

BEFORE THE
POSTAL RATE COMMISSION

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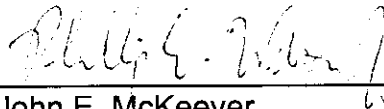
POSTAL RATE AND FEE CHANGES, 2000

DOCKET NO. R2000-1

ANSWERS OF UNITED PARCEL SERVICE WITNESS
KEVIN NEELS TO INTERROGATORIES OF
THE UNITED STATES POSTAL SERVICE
(USPS/UPS-T1-1 THROUGH 6)
(June 9, 2000)

Pursuant to the Commission's Rules of Practice, United Parcel Service ("UPS") hereby serves and files the responses of UPS witness Kevin Neels to interrogatories USPS/UPS-T1-1 through 6 of the United States Postal Service.

Respectfully submitted,



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USPS/UPS-T1-1. Please refer to the curriculum vitae provided as Appendix A to your testimony, UPS-T-1. For each listed item following the "Testimony" heading, other than the Docket No. R97-1 item, please indicate whether your testimony pertained, in whole or in part, to an econometric analysis of panel data. If so, please provide a copy of the written testimony.

Response to USPS/UPS-T1-1. My testimony in the following matters pertained in whole or in part to an econometric analysis of panel data:

1. Before the U.S. District Court, District of Maryland, Testimony in the Matter of Borman Motor Company Limited Liability Co., et al. vs. American Honda Motor Company Inc., et al., Civil Action No. MDL-1069, August 1998;
2. Before the U.S. District Court, District of Kansas, Testimony in the Matter of Timothy Mellon vs. The Cessna Aircraft Company, Civil Action No. 96-1454-JTM, Expert Report, November 1997.

Copies of the above are being filed as library reference UPS-LR-1.

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USPS/UPS-T1-2. Please refer to your testimony, UPS-T-1, at page 32, lines 9-

11. You state, "It would be even simpler for the Postal Service to dispense with the whole cost driver/distribution key approach and retain the traditional finding that mail processing labor costs are 100 percent volume-variable." See also witness Sellick's testimony, UPS-T-2, at page 2, lines 15-18, where Mr. Sellick states that he provides "a recalculation of base year Cost Segment 3 costs . . . using 100 percent mail processing labor cost variability as proposed by UPS witness Neels (UPS-T-1)."

a. Confirm that Mr. Sellick's calculations for cost segment 3.1 (mail processing labor) are consistent with your testimony, UPS-T-1. If you do not confirm, please explain fully.

b. Do you contend that the subclass "costs" for cost segment 3.1 computed by Mr. Sellick for UPS-T-2, divided by the corresponding RPW volume, have the economic interpretation of marginal cost? Please provide the economic interpretation you believe to be correct if your answer is negative in whole or in part

c. Please provide the precise economic interpretation(s) of the "100 percent mail processing labor cost variabilities" employed by Mr. Sellick for cost segment 3.1 That is, if you contend the 100 percent variabilities represent the elasticity of "X" with respect to "Y," provide a precise definition of "X" and "Y."

d. Please provide the precise economic interpretation(s) of the IOCS-based distribution key shares used by Mr. Sellick to compute mail processing "costs" by cost

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pool and subclass. Reconcile your answer, as necessary, with your responses to parts (b) and (c) of this interrogatory.

Response to USPS/UPS-T1-2.

(a) Confirmed. On pages 60-70 of my testimony, I present alternative calculations of the volume variability of mail processing labor costs. Almost all of these calculations yield variabilities equal to or in excess of 100 percent. The only noteworthy exception occurs in Tables 9 and 10 in connection with the Priority Mail MODS pool. As I note in my testimony (page 27, line 1-page 28, line 12), the Priority Mail data are subject to measurement error that appears to result in downward bias in the estimated volume variability. As I also state in my testimony (page 71, line 19-page 72, line 21), I am skeptical of the ability of MODS-level analyses to capture all of the effects of interactions between processing activities for purposes of computing volume variability. For these reasons, I am persuaded by the overall weight of the evidence, especially the results of the aggregate analysis reported on pages 63-70 of my testimony, that a volume variability of 100 percent is appropriate.

(b) I assume that you intend to ask whether I contend that the subclass costs for cost segment 3.1 computed by Mr. Sellick in UPS-T-2, divided by the corresponding RPW volume, represent marginal mail processing labor costs. Dividing Mr. Sellick's subclass costs by the corresponding RPW volumes does give the best approximations of the partial derivatives of mail processing labor costs with respect to subclass

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volumes that are available in this record.

(c) "X" equals mail processing labor cost for a specific MODS pool. "Y" represents the number of pieces of mail of a specific subclass delivered by the Postal Service.

(d) Mr. Sellick's IOCS-based distribution key shares represent the shares of costs, by MODS pool, accounted for by the various mail subclasses.

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USPS/UPS-T1-3. Please refer to your testimony, UPS-T-1, at pages 30-36.

Please also refer to USPS-T-15 at pages 52-53, especially lines 17-18 of page 52 and lines 7-8 of page 53.

- a. Please confirm that you conducted an analysis of the relationship between TPF (or TPH, as appropriate) and FHP as a test of the "proportionality assumption" discussed by Dr. Bozzo. If you do not confirm, please explain the purpose of the analysis you present at pages 34-36 of your testimony.
- b. Does Dr. Bozzo describe the "proportionality" assumption as pertaining to the relationship between piece handlings and subclass RPW volumes, or to the relationship between piece handlings and FHP volumes? Please explain the basis for your answer.
- c. Please provide a detailed statement of your understanding of the distinction between RPW volume and FHP volume.
- d. Have you conducted any analysis of the relationship between FHP volumes and RPW volumes? If so, please provide a detailed description of the methods and results of your analysis.

Response to USPS/UPS-T1-3.

- (a) Confirmed.
- (b) Dr. Bozzo describes the "proportionality" assumption as pertaining to the relationship between piece handlings and subclass RPW volumes, as explained on page 52, lines 17-18 of his testimony.

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(c) I understand that at a given point in time, mail processing and transportation plans provide a specific routing for each potential origin-destination combination. A particular piece of mail traveling from a specific origin to a specific destination may pass through multiple mail processing plants as it makes its way along this routing. This arrangement is described in the stylized example presented in USPS-T-16, pages 15-16. A single piece of mail, representing a unit increase in RPW volume, will generate a unit increase in FHP volume at each of the processing plants through which it passes and in which it undergoes sortation. The relationship between incremental RPW volume and incremental FHP volume will depend upon routing, and, for a given routing, the two will generally vary in direct proportion.

I understand that exceptions to direct proportionality between RPW volume and FHP volume may sometimes occur. A change in the geographic distribution of mail is likely to alter the relationship. Reconfiguration of the network involving the opening or closing of plants is also likely to alter the relationship. Sortation errors and misrouting of mail may increase the number of plants a particular piece of mail passes through, and thus changes in the frequency of these errors may also alter the relationship between RPW volume and FHP volume. Changes in worksharing can alter the relationship between RPW volume and FHP.

Any departures from direct proportionality between FHP volume and RPW volume would have an equal or greater effect on the relationship between TPF and RPW volume.

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(d) No.

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USPS/UPS-T1-4. Please refer to your testimony, UPS-T-1, at page 62. You indicate in note 1 to the table that “[v]olume variability is defined as:

$$\frac{\partial \ln C}{\partial \ln FHP} = \frac{\partial \ln C}{\partial \ln TPH} \cdot \frac{\partial \ln TPH}{\partial \ln FHP} .”$$

- a. Does your equation omit a subscript (say, “i”) indicating cost pool?
- b. If your response to part (a) is affirmative, confirm that the equation from note 1 may be rewritten as:

$$\frac{\partial \ln C_i}{\partial \ln FHP_i} = \frac{\partial \ln C_i}{\partial \ln TPH_i} \cdot \frac{\partial \ln TPH_i}{\partial \ln FHP_i} .$$
 If not, please provide a version of the equation

that correctly specifies the omitted subscripts.

Response to USPS/UPS-T1-4.

(a) Yes. I was speaking in general terms, not necessarily with respect to an analysis based on cost pools.

(b) Table 9 on page 62 presents the results of two calculations. Results presented in the second column from the right reflect TPH/FHP elasticities calculated at the MODS pool level. For this calculation, the modification of the equation from note 1 presented in part (b) of this question is correct. Results presented in the rightmost column, however, reflect TPH/FHP elasticities calculated at the shapes level. For that calculation, the appropriate modification of the note 1 equation would be:

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$$\frac{\partial \ln C_i}{\partial \ln FHP_i} = \frac{\partial \ln C_i}{\partial \ln TPH_i} \cdot \frac{\partial \ln TPH_j}{\partial \ln FHP_j},$$
 where the subscript i refers to MODS pool and the

subscript j refers to the shape grouping of which MODS pool i is a part.

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USPS/UPS-T1-5. Please refer to your testimony, UPS-T-1, at page 74, lines 20-21. You state that "Postal Service witnesses have argued that increases in cost associated with growth in the number of addresses have no relevance to ratemaking." Please refer further to your testimony at page 75, lines 14-15, where you indicate that growth in the number of delivery points is "costly to accommodate."

- a. Please provide detailed citations to the Postal Service testimony you reference in the statement from page 74 quoted above. If you can find none, what is the basis for the statement?
- b. Do you believe that there are "increases in cost associated with growth in the number of addresses" for mail processing? If not, explain in detail the meaning of the statement from page 75 quoted above.
- c. If there are "increases in cost associated with growth in the number of addresses," how are those costs causally attributable to a subclass of mail as volume-variable (or marginal cost)? Provide a detailed justification of your response.
- d. If there are "increases in cost associated with growth in the number of addresses," how are those costs causally attributable to a subclass of mail as incremental cost? Provide a detailed justification of your response, including a reconciliation of your response with the discussion of incremental cost provided by witness Sappington in UPS-T-6.

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Response to USPS/UPS-T1-5.

(a) See USPS-T-15, pages 47-48, in which Dr. Bozzo discusses the distinction between network characteristics and volume. He states on page 47, lines 19-20, that "Volume and network characteristics interact in complicated ways, but volume does not cause network characteristics." Later on page 48, lines 16-18, after a lengthy discussion of the effects of network characteristics on costs, he concludes that "Such systematic productivity differences are clearly not driven by volume, but rather by non-volume network characteristics."

See also USPS-T-15, page 125, lines 13-16, in which Dr. Bozzo states that "The significance of the distinction between the volume and the network effect for postal costing is that *the deliveries elasticities, the contributions of the network to the costs of processing operations, are not causally attributable to the subclasses of mail.*" (emphasis in the original).

See also USPS-T-16, page 5, lines 21-25, in which Mr. Degen states that "I identify some of the local cost-causing characteristics that will not change in response to a small sustained increase in volume. Some of these characteristics appear to be volume-related but are, in fact, driven by non-volume factors, particularly those pertaining to the delivery network served by each plant."

(b) Yes.

(c) As I discuss on page 75, lines 7-12, a portion of the volume growth experienced by the Postal Service will result from the creation of new households and

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new businesses. These new households and businesses represent new delivery points. Associated with each delivery point will be a characteristic mix of mail. Accommodating the volumes associated with such new delivery points requires modification of the processing plan for each mailstream experiencing such growth in volume. Costs associated with these modifications are causally related to the volume growth caused by the creation of new households and businesses.

(d) See my response to part (c), above.

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USPS/UPS-T1-6. Refer to your analysis of the relationship between FHP and TPF (or TPH, as appropriate).

- a. Confirm that a piece of mail may receive subsequent handlings in cost pools other than the cost pool in which it is recorded for FHP, e.g., pieces without a mailer applied barcode that are initially processed on OCR equipment and receive subsequent handlings on BCS equipment. Explain fully any answer other than an unconditional confirmation.
- b. Does your analysis of the relationship between FHP and TPF account for the fact that the FHP count for a piece and subsequent TPF volume may appear in different cost pools? If so, please explain how.

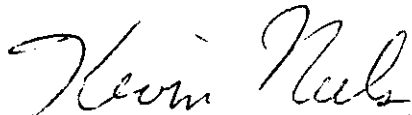
Response to USPS/UPS-T1-6.

(a) Confirmed.

(b) Yes. My MODS pool level analysis of the relationship between FHP and TPF does not account directly for the fact that a particular piece of mail may be processed in multiple MODS pools. This is a weakness inherent in MODS-level analysis. It was for this reason that I also conducted analyses of the relationship between FHP and TPF at the shapes level, which, by aggregating cost pools by shape, reflects the fact that the FHP count for a piece and subsequent TPF volume may appear in different cost pools. See UPS-T-1, pages 37-38.

DECLARATION


I, Kevin Neels, hereby declare under penalty of perjury that the foregoing answers are true and correct to the best of my knowledge, information, and belief.


Kevin Neels
Kevin Neels

Dated: June 9, 2000

CERTIFICATE OF SERVICE

I hereby certify that I have this date served the foregoing document in accordance with section 12 of the Commission's Rules of Practice.



Phillip E. Wilson, Jr.

Dated: June 9, 2000
Philadelphia, PA

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