

DOCKET SECTION

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

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POSTAL RATE AND FEE CHANGES, 1997

Docket No. R97-1
POSTAL RATE COMMISSION
OFFICE OF THE SECRETARY

ERRATA OF UNITED STATES POSTAL SERVICE TO TESTIMONY OF POSTAL SERVICE WITNESS BREHM (USPS-T-21)

The United States Postal Service hereby files errata to the testimony of witness Brehm (USPS-T-21). These nonsubstantive changes are described below:

1. On page 6, line 18, the first occurrence of the word "staffing" has been changed to "processing".
2. On page 20, Table 4, the following modifications were made to the footnotes:
 - a. Footnote 1 references USPS LR-H-167 instead of Exhibit USPS-21B.
 - b. Footnote 2 references Table 5 instead of Table 3.
 - c. Footnote 4 has been added to column 4, "Average Transaction Time for Multiple Element Transactions," and references Exhibit USPS-21B.
3. On page 22, Table 5, footnote 2 references Table 3 instead of Table 5.
4. On page 23, Table 6, footnote 2 references Table 5 instead of Table 7.

The revised pages are attached.

Respectfully submitted,

UNITED STATES POSTAL SERVICE

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1 additional processing time. Therefore, the supply side variability was zero for this group.
2 The combined demand and supply side variability for stamp purchases was then calculated
3 as a weighted average.⁶

4 3. Network Variability

5 The third indirect effect captures the degree to which clerk staffing costs increase as
6 clerk processing time increases. This effect is called the network variability and measures
7 the percentage change in total window costs resulting from a percentage change in
8 processing time. This variability can take a value of either less than, equal to, or greater
9 than 100 percent. A variability of less than 100 percent implies that post offices absorb
10 increases in processing time with relatively small increases in staffing time. A variability of
11 more than 100 percent means that an increase in processing time causes a
12 disproportionately large increase in staffing.

13 In Docket No. R90-1, witness LaMorte compared the time that clerks spend
14 processing transactions to total clerk staffing time. This information was gathered as part of
15 a transaction profile study that collected information on processing and staffing time.
16 Econometric analysis of this data found a linear relationship, which emanated from the
17 origin, between processing time and staffing time. This, in turn, led witness LaMorte to
18 conclude that increases in processing time cause proportionate increases in staffing time.
19 Therefore, the network variability is 100 percent.⁷ Like the demand side effects discussed
20 earlier, this result is not updated in the current Docket.

⁶ Docket No R90-1, USPS-T-6, pp. 21-22.

⁷ Docket No R90-1, USPS-T-6, pp. 28-33.

represents the marginal increase in time, on average, of an additional stamp sale. This time estimate is calculated in Table 4 for stamp sales, as well as four other window activities.

Table 4: Calculation of Average Increase in Transaction Time

Window Service Activities	Single Element Transactions		Multiple Element Transactions		Weighted Average Increase in Transaction Time
	Percent of Total Transactions ¹	Average Transaction Time ²	Percent of Total Transactions ³	Average Transaction Time ⁴	
Selling Stamps	60.04%	* 53.343	+ 39.96%	* 13.313	= 37.347
Setting Meters	62.69%	* 269.554	+ 37.31%	* 217.313	= 250.061
Weigh and Rate	30.79%	* 58.268	+ 69.21%	* 21.534	= 32.845
Express Mail	53.56%	* 122.449	+ 46.44%	* 78.011	= 101.812
Money Orders	31.98%	* 67.2098	+ 68.02%	* 32.9855	= 43.932
Table Notes					
¹ USPS LR-H-167.					
² See Table 3					
³ USPS LR-H-167.					
⁴ Exhibit USPS-21B					

2. The Formula for Converting Marginal Increases in Time to Variability Factors

The supply side variability factor is an elasticity that measures the percentage change in clerk processing time with respect to a percentage change in transactions.²⁶ The increase in clerk processing time that was calculated in the previous section was not expressed in percentage terms, however, but in seconds. Therefore, to convert a marginal change in transaction time into an elasticity that represents the supply side variability, we use the following formula:

$$Variability_i = \frac{\left(\frac{\delta \text{ transaction time}}{\delta \text{ transaction element}_i} \right)}{\text{predicted time for a single element transaction } i}$$

$Variability_i$ is the variability factor for activity i , and $element_i$ is the independent variable from the regression equation that causes costs to accrue to window service cost

²⁶ See Section II.A.2.

Table 5: Updated Supply Side Variability Factors

Window Service Activities	Weighted Average Increase in Transaction Time ¹	Predicted (Avg) Transaction Time ²	Variability Factor
Selling Stamps	37.347	/ 53.343 =	70.01%
Setting Meters	250.061	/ 269.554 =	92.77%
Weigh and Rate	32.845	/ 58.268 =	56.37%
Express Mail	101.812	/ 122.449 =	83.15%
Money Orders	43.932	/ 67.210 =	65.37%
Table Notes			
¹ See Table 6			
² See Table 3			

V. WINDOW SERVICE VARIABILITY FACTORS

The final step in calculating the overall variability factors for window service activities is to insert the updated supply side variability into the three-part chain that was outlined in section II.A.4. It is important to note that postage sales categories – stamp sales and meter settings – require a demand side variability to trace the window cost change back to the mail volume change.³⁰ This is needed because at the time a transaction occurs, it is not possible to observe the number of pieces that will be generated from a postage sale. The method of estimating supply side variability factors in the current Docket for weigh and rate activities, Express Mail, and Money Orders, however, implicitly accounts for the demand side effects. This is because the TTS data collectors were able to observe the actual volume that was generated in each transaction that involved a specific class of mail or a special service. Therefore, the regression analysis draws a direct link between volume changes and changes in clerk processing time for these activities. A separate demand side variability factor is not needed.

³⁰ Weigh and rates, Express Mail, and Money Orders do not have demand side variability estimates. In Docket No. R90-1, witness LaMorte concluded that it would be difficult to ask consumers about their purchasing behavior related to classes of mail and special services.

- 1 The revised window service variability factors for Docket No. R97-1 are calculated in
 2 Table 6.³¹ The variability factors from Docket No. R90-1 are also displayed.

3 **Table 6: Docket No. R97-1 Proposed Window Service Variability Factors**

Window Service Activities	Demand Side Variability ¹		Supply Side Variability ²		Network Variability ³		Docket No. R97-1 Variability Factor	Docket No. R90-1 Variability Factor ⁴
Selling Stamps	65.88%	*	70.01%	*	100.00%	=	46.12%	65.88%
Setting Meters	26.05%	*	92.77%	*	100.00%	=	24.17%	26.05%
Weigh and Rate	-		56.37%	*	100.00%	=	56.37%	100.00%
Express Mail	-		83.15%	*	100.00%	=	83.15%	100.00%
Money Orders	-		65.37%	*	100.00%	=	65.37%	100.00%
Table Notes								
¹ See Table 2								
² See Table 5								
³ See pp. 5-6								
⁴ Docket No. R90-1, Exhibit USPS-6B								

4

³¹ A variability of 78.53 percent was originally calculated for Express Mail, and is included in the Base Year calculation. Using a variability factor of 83.15% raises the volume variable costs for Express Mail by approximately \$902,000. In addition, a variability of 24.07 percent was calculated for metered mail. Using a variability of 24.17 percent raises the volume variable costs by approximately \$42,000, which would be distributed to metered mail.

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.



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