

USPS-T-24

BEFORE THE  
POSTAL RATE COMMISSION  
WASHINGTON DC 20268-0001

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POSTAL RATE AND FEE CHANGES, 2006

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Docket No. R2006-1

DIRECT TESTIMONY OF  
NORMA B. NIETO  
ON BEHALF OF THE  
UNITED STATES POSTAL SERVICE

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## AUTOBIOGRAPHICAL SKETCH

4           My name is Norma B. Nieto. I am a Managing Consultant with IBM Business  
5 Consulting Services, where I have worked since 2002. Prior to that, I was a  
6 Principal Consultant for PricewaterhouseCoopers Consulting, where I worked  
7 since 1993.<sup>1</sup> In both positions, I have worked on many consulting projects for the  
8 United States Postal Service, including financial, costing and statistical analysis,  
9 with an emphasis on cost studies.

10           Over the last ten years, I have supported and participated in several Postal  
11 Rate Commission proceedings. In Docket No. R97-1, I testified as a witness  
12 before the Postal Rate Commission on behalf of the Postal Service on the  
13 Transportation Cost System (TRACS). In Docket No. R2001-1, I testified as a  
14 witness on behalf of the Postal Service (USPS-T-26) regarding unit volume  
15 variable costs in support of a number of special service fees proposed by witness  
16 Mayo (USPS-T-36), including: Delivery Confirmation, Signature Confirmation,  
17 return receipts, and the enhancement to certified mail and registered mail. In  
18 Docket No. MC2002-1, I presented testimony on the estimated Test Year  
19 Confirm® costs (USPS-T-5).

20           In addition to formal participation in rate proceedings, I have directed or  
21 participated in multiple studies in support of incremental costing and business  
22 case development for new and existing products. My experience with the Postal  
23 Service also includes cost analysis in areas such as transportation, labor,  
24 buildings, marketing studies, and capital evaluation projects.

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<sup>1</sup> IBM acquired PricewaterhouseCoopers Consulting in 2002.

1           Over the past thirteen years, I have visited a number of Postal Service field  
2 offices including airport mail facilities (AMFs), bulk mail centers (BMCs),  
3 processing and distribution centers (P&DCs), and retail post offices (POs).

4           My academic background includes a bachelor's degree in Industrial  
5 Management and Economics from Carnegie Mellon University in 1993, with  
6 course work in statistics, and a Masters in Business Administration from the  
7 Kellogg Graduate School of Management at Northwestern University in 2000  
8 where I specialized in Marketing and Strategy.

**PURPOSE AND SCOPE**

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The purpose of my testimony is to sponsor the library references (USPS-LR-K-78 and USPS-LR-K-79) that document the procedures employed in the 2005 Transaction Time Study that supports the transaction time variabilities developed by witness Bradley (USPS-T-17).

1

## ASSOCIATED LIBRARY REFERENCES

2

3 I am sponsoring the following Library References which are associated with this  
4 testimony:

5

6 USPS-LR-L-78 2005 Transaction Time Study

7

8 USPS-LR-L-79 Input Programs and Data That Produce the Window Service  
9 Analysis Data Set

10



1                   **B.     The 1996 Transaction Time Study**

2                   The 1996 transaction time study (TTS) was a two-week data collection  
3                   effort that measured the duration of window service transactions, the services  
4                   provided during the transactions, the method of payment, and the total  
5                   transaction value. TTS data were collected at 20 randomly selected post offices  
6                   in July of 1996.

7                   Data collectors observed the retail transactions by standing behind the  
8                   counter, where they could observe the transaction as well as the retail terminal.  
9                   Approximately every thirty minutes they moved to the next open window. After  
10                  data editing and review, the study resulted in 7,175 transactions for use in the  
11                  econometric equations.<sup>2</sup>

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13                   **C.     Improvements Included in the New Transaction Time Study**

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15                  The most significant improvement to the data collection effort results from  
16                  the implementation of the POS-ONE system in 1997. The POS-ONE system,  
17                  which replaced the integrated retail terminals (IRTs) at over 15,000 offices,  
18                  provides the Postal Service a centralized, robust repository of detailed  
19                  transactional data, including product types, quantities sold, revenue, and  
20                  payment type, at the customer-visit level for individual post offices. Instead of  
21                  requiring the data collectors to manually record all transactional details, such as  
22                  products and quantities sold, revenue, and payment type, the POS-ONE data on  
23                  these variables were matched to the observed transaction times.<sup>3</sup> This freed the

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<sup>2</sup> For further details on the 1996 Transaction Time Study, see Docket No. R97-1, USPS LR-H-167.

<sup>3</sup> For more detailed information on the matching of POS-ONE data to recorded transaction times, please see USPS-LR-K-80.

1 data collectors to focus on the accurate recording of the transaction length and  
2 provided a much greater level of detail on the products and services comprising  
3 the transaction.<sup>4</sup> For example, the Docket No. R97-1 study simply had “weigh  
4 and rate” as a transaction category, assuming that the different products all had  
5 the same variability. POS-ONE data permitted identification of the individual  
6 products in “weigh and rate” transactions, allowing witness Bradley to estimate  
7 separate variabilities for Priority Mail, First Class Mail, Parcel Post, and the  
8 remaining other weigh and rate transactions.

9 Other improvements from the 1996 study are sampling 27 offices instead  
10 of 20, use of Palm Pilot data collection devices in place of handheld scanners,  
11 and the inclusion of new products and services that have been added since  
12 1996.

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<sup>4</sup> To ensure matches to the POS-ONE data, data collectors remained at one terminal during the day when possible, rather than switching every thirty minutes as was done in 1996.

1       **II.     THE TRANSACTION TIME STUDY**

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4           This section of my testimony presents an overview of the study plan,  
5       sample design, preparation and data collector training, and the study data  
6       cleaning and matching with POS-ONE data. Details of the study design and data  
7       collection activities can be found in USPS-LR-K-78, and the data inputs and  
8       programs used to clean and match the data can be found in USPS-LR-K-79.

9  
10           **A.     Study Design**

11           The study objective was to measure the time associated with individual  
12       transactions at the windows at post offices. The study took place over a two-  
13       week period in April and May of 2005 at 27 randomly selected post offices  
14       representing all of the 11 Postal Service Areas. These post offices were selected  
15       from a sample frame of 15,096 post offices with the POS-ONE system. Although  
16       POS-ONE is not available at every office, the POS-ONE offices represent  
17       approximately 90 percent of all retail revenue and offer a sufficiently diverse  
18       population of offices (including one-window offices) to capture the required  
19       variation across the sampled offices.

20  
21           **B.     Preparation and Data Collector Training**

22           Prior to the actual data collection period, extensive pre-testing and preparation  
23       was performed to plan for this study. Knowledgeable staff from USPS Retail  
24       Operations was interviewed to gain a comprehensive view of how window  
25       service operations had changed over the years. USPS Finance and IBM

1 personnel conducted an on-site visit to a local post office, during which interviews  
2 were conducted with the Postmaster and window service supervisor, and actual  
3 transactions were observed and timed.

4 In March 2005, a pilot test and two training sessions were held. Prior to  
5 the first pilot test, data collectors received the preliminary version of the training  
6 manual, several weeks before the first training session. That session took place  
7 at a retail counter. In the first training session, data collectors received an  
8 overview of the data collection process, and instructions on how to use the  
9 handheld Palm Pilot devices.<sup>5</sup>

10 Next the pilot test was held. The objective of the pilot was to simulate an  
11 actual day of data collecting, to ensure the ease of using the Palm Pilots, and to  
12 evaluate the difficulty of matching data collector times to POS-ONE data. By  
13 spending the day at the site, data collectors were able to practice using the  
14 collection device. They were also able to get a feel for the type of transactions  
15 that occur and correct any problems that transpired. The instructors were also  
16 able to get feedback from the data collectors and answer questions regarding all  
17 aspects of the process.

18 After the pilot test, the data collection instructions were refined and the  
19 data collectors attended a second all-day training session at USPS headquarters.  
20 The objective of the second training session was to reinforce data collection  
21 methodology, resolve any outstanding issues, and to finalize the logistics of the  
22 data collection. In addition, data collectors received additional device training,

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<sup>5</sup> A Palm m125 running the PocketTimer software was used as the data collection device throughout the study.

1 including data downloading and backup procedures. Following this training  
2 session, data collectors attended an on-site data collection session to allow them  
3 to become proficient in the use of the data collection device.

4

### 5 **C. Data Collection**

6 The data collectors were made of IBM personnel and USPS Finance staff.  
7 Two data collectors visited each post office, except for the offices which had only  
8 one window. Data collectors randomly selected the windows to be timed from  
9 the windows identified to be staffed for the majority of the day by the site  
10 supervisor. Data collectors stood as unobtrusively as possible behind or to the  
11 side of the window clerk so as to not disrupt customer activities. Data collectors  
12 recorded basic identification information such as date and number of windows at  
13 the site. Data collectors recorded the following information:

- 14 • the time associated with the customer approaching the window (if  
15 applicable)
- 16 • the time the transaction began
- 17 • the time the transaction ended

18 The collectors were instructed to manually record the products and services  
19 in specific transactions on their comment sheets periodically. This would provide  
20 a check for the process of matching the information in the collection device with  
21 the POS information.

22 Data collectors also recorded comments on any transactions that were  
23 unusual, such as those in which a customer comes to the counter and then  
24 leaves to fill out forms while the window clerk serves another customer.

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