaper, electronically?

A I'm --

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Q Did you say to him, gee, Joe, you know, you have big differences here, and you can certainly explain away Table 3.3, but it gets a little bit harder, particularly, to explain away Table 3.2, and particularly when you look at the test year before rates revenues, which we did in conjunction with Exhibit 5 with PSA-5?

9 A If you're trying to get at what the discussion was 10 that took place between Witness Moeller and myself, it was 11 more or less, given that this was not -- this was probably, 12 you know, maybe a year ago, basically the discussion went 13 something like these are the costs or regular. That's where 14 90 percent of the volume is.

15 The costs in some of the other subclasses are 16 higher. I don't know if I gave him a table listing it all 17 out, but I do know that he was aware of the basic cost 18 differences by subclass, and that regular, with most of the 19 volume, was such that it is with its contribution -- and 20 then the other ones were as they were.

21 Q Was he also aware of the difference in revenue 22 effects?

A Yes, we talked about revenue effects also, and I
had sent him similar data.

25

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Let's go back and conclude this with one last

1 question.

2 Would you take Exhibits B and C that I have given 3 you, the two boxes, and I think we agreed at least for 4 purposes of this demonstration Exhibit B weighs 3.6 ounces 5 and Exhibit C weighs 5.9 ounces.

Now what you have shown on Attachment to PSA-3 is
the average revenue per piece, is that correct?

8 A Let me just get there real quickly. Yes, the 9 Attachment to PSA-3 has the average revenue per piece --10 subclass and shape.

11 Q Now let's hypothesize that the 3.6 ounce piece is 12 so close to the average as to not make a difference. In 13 fact, it is probably slightly above average, but for 14 purposes of the illustration, that will serve.

Now the other piece is 1.3 ounces heavier. It would pay more than the 47 cents that you show here.

17 A Well, let me -- I am not sure I agree with your 18 average weights. Let me check something here real quick.

I haven't divided this through but it looks like the weight of a regular parcel is closer to -- if my math -off the top of my head is it 7 to 8 ounces? I don't see that as being 3.6. Perhaps I am looking at a different number here but I don't think these are the same weight as the average regular parcel.

25

Q Well, what I meant was for rating purposes they

1 are both above the breakpoint, aren't they? 2 А Yes. And that is what I was really getting at. 3 Ο 4 А Okay. Because they are both above the break point, they 5 Ο 6 will pay the piece plus per pound. 7 А Right. 8 And the piece that weighs 5.9 ounces is going to Q pay more than the piece that weighs 3.6 ounces? 9 Yes. 10 А And ceterus paribus, what we agreed was 19 cents 11 0 in the case of some pieces might be considerably less than 12 19 cents, mightn't it? 13 14Α That is correct. A heavier piece would bring in more revenue, ceterus paribus, and that number for a given 15 piece certainly could be lower. 16 I have no further questions, Mr. 17 MR. VOLNER: 18 Chairman. Thank you. 19 CHAIRMAN GLEIMAN: Is there any follow-up? [No response.] 20 CHAIRMAN GLEIMAN: Questions from the bench? 21 22 [No response.] CHAIRMAN GLEIMAN: Would you like some time for 23 redirect? 24 MR. COOPER: Could I take ten? 25

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1 CHAIRMAN GLEIMAN: You may take ten and we will 2 take ten also. 3 [Recess.] 4 CHAIRMAN GLEIMAN: Mr Cooper? 5 MR. COOPER: We have no redirect. 6 CHAIRMAN GLEIMAN: That being the case, Mr. Crum, 7 that completes your testimony here today. We appreciate 8 your appearance and your contributions to our record. 9 We thank you and you are excused. 10 [Witness excused.] 11 CHAIRMAN GLEIMAN: This concludes today's hearing. 12 We will reconvene at 9:30 tomorrow morning and we will receive testimony from Postal Service Witnesses Tolley, 13 Thress and Musgrave. 14 15 Thank you all and have a good afternoon. 16 [Whereupon, at 2:17 p.m., the hearing was 17 recessed, to reconvene at 9:30 a.m., Thursday, April 20, 18 2000.1 19 20 21 22 23 24 25

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