Postal Rate Commission
Submitted 4/8/2005 12:19 pm
Filing ID: 43444
Accepted 4/8/2005

USPS-T-19

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

POSTAL RATE AND FEE CHANGES PURSUANT TO PUBLIC LAW 108-18	:	Docket No. R2005-1

DIRECT TESTIMONY
OF
MICHAEL W. MILLER
ON BEHALF OF THE
UNITED STATES POSTAL SERVICE

TABLE OF CONTENTS

AUTOBIOGRAPHICAL SKETCH iii

I. PURPOSE AND SCOPE OF TESTIMONY 1

II. GUIDE TO TESTIMONY 2

III. FLATS TOTAL MAIL PROCESSING UNIT COST ESTIMATES 4

A. TEST YEAR FLATS MAIL PROCESSING TECHNOLOGIES 4

1. BUNDLE SORTING OPERATIONS 4
2. PIECE DISTRIBUTION OPERATIONS 4

B. COST MODEL CHANGES 5

1. APPS 6
2. FICS 6
3. ATHS 7
4. UFSM1000 STRATEGY 7

C. COST METHODOLOGY 7

1. CRA MAIL PROCESSING UNIT COSTS 7

2. MODEL-BASED MAIL PROCESSING UNIT COSTS 8
a. MAIL FLOW SPREADSHEET 9
i. BASE YEAR MAIL VOLUMES 9
ii. BUNDLE SORT 10
iii. ENTRY PROFILE 10
iv. COVERAGE FACTORS 11
v. ACCEPT RATES 11
vi. MAIL FLOW DENSITIES 12

b. COST SPREADSHEET 12
i. MARGINAL (VOLUME VARIABLE) PRODUCTIVITIES 12
ii. WAGE RATES 13
iii. “PIGGYBACK” (INDIRECT COST) FACTORS 13
iv. PREMIUM PAY FACTORS 13
v. BUNDLE SORTING COSTS 13

c. CRA ADJUSTMENTS 13

D.PRESORT-ADJUSTED TOTAL MAIL PROCESSING UNIT COST METHODOLOGY 14

IV. PROPOSED CHANGES RELATIVE TO PRC METHODOLOGY 16

LIST OF TABLES

TABLE 1: USPS FLATS TOTAL MAIL PROCESSING UNIT COST ESTIMATES 17
TABLE 2: PRC FLATS TOTAL MAIL PROCESSING UNIT COST ESTIMATES 18

ASSOCIATED LIBRARY REFERENCES

USPS-LR-K-43: Flats Mail Processing Cost Models

This Category 2 library reference contains the cost models that are used to develop test year 2006 volume variable mail processing unit cost estimates by rate category for First-Class Mail presort flats, Periodicals Outside County flats, and Standard Mail Regular flats. In Docket No. R2001-1, flats cost models were contained in USPS-LR-J-61 and were described in testimony USPS-T-24.

USPS-LR-K-44: Flats Coverage Factors

This Category 2 library reference contains the results from a recent coverage factor study. Coverage factors are estimates of the percentage of test year mail volume that will have access to the various equipment and technologies. These estimates have been developed using Base Year (BY) 2004 Origin Destination Information System - Revenue, Pieces and Weights (ODIS-RPW) data. Flats coverage factors were last calculated in Docket No. R2000-1, USPS-LR-I-89.

USPS-LR-K-45: Flats Technology Decision Analysis Report (DAR) Information

This Category 3 library reference contains Decision Analysis Report (DAR) information for the following flats technology enhancement projects in which deployments / retrofits will have begun by the midpoint of test year 2006: the Automated Package Processing System (APPS), the Flats Identification Code Sort (FICS) system, the Automated Tray Handling System (ATHS), and the Automatic Induction (AI) system.

DIRECT TESTIMONY
OF
MICHAEL W. MILLER

AUTOBIOGRAPHICAL SKETCH

My name is Michael W. Miller. I am an Economist in Special Studies at the United States Postal Service. Special Studies is a unit of Corporate Financial Planning in Finance at Headquarters. I have testified before the Postal Rate Commission on seven separate occasions.

Most recently, I testified as a witness in opposition to the Time Warner, et al. complaint case, Docket No. C2004-1.

In Docket No. R2001-1, I sponsored two separate testimonies as a direct witness on behalf of the Postal Service. The first testimony presented First-Class Mail letters/cards and Standard Mail letters mail processing unit cost estimates and worksharing related savings estimates, the Qualified Business Reply Mail (QBRM) worksharing related savings estimate, the nonstandard surcharge/nonmachinable surcharge cost studies, and the Business Reply Mail (BRM) fee cost studies. The second testimony presented First-Class Mail, Periodicals, and Standard Mail flats mail processing unit cost estimates.

In Docket No. R2000-1, I testified as the direct witness presenting First-Class Mail letters/cards and Standard Mail letters mail processing unit cost estimates and worksharing related savings estimates. My testimony also included the cost study supporting the nonstandard surcharge. In that same docket, I also testified as a rebuttal witness. My testimony contested key elements of the worksharing discount proposals presented by several First-Class Mail intervenors, as well as the Office of the Consumer Advocate (OCA).

In Docket No. R97-1, I testified as a direct witness concerning Prepaid Reply Mail (PRM) and QBRM mail processing cost avoidance estimates. In that same docket, I also testified as a rebuttal witness concerning the Courtesy Envelope Mail (CEM) proposal presented by the OCA.

Prior to joining the Special Studies unit in January 1997, I served as an Industrial Engineer at the Margaret L. Sellers Processing and Distribution Center in San Diego, California. In that capacity, I worked on field implementation projects. For example, I was the local coordinator for automation programs such as the Remote Bar Coding System (RBCS) and the Delivery Bar Code Sorter (DBCS). I was also responsible for planning the operations for a new Processing and Distribution Center (P&DC) that was activated in 1993. In addition to field work, I have completed detail assignments within the Systems/Process Integration group in Engineering. My primary responsibility during those assignments was the development of Operating System Layouts (OSL) for new facilities.

Prior to joining the Postal Service, I worked as an Industrial Engineer at General Dynamics Space Systems Division, where I developed labor and material cost estimates for new business proposals. These estimates were submitted as part of the formal bidding process used to solicit government contracts.

I was awarded a Bachelor of Science degree in Industrial Engineering from Iowa State University in 1984 and a Master of Business Administration from San Diego State University in 1990. I also earned a Professional Engineer registration in the State of California in 1990.

I. PURPOSE AND SCOPE OF TESTIMONY

This testimony describes the test year 2006 First-Class Mail presort flats, Periodicals Outside County flats, and Standard Mail Regular flats volume variable mail processing unit cost estimates by rate category, which are being provided in light of the Postal Rate Commission's views expressed in Docket No. R94-1, paragraph [1034]. The cost estimates for the First-Class Mail automation presort flats and Standard Mail Regular flats rate categories are relied upon by witness Moser (USPS-T-23) as a means to calculate final adjustments.

II. GUIDE TO TESTIMONY

The flats mail processing cost models can be found in USPS-LR-K-43. In addition to USPS-LR-K-43, I am also sponsoring library reference USPS-LR-K-44. Library reference USPS-LR-K-44 contains the results from a recent flats coverage factor analysis, which is an input to the cost models. Many of the coverage factors concern future flats technology enhancements. Library reference USPS-LR-K-45 contains flats technology Decision Analysis Report (DAR) information, which describes those enhancements. This DAR information was also relied upon during the model development process.

In addition to the three library references described above, the cost models also rely on data inputs that have been generated by other postal witnesses. Witness Van-Ty-Smith (USPS-T-11) provides wage rates (USPS-LR-K-55), premium pay factors (USPS-LR-K-55), and volume variability factors (USPS-T-11, Table 1); witness Bozzo (USPS-T-12) provides base year Management Operating Data System (MODS) productivity figures (USPS-LR-K-56); witness Smith (USPS-T-13) provides piggyback factors (USPS-LR-K-52) and mail processing unit cost estimates by shape (USPS-LR-K-53); and witness Loetscher (USPS-T-32) provides revised Periodicals Outside County mail characteristics data (USPS-LR-K-92) and a Standard Mail L008 label list adjustment factor (USPS-LR-K-92). Base Year 2004 Revenue, Pieces and Weights (RPW) mail volumes by shape are also contained in the models.

In developing the cost estimates, I have also relied upon data from previous rate cases. The acceptance rates and mail piece distribution density tables in the models can be found in Docket No. R2001-1, USPS-LR-J-63. The bundle distribution density tables, subsequent bundle breakage factors, percentage mechanized bundle handling, and number of bundle handlings can be found in Docket No. R2000-1, USPS-LR-I-88. The initial bundle breakage factors can be found in Docket No. R2000-1, USPS-LR-I-297. The First-Class Mail characteristics can be found in Docket No. R97-1, USPS-LR-H-185. The Standard Mail Regular Commercial and Non Profit mail characteristics data (prior to the L008 adjustment) can be found in Docket No. R97-1, USPS-LR-H-105 and USPS-LR-H-195, respectively.

My test year volume variable mail processing unit cost estimates for the First-Class Mail automation presort flats rate categories and the Standard Mail Regular flats rate categories have been provided to witness Moser (USPS-T-23) for purposes of calculating final adjustments. The cost estimates for all flats rate categories have also been provided to witnesses Robinson (USPS-T-27) and Taufique (USPS-T-28).

III. FLATS TOTAL MAIL PROCESSING UNIT COST ESTIMATES

This testimony describes the flats mail processing unit cost estimates by rate category, which were last calculated in Docket No. R2001-1, USPS-LR-J-61. Many changes that have been made to the cost models involve simple updates of cost model inputs (e.g., productivity figures). In other cases, the mail flow model itself had to be modified to reflect planned technology changes that will be in place by the test year.

A. TEST YEAR FLATS MAIL PROCESSING TECHNOLOGIES

The flats cost models estimate bundle sorting costs and piece distribution costs by rate category. In test year 2006, the Postal Service will have begun implementing technological changes that will affect bundle sorting operations and piece distribution operations for First-Class Mail presort flats, Periodicals Outside County flats, and Standard Mail Regular flats.

1. BUNDLE SORTING OPERATIONS

By test year 2006, the first phase of Automated Package Processing Systems (APPS) will have been deployed. Some Small Parcel and Bundle Sorting (SPBS) systems will be removed from the APPS facilities and will be redeployed to other sites. Bundle sorting operations will be conducted in APPS, SPBS, Linear Integrated Parcel Sorter (LIPS), or manual operations.

2. PIECE DISTRIBUTION OPERATIONS

In test year 2006, the Automated Flats Sorting Machine Model 100 (AFSM100) and the Upgraded Flats Sorting Machine Model 1000 (UFSM1000) will continue to be used to process flat-shaped mail. Piece distribution operations for machinable mail will be performed on the AFSM100 for sites that have that machine. Nonmachinable mail will be processed on the UFSM1000 at sites containing those machines. Facilities that do not have these machines will perform manual piece distribution operations.

AFSM100: Funding has been approved for three modifications that will affect the AFSM100 in the test year: Flats Identification Code Sort (FICS) system, Automatic Tray Handling System (ATHS), and Automatic Induction (AI) system.[1]

[1] Docket No. R2005-1, USPS-LR-K-45.

The FICS modification will be made to all AFSM100s by the test year. This modification involves the application of ID tags to non-barcoded flats. The Optical Character Reader (OCR) and Remote Encoding Center (REC) results will be electronically linked to the ID tag barcodes on those mail pieces and will be used to sort them in subsequent operations. The FICS modification is an improvement over the current system where problematic mail pieces could incur REC keying costs each time they are processed on the AFSM100.

Deployments of the ATHS modification will have begun by the test year. Machines that are retrofitted with ATHS will be able to automatically load, remove, and label flats tubs. The staffing requirement for modified machines will be reduced from five employees to four employees.

Deployments of the AI modification will also have begun by the test year. The AI system involves the relocation of the flats mail prep operation (operation 035) to an area directly adjacent to the AFSM100. Flat mail will be unbundled and loaded into containers that will be placed on conveyors, which will route the mail to one of three feed modules. The AI system will not impact the AFSM100 staffing requirement, but will result in reductions in clerk work hours, as all employees will be mail handlers. Furthermore, reductions in operation 035 work hours are expected.

UFSM1000: The strategy concerning the UFSM1000 continues to evolve. All UFSM1000s are now equipped with High Speed Feeders (HSF). Some of these machines have now been relocated to facilities that previously had no flat sorting equipment and are being used to process both machinable and nonmachinable mail.

B. COST MODEL CHANGES

The flats cost models have been revised to accommodate the technology and operations changes described above. The models have been adjusted to incorporate the following operational changes: APPS, FICS, ATHS, and the revised UFSM1000 strategy. It was not necessary to incorporate the AI modification into the cost models because those systems will not impact the AFSM100 staffing requirement. Furthermore, the wage rates that have historically been used to support cost models represent an aggregate clerk / mailhandler rate. Any change to the mix of clerk and mailhandler work hours would have been accounted for in the test year wage rate.

Many changes have been accommodated using data from the coverage factor study (USPS-LR-K-44). Coverage factors are estimates of the percentage of test year mail volume that will have access to the various equipment and technologies. The analysis relies on Origin Destination Information System - Revenue, Pieces, and Weights (ODIS-RPW) data. The coverage factors are calculated by dividing the originating / destinating volumes for the "covered" facilities by the total originating / destinating volumes for all facilities. The "covered" facilities are those facilities that will have the equipment or technology by the midpoint of the test year (March 31, 2006).

1. APPS

Changes were made to the cost models in order to accommodate the APPS deployments. In Docket No. R2001-1, the percentage of bundles that were estimated to be processed in mechanized bundle sorting operations was taken from the Docket No. R2000-1 USPS LR-I-88 study. In the instant proceeding, those figures were changed to reflect the sum of the APPS and SPBS / LIPS coverage factors. The mechanized bundle processing percentage is used to estimate the quantity of bundles by rate category that are processed in mechanized and manual operations in the "BUNDLE SORT" spreadsheets in the models. In the cost sheets for each rate category, the mechanized bundle quantities were then distributed to the APPS or SPBS / LIPS operations using the coverage factors. Finally, engineering personnel provided the average APPS productivity estimate from the Decision Analysis Report (DAR), which was added to the "PRODUCTIVITIES" spreadsheets in the models and was used in the cost sheets to estimate the costs by operation.

2. FICS

The FICS modification was incorporated into the mail flow spreadsheets for all rate categories. In Docket No. R2001-1, OCR acceptance rates were applied to all non-barcoded mail that was processed in each AFSM100 operation. In this docket, all barcoded and non-barcoded mail that has had a previous sortation on an AFSM100 is totaled on the bottom line of each AFSM100 node. The BCR acceptance rates are then applied to those mail pieces, even if they do not contain mailer-applied barcodes.

3. ATHS

Two changes were made to the cost model in order to accommodate the ATHS retrofits. In order to estimate the ATHS productivities by operation level (outgoing primary, etc.), the AFSM100 MODS workhours were reduced by one-fifth. This assumption was based on the DAR expectation that the staffing requirement would be reduced from five employees to four employees for AFSM100s that have the ATHS retrofit. In the cost sheets for each rate category, the ATHS coverage factors were used to weight the actual AFSM100 productivities with the ATHS-adjusted AFSM100 productivities.

4. UFSM1000 STRATEGY

For piece distribution operations, coverage factors were calculated for AFSM100 only sites, UFSM1000 only sites, AFSM100 / UFSM1000 sites, and manual sites. Machinable and nonmachinable mail volumes were distributed to the AFSM100, UFSM1000 and manual operations as follows:

Mail Type	Operation	Coverage Factor(s) Applied
Machinable	AFSM100	AFSM100 Only + AFSM100 / UFSM1000
Machinable	UFSM1000	UFSM1000 only
Machinable	Manual	Manual
Nonmachinable	AFSM100	N/A
Nonmachinable	UFSM1000	UFSM1000 only + AFSM100 / UFSM1000
Nonmachinable	Manual	1 - UFSM1000 only + AFSM100 / UFSM1000

C. COST METHODOLOGY

In the past few dockets, a hybrid cost methodology has been used to estimate flats mail processing unit cost estimates by rate category.[2] A hybrid cost methodology is again relied upon in this docket.

1. CRA MAIL PROCESSING UNIT COSTS

The flats cost analysis relies upon shape-specific Cost and Revenue Analysis (CRA) mail processing unit costs, which are reported by cost pool in the In-Office Cost System (IOCS).[3] These CRA mail processing unit costs are subdivided into 63 cost

[2] *See* Docket No. R2001-1, USPS-J-61; Docket No. R2000-1, USPS-I-90. A hybrid cost methodology indicates that a combination of engineering cost models and Cost and Revenue Analysis (CRA) data are used to develop the estimates by rate category.

[3] Docket No. R2005-1, USPS-LR-K-43, pages 3 (First-Class Mail), 36 (Periodicals), and 71 (Standard Mail).

pools. Each cost pool represents a specific mail processing task performed at Bulk Mail Centers (BMC), Management Operating Data System (MODS) plants, or non-MODS plants. The costs are "mapped" to each cost pool using the Productivity Information Management System (PIMS) or MODS operation number associated with each IOCS tally.

Each cost pool has been classified into one of three categories: worksharing related proportional, worksharing related fixed, or non-worksharing related fixed.[4]

The "worksharing related proportional" cost pools contain the costs for piece or bundle distribution operations that are directly affected by the presorting and/or prebarcoding activities performed by mailers. These cost pools are "proportional" in that the magnitude of the costs, and therefore worksharing related savings, are directly related to the specific level of presorting and/or prebarcoding. In addition, these costs pools contain the costs for the tasks that have actually been modeled. The flat sorting machine ("AFSM100") cost pool is an example of a worksharing related proportional cost pool. This classification represents the largest percentage of the CRA mail processing unit costs (typically 50-60 percent).

The "worksharing related fixed" cost pools contain costs for other activities that are also affected by worksharing. However, these costs do not vary as a direct result of the specific worksharing options chosen by a given mailer. These costs represent tasks that have not actually been modeled. The bulk mail entry and verification ("LD79") cost pool is an example of a worksharing related fixed cost pool.

The "non-worksharing fixed" category consists of those remaining costs that are not affected at all by the types of worksharing activities covered in this testimony. The Express Mail ("EXPRESS") cost pool is an example of a non-worksharing related fixed cost pool.

2. MODEL-BASED MAIL PROCESSING UNIT COSTS

When it is not possible to isolate CRA mail processing unit costs at the rate category level, an alternative method of cost estimation is needed. In this testimony, cost models are used to de-average the CRA mail processing unit cost categories. Cost models have been developed for each rate category. For example, cost models

[4] Docket No. R2005-1, USPS-LR-K-43.

have been created for the First-Class Mail flats nonautomation presort, mixed Area Distribution Center (ADC) automation presort, ADC automation presort, 3-digit automation presort, and 5-digit automation presort rate categories. These models are then used to de-average the CRA mail processing unit costs for “First-Class Mail presort flats."

Each of the flats cost models consists of two spreadsheets: a mail flow spreadsheet and a cost spreadsheet. These spreadsheets are used to calculate model costs. A weighted model cost for all the rate categories being de-averaged is then computed using base year RPW mail volumes and tied back to the CRA using adjustment factors. These factors are used to estimate the total flats mail processing unit costs by rate category.

a. MAIL FLOW SPREADSHEET

Each spreadsheet “flows” 10,000 flat mail pieces through the mail processing network. This network is represented by a series of boxes (operations) and arrows on each spreadsheet that “flow” mail to other operations. Each box is separated into two parts. The right-hand section represents the actual number of physical pieces processed in a given operation. The left-hand section is equal or higher in value and reflects the fact that some pieces are processed through a given operation more than once. The latter values are what is ultimately accessed by the cost sheet and used to calculate model costs. The 10,000 mail pieces are flowed from one operation to the next using various input data that are described below.

i. BASE YEAR MAIL VOLUMES

The Docket No. R2000-1 base year (1998) mail characteristics data for First-Class Mail and Standard Mail flats were used as the starting point in developing mail flow spreadsheets in this docket.[5] These mail characteristics include the mail volumes by package and container presort level for each rate category. The 1998 data were adjusted with mail volume information for base year 2004.[6] For Periodicals, BY 2004 mail characteristics data were provided by witness Loetscher (USPS-T-32) and are

[5] Docket No. R2000-1, USPS-LR-I-90.
[6] Docket No. R2005-1, USPS-LR-K-43, pages 30, 65, and 92.

found in USPS-LR-K-92. For the Periodicals Outside County nonautomation basic presort rate category, all firm bundles were treated as 5-digit bundles in the cost model.

ii. BUNDLE SORT

The base year 2004 mail volume data were then used to estimate the number of bundles finalized and broken in each bundle sorting operation. In addition, Docket No. R2000-1 data related to the bundle sorting productivities, bundle breakage rates, bundle mail flow densities, and the number of bundle handlings were used in this analysis.[7] In terms of bundle breakage, the data from Docket No. R2000-1, USPS-LR-I-297 have been used to determine the percent of bundles broken for each first handling of that bundles. For pallets and sacks, these percentages are 1.1 percent and 17.5 percent, respectively.

The percent of broken bundles for all subsequent handlings has been taken from Docket No. R2000-1, USPS-LR-I-88. The results from this study measured breakage rates for pallets and sacks of 10 percent and 20 percent, respectively. In order to be conservative, the 10 percent figure has been used for both pallets and sacks.

For Standard Mail, an L008 label list adjustment factor was applied to the pieces per bundle figures for all 3-digit bundles. This factor (0.8203) can be found in USPS-LR-K-92. The "pieces per bundle" figures for all 3-digit bundles in columns G (“Pallet Pcs/Bundle”) and I (“Sack Pcs/Bundle”) on page 91 of USPS-LR-K-43 were divided by this factor to reflect changes in bundle sizes resulting from the L008 label list.

iii. ENTRY PROFILE

The point at which bundles are broken and finalized is then used to develop an "ENTRY PROFILE" spreadsheet. This spreadsheet translates the number of bundles back into pieces, with the 10,000-piece figure being used for each rate category.

The mail flow spreadsheet for each rate category then pulls these data into the corresponding cell on the "PIECE ENTRY POINTS" section based on whether they are machinable and/or barcoded. The "PCS IN" box at the top of each mail flow spreadsheet sums the data in the "PIECES ENTRY POINTS" cells to ensure that 10,000 mail pieces are entered into the model.

[7] Docket No. R2000-1, USPS-LR-I-88 and LR-I-297.

iv. COVERAGE FACTORS

An updated coverage factor study was conducted to support this testimony and can be found in USPS-LR-K-44. The application of these coverage factors is described above.

v. ACCEPT RATES

The accept rates used in the mail flow spreadsheets reflect the fact that, for a variety of reasons, some mail will not be accepted by the different types of automated flat mail processing equipment and will have to be diverted to manual operations for processing. These accept rates are taken from two sources.

The FSM "keying accept", "refed/misfaced REC time out," and "total accept rates" were calculated using End-Of-Run (EOR) data from a Docket No. R2001-1 study.[8] The FSM "keying accept" rate is the percentage of mail successfully keyed by employees feeding the machine itself; it is not related to REC keying activities. The UFSM1000 is the only equipment in the mail flow models that allows such keying. The rejects from the automated UFSM1000 operation are assumed to be keyed one time only, except for manual incoming secondary operations.[9] Rejects that occur during keying operations are diverted to manual operations. The "refed/misfaced REC timeout" accept rate reflects the percentage of total mail volume that must be refed through the machine because the REC keyers did not finalize the mail piece before the mail piece "timed out." The models assume that this mail is refed only once. The "total accept rate" represents the total percentage of the AFSM100 mail that is finalized.

The results from engineering studies were also used in the mail flow models. The "BCR accept" rate reflects the percentage of barcoded mail that was accepted on the AFSM100 during engineering tests. The "OCR accept" rate reflects the percentage of non-barcoded mail pieces that were finalized by the AFSM100 in these same tests. Finally, the "REC image finalization rate" represents the percentage of mail for which Data Conversion Operators (DCO) at the REC were able to achieve a finest-depth-of-sort result.

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[8] Docket No. R2001-1, USPS-LR-J-63, page 15.

[9] It is assumed that UFSM1000 automation incoming secondary rejects would not be keyed on that machine, due to the relatively small volumes that would be rejected for a given ZIP Code, or grouping of ZIP Codes.

vi. MAIL FLOW DENSITIES

A “sort plan” is a software program which designates the bin on mail processing equipment to which each mail piece is sorted based on ZIP Code information. The term “density” refers to the percentage of mail that is sorted to a given bin on a machine using a given sort plan. In the mail flow spreadsheets, automation/mechanization density percentages are used to flow mail to succeeding operations. The cost models rely on the mail flow density data that were calculated in Docket No. R2001-1, USPS-LR-J-63.

The data inputs described above are used in the mail flow spreadsheets to “flow” 10,000 mail pieces through a modeled representation of the postal mail processing network. After the 10,000 mail pieces are finalized in either an automation or manual incoming secondary operation, the finalized mail volumes are totaled for each of those operations and the sum is entered in the “PCS OUT” box at the top of the page. This calculation is performed to ensure that all 10,000 pieces that are entered into the model are also processed through the model.

b. COST SPREADSHEET

Each cost spreadsheet accesses the mail volumes from each operation in the corresponding mail flow spreadsheet.[10] This volume information, in conjunction with the other data inputs described below, is used to calculate a mail processing cost estimate for the mail volumes flowing through each operation. Each operation cost is then divided by the "PCS OUT" mail volume in order to determine the weighted operation cost. The sum of these weighted operation costs is the model cost.

i. MARGINAL (VOLUME VARIABLE) PRODUCTIVITIES

The productivities used in this docket come from three sources. The productivities for manual bundle sorting operations are from a Docket No. R2000-1 study.[11] The productivity that was calculated to support the APPS DAR is used to estimate APPS costs. The productivities for the SPBS / LIPS, AFSM100, UFSM1000, and manual operations are taken from a study that was conducted using GFY 2004 MODS data.[12] The marginal productivity values are then calculated by dividing the

[10] Docket No. R2005-1, USPS-LR-K-43.
[11] Docket No. R2000-1, USPS-LR-I-88.
[12] Docket No. R2005-1, USPS-LR-K-56.

actual productivity values for each operation by the volume variability factors found in USPS-T-11, Table 1.

ii. WAGE RATES

Two separate wage rates are used to calculate model costs. The first wage rate reflects the wages for mail processing employees working at REC sites. The "other mail processing" wage rate is an aggregate rate for all other mail processing employees who do not work at REC sites.[13]

iii. "PIGGYBACK" (INDIRECT COST) FACTORS

"Piggyback" factors are used to estimate indirect costs.[14] This methodology is consistent with the methodology relied upon by the Commission in past dockets.

iv. PREMIUM PAY FACTORS

Premium pay factors are used to account for the fact that employees earn "premium pay" for evening and Sunday work hours. As an example, First-Class Mail is processed during the premium pay time periods (Tours 3 and 1) while Standard Mail is processed during regular business hours (Tour 2). Therefore, the First-Class Mail factor is greater than the Standard Mail factor.[15]

v. BUNDLE SORTING COSTS

The bundle quantities calculated in the "BUNDLE SORT" spreadsheet by operation are used to calculate the bundle sorting costs in the cost spreadsheet for each rate category. Separate productivities are also available for each operation as described above.

c. CRA ADJUSTMENTS

The model costs for each rate category are weighted together using base year RPW mail volumes. The sum of the CRA worksharing related proportional cost pools is then divided by this weighted model cost in order to calculate the CRA proportional adjustment factor. The costs for the remaining two cost pool classifications are used as fixed adjustments. The total mail processing unit costs are calculated as follows:

(Mail Processing Model Cost) * (Worksharing Related Proportional Adjustment Factor) + (Worksharing Related Fixed Factor) + (Non-Worksharing Related Fixed Factor)

[13] Docket No. R2005-1, USPS-LR-K-55.
[14] Docket No. R2005-1, USPS-LR-K-52.
[15] Docket No. R2005-1, USPS-LR-K-55.

The mail processing unit cost estimates by rate category can be found in Table 1 below.

D. PRESORT-ADJUSTED MAIL PROCESSING UNIT COST METHODOLOGY

The actual figures shown in Table 1 are not always an accurate measure of the value associated with the prebarcoding of flat-shaped mail. For example, First-Class Mail has one nonautomation presort rate category. An examination of the mail characteristics for these mail pieces reveals that a great deal of this mail is presorted to either 3-digits or 5-digits. As such, the actual total mail processing unit costs for First-Class Mail nonautomation presort flats are lower than those for First-Class Mail automation mixed ADC presort flats. In order to make a more insightful comparison, the costs for automation mixed ADC presort flats should be compared to the costs for nonautomation presort flats that have been presorted to the same level (in this instance, mixed ADC). Consequently, adjusted costs were developed for First-Class Mail presort flats, Periodicals Outside County flats, and Standard Mail Regular flats.

For First-Class Mail presort flats, adjusted costs were developed for nonautomation presort flats at each presort level (mixed ADC, ADC, 3-digit, and 5-digit). The costs for the automation presort flats rate categories remained the same. The adjusted cost models were developed using the identical entry profile from the corresponding automation mail flow model. For example, the nonautomation mixed ADC mail flow model uses the same entry profile as the automation mixed ADC mail flow model. The only difference is that the mail volumes for barcoded machinable and nonmachinable mail in the automation model were entered as non-barcoded machinable and nonmachinable mail in the nonautomation model. The model costs from these models were adjusted using the actual CRA adjustment factors described above.

For Periodicals Outside County flats and Standard Mail Regular flats, a similar analysis was performed, but the adjustments were made to the automation model costs. Therefore, the nonautomation model costs remained the same. The adjusted cost models were developed using the identical entry profile from the corresponding nonautomation mail flow model. For example, the Periodicals automation basic presort mail flow model uses the same entry profile as the Periodicals nonautomation basic presort mail flow model. The only difference is that the mail volumes for non-barcoded

machinable and nonmachinable mail in the nonautomation model were entered as barcoded machinable and nonmachinable mail in the automation model. The model costs from these models were adjusted using the actual CRA adjustment factors as described above.

IV. PROPOSED CHANGES RELATIVE TO PRC METHODOLOGY

To the extent that, in response to Commission Rule 53, I discuss and compare Postal Rate Commission (PRC) versions of costing materials in this testimony, I do not sponsor those materials, or in any way endorse the methodologies used to prepare them. In its Order No. 1380 adopting the roadmap rule, the Commission included the following statements regarding the role played by Postal Service witnesses under these circumstances:

> The comparison required by this exercise cannot be equated with sponsoring the preexisting methodology. It merely identifies and gives context to the proposed change, serving as a benchmark so that the impact can be assessed. … [W]itnesses submitting testimony under Rule 53(c) sponsor the proposed methodological changes, not the preexisting methodology. That they may be compelled to reference the pre-existing methodology does not mean that they are sponsoring it. Order No. 1380 (August 7, 2003) at 7.

Therefore, although I may be compelled to refer to the PRC methodologies and versions corresponding to the Postal Service proposals which are the subject of my testimony, my testimony does not sponsor those PRC materials.

The PRC version of the flats cost models are contained in USPS-LR-K-102. The cost models contained in USPS-LR-K-102 are expressed in the same format as the postal versions found in USPS-LR-K-43, with the exception that four cost inputs have changed. The PRC version of the flats costs models rely on revised piggyback factors (USPS-LR-K-98), CRA mail processing unit cost estimates by shape (USPS-LR-K-99), volume variability factors (USPS-T-11, Table 5), and premium pay factors (USPS-LR-K-100). All other cost model inputs are identical for both the postal and PRC versions of the flats cost models.

TABLE 1:

USPS FLATS TOTAL MAIL PROCESSING UNIT COST ESTIMATES

RATE CATEGORY	ACTUAL TOTAL MAIL PROCESSING UNIT COST (CENTS)	PRESORT-ADJUSTED TOTAL MAIL PROCESSING UNIT COST (CENTS)
FIRST-CLASS MAIL PRESORT FLATS		
Nonautomation Flats	25.805	---
Nonautomation Mixed ADC Flats	---	38.270
Nonautomation ADC Flats	---	30.998
Nonautomation 3-Digit Flats	---	28.551
Nonautomation 5-Digit Flats	---	17.785
Automation Mixed ADC Flats	35.612	35.612
Automation ADC Flats	28.893	28.893
Automation 3-Digit Flats	26.884	26.884
Automation 5-Digit Flats	17.153	17.153
PERIODICALS OUTSIDE COUNTY FLATS		
Nonautomation Basic Flats	23.837	23.837
Nonautomation 3-Digit Flats	17.663	17.663
Nonautomation 5-Digit Flats	13.233	13.233
Nonautomation Carrier Route Flats	8.669	8.669
Automation Basic Flats	24.785	22.442
Automation 3-Digit Flats	19.080	16.965
Automation 5-Digit Flats	12.593	12.687
STANDARD MAIL REGULAR FLATS		
Nonautomation Basic Flats	23.148	23.148
Nonautomation 3/5-Digit Flats	14.528	14.528
Automation Basic Flats	22.751	21.672
Automation 3-/5-Digit Flats	14.142	13.868

TABLE 2:

PRC FLATS TOTAL MAIL PROCESSING UNIT COST ESTIMATES

RATE CATEGORY	ACTUAL TOTAL MAIL PROCESSING UNIT COST (CENTS)	PRESORT-ADJUSTED TOTAL MAIL PROCESSING UNIT COST (CENTS)
FIRST-CLASS MAIL PRESORT FLATS		
Nonautomation Flats	27.852	---
Nonautomation Mixed ADC Flats	---	42.255
Nonautomation ADC Flats	---	33.667
Nonautomation 3-Digit Flats	---	30.770
Nonautomation 5-Digit Flats	---	17.948
Automation Mixed ADC Flats	39.065	39.065
Automation ADC Flats	31.196	31.196
Automation 3-Digit Flats	28.853	28.853
Automation 5-Digit Flats	17.331	17.331
PERIODICALS OUTSIDE COUNTY FLATS		
Nonautomation Basic Flats	28.070	28.070
Nonautomation 3-Digit Flats	20.183	20.183
Nonautomation 5-Digit Flats	14.438	14.438
Nonautomation Carrier Route Flats	9.131	9.131
Automation Basic Flats	28.715	26.289
Automation 3-Digit Flats	21.647	19.345
Automation 5-Digit Flats	13.763	13.878
STANDARD MAIL REGULAR FLATS		
Nonautomation Basic Flats	26.468	26.468
Nonautomation 3/5-Digit Flats	15.559	15.559
Automation Basic Flats	25.630	24.614
Automation 3-/5-Digit Flats	15.109	14.818