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BEFORE THE
POSTAL RATE COMMISSION
WASHINGTON DC 20268-0001

POSTAL RATE AND FEE CHANGES, 2006	Docket No. R2006-1

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

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AUTOBIOGRAPHICAL SKETCH

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

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

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

[1] IBM acquired PricewaterhouseCoopers Consulting in 2002.

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

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

PURPOSE AND SCOPE

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).

ASSOCIATED LIBRARY REFERENCES

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

USPS-LR-L-78	2005 Transaction Time Study
USPS-LR-L-79	Input Programs and Data That Produce the Window Service Analysis Data Set

I. MOTIVATION FOR UPDATING THE WINDOW SERVICE TRANSACTION TIME STUDY.

The Postal Service is presenting an updated set of transaction supply side variabilities for window service transactions. In order to provide this update, the Postal Service was required to undertake a new field study of transactions. This section of my testimony briefly explains why a new field study was required, provides an overview of the 1996 Transaction Time study methodology and identifies the improvements included in the 2005 Transaction Time study.

A. Why a New Transaction Time Study Was Required

In Docket No. R97-1, witness Brehm developed new window service transaction supply-side variabilities to support the development of window service volume variable costs. Underlying these variabilities was the transaction time study, which provided data on the times associated with handling various transactions at the windows at Post Offices. The Postal Service wished to update the supply-side variabilities to reflect product and operational changes at the retail windows since 1996 that created the possibility of changes in the time associated with handling of various transactions. These included the implementation of the Point-of-Sale (POS) system and the addition of various new products and services. Further description of the POS system and other operational changes are described by witness Hintenach (USPS-T-43). Witness Bradley describes the role of the field study in the estimation of the supply side variabilities (USPS-T-17).

B. The 1996 Transaction Time Study

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

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

C. Improvements Included in the New Transaction Time Study

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

[2] For further details on the 1996 Transaction Time Study, see Docket No. R97-1, USPS LR-H-167.
[3] For more detailed information on the matching of POS-ONE data to recorded transaction times, please see USPS-LR-L-80.

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

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

[4] 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.

II. THE TRANSACTION TIME STUDY

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

A. Study Design

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

B. Preparation and Data Collector Training

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

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

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

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

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

[5] A Palm m125 running the PocketTimer software was used as the data collection device throughout the study.

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

C. Data Collection

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

- the time associated with the customer approaching the window (if applicable)
- the time the transaction began
- the time the transaction ended

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

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

D. Data Cleaning and Matching to POS-ONE Data

The first step was to review and clean the data collected. First, the data was checked to validate recorded codes. Common recording errors were identified, examined individually, and corrected when possible. An example of a common recording error corrected included double entry of a code associated with an event (collector entered ‘22’ instead of ‘2’). The next step was to check for missing event codes and for logical event code order (i.e., begin transaction event code followed by an end transaction event code). Missing event codes were corrected when possible. Other corrections and deletions were made based on the data collectors’ manual comment sheets.

The next step was to match the cleaned collected data to the POS-ONE transactional data from the days and sites observed. The first step in matching the collected data to POS-ONE was identifying the registers, which was done by comparing the first transaction time and components recorded by the data collectors with the POS-ONE register time stamps. After the correct register was identified, transactions were matched sequentially, with each transaction being checked against the POS-ONE register time stamp and against the transaction components recorded manually by the data collectors on periodic intervals.

POS-ONE provides product transactional detail at a very minute level. After the data were matched, the final step was to create product variables that consolidated the product identification information into the products (e.g. First Class, Priority Mail) that are included in the established window service costing model.