USPS-T-2

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

POSTAL RATE AND FEE CHANGES, 1997	Docket No. R97-1

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

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Direct Testimony
of
Norma B. Nieto
AUTOBIOGRAPHICAL SKETCH

My name is Norma B. Nieto. I am a Consultant at Price Waterhouse LLP (hereafter Price Waterhouse), located at 1616 N. Fort Myer Dr., in Arlington, Virginia. I have been with Price Waterhouse since 1993. During that time, I have worked on many consulting projects for the United States Postal Service, specializing in financial and statistical analysis, with an emphasis on cost systems. My experience with the Postal Service includes cost analysis in areas such as transportation, labor, and buildings, product feasibility analysis, marketing studies, and capital evaluation projects.

At Price Waterhouse, I have worked on various transportation projects, including the Docket No. R94-1 Plant Load Transportation Costs Study update. Since I began my employment at Price Waterhouse, I have been working with the Transportation Cost System (TRACS), and currently oversee the TRACS projects the firm conducts for the Postal Service. I served as a witness on behalf of the Postal Service in Docket No. MC95-2, testifying on transportation unit costs. Also, in Docket No. R94-1, I provided technical support to Postal Service witnesses Barker and Steele on TRACS and other related issues. In Docket No. MC95-1, I provided technical support to Postal Service witness Treworgy.

I have spent a great deal of time in Postal Service field offices observing TRACS tests, transportation operations, and mail processing operations firsthand. Over the course of numerous projects, I have visited over twenty facilities including Airport Mail Facilities, Airport Mail Centers, Bulk Mail Centers, Sectional Center Facilities, and Associate Offices.

I received a bachelor's degree in Industrial Management and Economics from Carnegie Mellon University in 1993, with course work in statistics.

I. PURPOSE AND SCOPE OF TESTIMONY

The purpose of my testimony is to describe the Transportation Cost System (TRACS) which generates distribution keys, which are in turn used to estimate various purchased transportation costs by rate category. My testimony covers the general design of TRACS. In addition, I will describe new methodology used to calculate the Christmas Air Network (CNET) distribution key.

II. TRANSPORTATION COST SYSTEM (TRACS)

A. INTRODUCTION

TRACS is a statistical sampling and data collection system that provides distribution keys for purchased transportation costs in nine specific cost categories. These nine transportation cost categories covered by TRACS are: intra-SCF highway, inter-SCF highway, intra-BMC highway, inter-BMC highway, commercial air, freight rail transportation, Eagle air network, Western air network, and passenger rail (AMTRAK) transportation. These nine cost categories fall into five modes of transportation: highway, freight rail, commercial air, network air, and passenger rail. Because each of these modes is associated with different operational and information considerations, each mode has a different sample design and estimation methodology. The sections that follow discuss the sample design and estimation methodology for each mode.

B. HIGHWAY TRANSPORTATION

The highway sample design develops separate distribution keys for four highway purchased transportation cost accounts:

- Intra-SCF, Account Number 53121
- Inter-SCF, Account Number 53124
- Intra-BMC, Account Number 53127
- Inter-BMC, Account Number 53131

The universe under study is all mail moved on contracts whose costs accrue to these four accounts. The sample design consists of two stages. Contract route destination-days are randomly selected, at the first stage, from a list of all destinations on all trips whose route information is available in the National Air and Surface System (NASS) and whose contract route costs are listed in the accounting files. For each selected route destination-day, mail offloaded at the test site facility is randomly selected, at the second stage, for detailed sampling.

Information on weight and volume by rate category is recorded for the contents of sampled containers and items. In order to develop estimates of cubic-foot-miles, data collectors also record the facility where the mail was loaded onto the test truck (to establish miles traveled) and the percent of the floor space of the truck occupied by each container type (to establish cubic-feet utilized). Data are recorded directly into portable microcomputers under the Computerized On-Site Data Entry System (CODES). User's Guides, field operating instructions, and information on the CODES software are contained in Library References H-60, H-61 and H-62. Data collection instructions specific to TRACS are contained in Docket No. R94-1, LR-G-112.

Confidence limits of major estimates are shown in Library Reference H-78, along with a more detailed description of the TRACS highway sample design and estimation methodology. Programs for computing confidence limits are contained in Library Reference H-82.

C. FREIGHT RAIL TRANSPORTATION

The freight rail sample design provides a distribution key for the inter-BMC freight rail cost account, account number 53143.

The universe under study is all mail traveling on movements whose costs accrue to this account. The sample design consists of two stages. Destination-days are randomly selected, at the first stage, from a list of all rail movements whose information is in the Rail Management Information System (RMIS). At the second stage, a specific rail van is randomly selected from a movement-destination-day. For each selected rail van, mail offloaded at the test site facility is randomly selected, at the third stage, for detailed sampling.

Information on weight and volume by rate category is recorded for the contents of sampled containers and items. In order to develop estimates of cubic-foot-miles, data collectors also record the facility where the mail was loaded onto the rail van (to establish miles traveled). Data are recorded directly into portable microcomputers under the Computerized On-Site Data Entry System (CODES). User's Guides, field operating instructions, and information on the CODES software are contained in Library References H-60, H-61 and H-62. Data collection instructions specific to TRACS are contained in Docket No. R94-1, LR-G-112.

Confidence limits of major estimates are shown in Library Reference H-78, along with a more detailed description of the TRACS freight rail sample design and estimation methodology. Programs for computing confidence limits are contained in Library Reference H-83.

D. COMMERCIAL AIR TRANSPORTATION

The commercial air sample design provides a distribution key for the commercial (passenger) air purchased transportation cost component.

The universe under study is mail moved on passenger airlines traveling from a domestic origin to a domestic destination under air transportation contracts, whose costs accrue to the accounts 53501, Loose Sack Line Haul and 53511, Loose Sack Terminal Handling. The sample design consists of two stages. Flight-days are randomly selected, at the first stage, from a list of flights listed in the Air Contract Support System (ACSS) and the Official Airline Guide (OAG) planned route file. For each selected flight-day, mail dispatched for that flight at the origin is randomly selected, at the second stage, for detailed sampling.

Information on weight and volume by rate category is recorded for the contents of sampled containers and items. Data are recorded directly into portable microcomputers under the Computerized On-Site Data Entry System (CODES). User's Guides, field operating instructions, and information on the CODES software are contained in Library References H-60, H-61 and H-62. Data collection instructions specific to TRACS are contained in Docket No. R94-1, LR-G-112.

Confidence limits of major estimates are shown in Library Reference H-78, along with a more detailed description of the TRACS commercial air sample design and estimation methodology. Programs for computing confidence limits are contained in Library Reference H-79.

E. EAGLE AND WESTERN NETWORK

The Eagle sample design provides two distribution keys: one for the Eagle network, which has a hub in Indianapolis, IN, and one for the Western network, which is based out of Oakland, CA.

The universe under study is all mail moved on these networks, whose costs accrue to the following accounts:

- 53541, Domestic Air Mail - Network Line Haul
- 53543, Domestic Air Mail - Network Terminal Handling
- 53545, Domestic Air Mail - Western Network Line Haul
- 53546, Domestic Air Mail - Western Network Terminal Handling

The sample design consists of two stages. Network city-days are chosen from records contained in the National Air and Surface System (NASS) in the first stage. In the second stage, mail dispatched at the origin for the specified flight is randomly selected for detailed sampling.

Information on weight and volume by rate category is recorded for the contents of sampled containers and items. Data are recorded directly into portable microcomputers under the Computerized On-Site Data Entry System (CODES). User's Guides, field operating instructions, and information on the CODES software are contained in Library References H-60, H-61 and H-62. Data collection instructions specific to TRACS are contained in Docket No. R94-1, LR-G-112.

Confidence limits of major estimates are shown in Library Reference H-78, along with a more detailed description of the TRACS network air sample design and estimation methodology. Programs for computing confidence limits are contained in Library Reference H-81.

In this docket, there are several changes in the air network's distribution key methodology. Previously, the Eagle and Western Network distribution keys were calculated on a cubic-foot mile basis. Consistent with the incremental cost methodology proposed in this docket, the Eagle and Western Network distribution keys are now calculated on a pound-mile basis. In addition, the Eagle and Western Network premiums, which are calculated as the difference between the respective network costs and the total costs of flying the mail at the commercial air rate, are treated as costs incremental to Express Mail[1].

The Postal Service also makes an adjustment for TNT product flown on the Eagle Network. TNT is an international express company which has made joint agreements with numerous international postal administrations. TNT has an agreement with USPS that allows TNT to use the Eagle Network to move its product between Eagle Network cities within the United States.

TNT product is tendered to the Postal Service directly by TNT officials, who bring it to the origin AMC/AMF. At the destination AMF/AMC, TNT product is separated out and retrieved by TNT staff.

TNT product travels in distinctive white sacks, which are not eligible for sampling in a TRACS test. Instead, TNT pound-miles are estimated from manifest records detailing pounds and origin and destination information. TNT pound-miles as a percentage of total Eagle Network pound-miles is used as the distribution key. Please refer to Library Reference H-104 for the details of the TNT adjustment.

[1] Please refer to USPS-T-41 for a discussion of incremental cost methodology.

F. PASSENGER RAIL (AMTRAK)

The Amtrak sample design provides a distribution key for costs accruing to the passenger rail service account, 53142.

The universe under study is all mail moved on Amtrak passenger rail service. The Amtrak sample design consists of two stages. The first stage consists of a random selection of train segment-days. For each train-segment day selected, mail offloaded at the test site facility is randomly selected, at the second stage, for detailed sampling.

Information on weight and volume by rate category is recorded for the contents of sampled containers and items. In order to develop estimates of square-foot-miles, data collectors also record the facility where the mail was loaded onto the train (to establish miles traveled). Data are recorded directly into portable microcomputers under the Computerized On-Site Data Entry System (CODES). User's Guides, field operating instructions, and information on the CODES software are contained in Library References H-60, H-61 and H-62. Data collection instructions specific to TRACS are contained in Docket No. R94-1, LR-G-112.

Confidence limits of major estimates are shown in Library Reference H-78, along with a more detailed description of the TRACS Amtrak sample design and estimation methodology. Programs for computing confidence limits are contained in Library Reference H-80.

III. CHRISTMAS NETWORK DISTRIBUTION KEY

The Postal Service contracts for dedicated aircraft to transport the additional mail volumes associated with the Christmas holidays. Prior to this filing, Christmas Network

(CNET) costs were allocated using the TRACS commercial air distribution key. In this filing, we have amended this approach.

CNET is needed for two reasons: (1) uncertainty of commercial airlift for all mail and (2) the increase in cube from parcels in the Priority Mail stream. This latter reason leads to the uncertainty that the mix of mail on CNET is the same as that on commercial air, and thus, a separate distribution key was developed.

Using payment records for FY96, we determined the pound-miles by air class on CNET based on the ACT tag designation (F for First, P for Priority, E for Express, or O for Other) of each item. The pound-miles by air class were mapped to rate categories using historical air class distribution keys for commercial air and Eagle Network for PQ2, FY96. A pound-mile based distribution key was then calculated for CNET. The new CNET distribution key for volume-variable costs is presented in Table 2.

Table 2 - CNET BY96 Distribution Keys

1C L&P	0.131380
1C Presort L&P	0.118845
1C Postal Cards	0.000120
1C Private Postcards	0.000658
1C Presort Postcards	0.000438
Priority Mail	0.723394
Express Mail	0.000978
2C Periodicals	0.006037
3C Single Piece Rate	0.000239
3C BRR CR Presort	0.000083
3C BRR Other	0.002773
3C BRN CR Presort	0.000011
3C BRN Other	0.001469
4C Parcel Post	0.000516
4C Bound Printed Matter	0.000165
4C Special Rate	0.000132
4C Library Rate	0.000175
4C USPS Penalty	0.000300
Free for the Blind	0.000246
International Mail	0.012042
	1.000000

In addition, parallel to the treatment of premium costs of the Eagle and Western Networks, a CNET premium percentage is calculated as the difference in the CNET costs and the costs incurred for flying the CNET volume at commercial air rates, expressed as a percentage of total CNET costs for BY96. The CNET premium percentage for FY96 was 79.745%.[2] Please refer to Library Reference H-85 for the details of the distribution key and premium development.

[2] Please refer to USPS-T-41 for a description of the treatment of CNET premium costs as incremental costs.