

DOCKET SECTION

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

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OFFICE OF THE SECRETARY

POSTAL RATE AND FEE CHANGES, 1997

Docket No. R97-1

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS MUSGRAVE TO  
INTERROGATORIES OF UNITED PARCEL SERVICE  
(UPS/USPS-T8-1-5)

The United States Postal Service hereby provides responses of witness  
Musgrave to the following interrogatories of United Parcel Service: UPS/USPS-T8-1-  
5, filed on September 15, 1997.

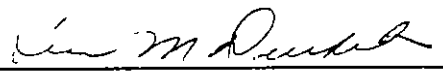
Each interrogatory is stated verbatim and is followed by the response.

Respectfully submitted,

UNITED STATES POSTAL SERVICE

By its attorneys:

Daniel J. Foucheaux, Jr.  
Chief Counsel, Ratemaking

  
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Susan M. Duchek

475 L'Enfant Plaza West, S.W.  
Washington, D.C. 20260-1137  
(202) 268-2990; Fax -5402  
September 29, 1997

**RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS MUSGRAVE TO  
INTERROGATORIES OF THE UNITED PARCEL SERVICE**

**UPS/USPS-T8-1.** Please refer to your testimony, page 18, line 14, where you state that the own-price elasticity of demand for Priority Mail is estimated to be  $-0.77$ .

a. Did you compute confidence levels or any other statistical measure of the uncertainty associated with this estimate?

b. If the answer to (a) is yes, please provide such estimates. If the answer to (a) is no, please explain why no such measures were computed.

c. If the answer to (a) is no, please provide an estimate of the range within which the own-price elasticity of demand for Priority Mail, in your opinion, likely falls.

**RESPONSE:**

a. Yes.

b. Please see my Library Reference H-120, page 56, first line, where the computed t-statistic equals  $-5.719$ .

c. Not Applicable.

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**RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS MUSGRAVE TO  
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**UPS/USPS-T8-2.** Please refer to your testimony, page 27, lines 17-21, where you provide estimates of volume for Priority Mail in the Test Year.

a. Did you compute confidence levels or any other statistical measure of the uncertainty associated with these estimates?

b. If the answer to (a) is yes, please provide such estimates. If the answer to (a) is no, please explain why no such measure was computed.

c. If the answer to (a) is no, please provide an estimate of the range within which the estimate of Priority Mail volume in the Test Year, in your opinion, likely falls.

**RESPONSE:**

a. No.

b. They have not been provided in previous cases. In addition, it is my understanding that the Postal Service and the Postal Rate Commission use point estimates of volume forecasts, rather than confidence intervals.

c. A statistical confidence interval is not available. However, the R94-1 after- rates Test Year forecast was 10.65% low. I would expect the current forecast to be within the range of plus or minus 11% of the actual value.

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**RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS MUSGRAVE TO  
INTERROGATORIES OF THE UNITED PARCEL SERVICE**

**UPS/USPS-T8-3.** Please refer to your testimony, page 35, lines 5 and 6, where you provide an estimate of the long-run own-price elasticity for Express Mail.

a. Did you compute confidence levels or any other statistical measure of the uncertainty associated with this estimate?

b. If the answer to (a) is yes, please provide such estimates. If the answer to (a) is no, please explain why no such measure was computed.

c. If the answer to (a) is no, please provide an estimate of the range within which the estimate of Express Mail own-price elasticity, in your opinion, likely falls.

**RESPONSE:**

a. Yes.

b. Please see my Library Reference H-121, page 42, line 11, where the computed t-statistic equals -17.774.

c. Not Applicable.

**RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS MUSGRAVE TO  
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**UPS/USPS-TB-4.** Please refer to your testimony, page 44, where you provide estimates of Express Mail volumes in the Test Year.

a. Did you compute confidence levels or any other statistical measure of the uncertainty associated with these estimates?

b. If the answer to (a) is yes, please provide such estimates. If the answer to (a) is no, please explain why no such measure was computed?

c. If the answer to (a) is no, please provide an estimate of the range within which the estimate of Express Mail volume, in your opinion, likely falls.

**RESPONSE:**

a. No.

b. They have not been provided in previous cases. In addition, it is my understanding that the Postal Service and the Postal Rate Commission use point estimates of volume forecasts, rather than confidence intervals.

c. A statistical confidence interval is not available. However, the R94-1 after-rates Test Year forecast was 6.98% low. I would expect the current forecast to be within the range of plus or minus 7% of the actual value.

## RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS MUSGRAVE TO INTERROGATORIES OF THE UNITED PARCEL SERVICE

**UPS/USPS-T8-5.** In its Opinion and Recommended Decision in Postal Rate and Fee Changes, 1994, Docket No. R94-1, the Commission presented, at page II-39, a table comparing forecasted volume estimates of Postal Service witnesses Tolley and Musgrave with actual volumes. On page II 38, the Commission concluded that:

- The excellent overall volume forecasting performance masked large but offsetting forecast errors among individual mail categories
- Percentage errors for major categories of mail were within a range of plus or minus 3%
- Forecasting errors for smaller categories of mail tended to fall within a larger range
- Forecasting accuracy has improved
- No bias was apparent

a. Do you agree with the Postal Rate Commission's assessment summarized above? If not, please explain.

b. With respect to the forecasts provided in the present proceeding, Docket No. R97-1, do you anticipate that the same conclusions might apply? Please explain your answer.

c. Specifically, with respect to the forecasts provided in the present proceeding, do you anticipate that the differences between the forecasts and the actual volumes for the larger mail categories will fall within a range of plus or minus 3 % and the errors for the smaller categories will fall within a wider range? Please explain your answer.

### RESPONSE:

a. My testimony and response are limited to Priority Mail and Express Mail. In the cited table (II-3), page II-39, percent difference in forecast versus actual is -4.78% for Priority Mail and -2.36% for Express Mail. These seem to be generally consistent with the Commission's statement.

b. Yes, within the limits of my testimony, these same conclusions might apply.

c. Yes, within the limits of my testimony, see my response to UPS/USPS-T8-2 and UPS/USPS-T8-4. My best estimates of the Test Year volumes are presented in my testimony and they are the ones in which I have the most confidence as being closest to the actual volumes.

DECLARATION

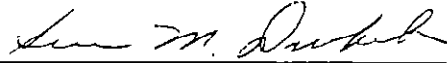
I, Gerald L. Musgrave, declare under penalty of perjury that the foregoing answers are true and correct, to the best of my knowledge, information, and belief.

G. MUSGRAVE

Dated: 9/29/97

**CERTIFICATE OF SERVICE**

I hereby certify that I have this day served the foregoing document upon all participants of record in this proceeding in accordance with section 12 of the Rules of Practice.



Susan M. Duchek

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Washington, D.C. 20260-1137  
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