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

POSTAL RATE AND FEE CHANGES, 2001	:	**Docket No. R2001-1**

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

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DIRECT TESTIMONY
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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 the Office of Cost and Rate Case Development in Finance at Headquarters. I have testified before the Postal Rate Commission on four separate occasions.

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 Qualified Business Reply Mail (QBRM) mail processing cost avoidances.

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 in San Diego 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.

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 award government contracts.

I earned 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. PURPOSE AND SCOPE OF TESTIMONY

This testimony is separated into five sections.

The first section discusses the cost studies that calculate the test year volume variable mail processing unit cost estimates for the First-Class Mail presort letters, First-Class Mail presort cards, and Standard Mail presort letters rate categories.[1] These estimates are referenced in the testimonies of witnesses Eggleston (USPS-T-25), Robinson (USPS-T-29), Moeller (USPS-T-32), and Taufique (USPS-T-34). The test year worksharing related portion of the mail processing unit cost estimates, in conjunction with the test year delivery unit cost estimates developed by witness Schenk (USPS-T-43), are then used to calculate the volume variable worksharing related savings estimates for the First-Class Mail presort letters, First-Class Mail presort cards, and Standard Mail presort letters rate categories. These savings calculations, used in developing presort and automation discounts for letters and cards, are referenced in the testimonies of witnesses Robinson (USPS-T-29), Moeller (USPS-T-32), and Taufique (USPS-T-34).

The second section updates the cost study that supports the First-Class Mail Qualified Business Reply Mail (QBRM) postage discount. The test year volume variable mail processing worksharing related savings estimate is used as the basis for a discount extended to both letters and cards and is referenced in the testimony of witness Robinson (USPS-T-29).

The third section of this testimony includes the cost study that supports the First-Class Mail nonstandard surcharge as it is currently defined. This study estimates the additional test year volume variable mail processing costs required to process First-Class Mail nonstandard single-piece and presort mail pieces weighing one ounce or less.[2] These costs support witness Robinson's testimony (USPS-T-29).

The fourth section includes the cost studies that support the Postal Service's proposal to surcharge First-Class Mail and Standard Mail nonmachinable

[1] These costs do not include data for the Standard Enhanced Carrier Route (ECR) rate categories. Those rate categories are included in witness Schenk's testimony (USPS-T-43).

[2] A non-standard mail piece is defined as a First-Class Mail piece, weighing one ounce or less, that does not meet one or more of the following specifications: length <= 11 ½", height <= 6 1/8", thickness <= ¼", and aspect ratio (length divided by width) between 1.3 and 2.5, inclusive.

nonautomation presort letters. These mail pieces must be processed manually and therefore cost considerably more to process than machinable nonautomation presort letters. The additional test year volume variable cost estimates are referenced in the testimonies of witness Robinson (USPS-T-29) and witness Moeller (USPS-T-32).

The fifth section of this testimony includes several test year cost studies that support various special service fees, including many related to Business Reply Mail (BRM). These cost studies include: the annual permit fee, the annual accounting fee, the QBRM quarterly fee, the non-letter size BRM monthly fee, the high volume QBRM per-piece fee, the basic QBRM per-piece fee, the high volume BRM per-piece fee, the basic BRM per-piece fee, and the non-letter size BRM per-piece fee.[3] These costs are referenced in the testimony of witness Mayo (USPS-T-36).

II. DATA SOURCES

Numerous data sources have been used to calculate the cost estimates included in this testimony. I rely upon the following data sources from Docket Nos. R2000-1, MC99-2, R97-1, and MC95-1:

Docket No.	Data Description	Data Source
R2000-1	Exhibit KE-1B	KE-T-1
	USPS-T-24 Workpapers	Miller WP1
	Domestic Mail Volume and Revenue History	LR-I-117
	Equipment Handbooks	LR-I-154
	USPS-T-29 Electronic Spreadsheets	LR-I-160
	USPS-T-24 Electronic Spreadsheets	LR-I-162
	RCR 2000 Decision Analysis Request	LR-I-164
MC99-2	Schenk Workpaper 1	USPS-T-3
R97-1	Standard Regular Mail Characteristics	LR-H-105
	Coverage Factors	LR-H-128
	Accept and Upgrade Rates	LR-H-130
	BRM Practices Survey	LR-H-179
	First-Class Mail Characteristics	LR-H-185
	Standard Nonprofit Mail Characteristics	LR-H-195
	Diskette Supporting USPS-T-27	LR-H-215

[3] Some of these fees, such as the annual permit fee, do not apply solely to BRM.

MC95-1	Package Sorting Productivity	USPS-T-10B
	Post Office Box Productivities	USPS-T-10F
	Post Office Box Coverage Factor	USPS-T-10I
	Package Sorting Information	USPS-T-10 (WP VII)

I also rely upon the Docket No. R2001-1 volume variability factors found in Table 1 of witness Van Ty Smith's testimony (USPS-T-13). In addition, the following Docket No. R2001-1 library references are associated with my testimony:

Docket No.	Data Description	Data Source
R2001-1	Wage Rates	LR-J-50
	Piggyback/Premium Pay Factors	LR-J-52
	CRA Mail Processing Unit Costs/ Cost Pool Piggyback Factors	LR-J-53
	MODS Productivities/BCS Accept Rates	LR-J-56
	USPS-T-22 Electronic Spreadsheets	LR-J-60
	Letter Recognition Enhancement Program	LR-J-62
	Base Year Mail Volumes	LR-J-98
	Delivery Unit Costs	LR-J-117

III. LETTER/CARD TOTAL MAIL PROCESSING UNIT COST ESTIMATES AND WORKSHARING RELATED SAVINGS ESTIMATES

In general, the cost methodology that I used in Docket No. R2000-1 has again been used in this docket to develop letter and card total mail processing unit cost estimates and worksharing related savings estimates by rate category. In some cases, the methodology has been modified. These modifications have impacted the savings measurements and are discussed in detail throughout this testimony. In addition, the Postal Service has continued to enhance the letter mail processing technologies that are used to sort letters and cards. These enhancements have also affected costs and are discussed as well.

A. LETTER AND CARD MAIL PROCESSING TECHNOLOGIES AND SUBSEQUENT IMPACT ON COSTS

In 1998, the single-piece letters rate category made up 57.2% of the total First-Class Mail letter volume.[4] This mail mix was a substantial change from that which

[4] Docket No. R2000-1, USPS LR-I-117 (54,273 million pieces / 94,907 million pieces = 57.2%).

existed ten years earlier. In 1988, the First-Class single-piece letters rate category represented nearly 70% of the total First-Class letter mail volume.[5]

The year 1988 was also the time frame when the Postal Service unveiled its Corporate Automation Plan (CAP).[6] Given the fact that First-Class Mail single-piece letters represented the majority of mail volume, cost, and revenue at that time, the original CAP included plans to purchase equipment that could be used to apply barcodes to those mail pieces. Accordingly, the Postal Service's initial efforts to automate the letter and card mail processing operations were focused on reducing, or at least containing, the costs for non-barcoded letters and cards, the vast majority of which were found in the First-Class single-piece mail stream. These automation efforts, however, also affected the costs for First-Class Mail and Standard Mail nonautomation presort letters and cards and automation presort letters and cards. Consequently, all letter and card mailers have directly benefited from improved letter mail processing technologies.

1. FIRST-CLASS SINGLE-PIECE LETTERS AND CARDS

The single-piece First-Class Mail stream contains both non-machinable and machinable letters and cards. Non-machinable letters consist of those mail pieces that are culled from the cancellation system. These mail pieces must be processed manually and, therefore, incur much higher than average mail processing costs.

The machinable letters and cards consist of three heterogenous mail types based on the addressing method. "Prebarcoded" mail pieces are those mail pieces with both machine-printed addresses and barcodes located either in the lower right hand corner of the mail piece or in the address block. "Machine printed" mail pieces are those mail pieces with machine-printed addresses that are not prebarcoded. "Handwritten" mail pieces are those mail pieces with handwritten addresses that are not prebarcoded.

The Advanced Facer Canceler System Input Sub System (AFCS-ISS) is a cornerstone of letter and card mail processing operations and can face, cancel, and separate these three machinable mail types. The fact that the three mail types can be

[5] Docket No. R2000-1, USPS LR-I-117 (54,364 million pieces / 78,173 million pieces = 69.5%).
[6] The Postmaster General initially announced plans to barcode 95% of letter and non-carrier route presort flat mail at the September 26, 1988 National Postal Forum. The Corporate Automation Plan was the "road map" to achieving that goal.

separated on the AFCS-ISS ensures that each mail type will be routed to the most efficient "downstream" operation. As a result, this piece of equipment alone has affected the mail processing costs for the three machinable mail types.

The AFCS-ISS is also now linked to the Remote Bar Code System (RBCS), which includes various hardware and software components that are designed to apply barcodes to the machine printed and handwritten mail pieces. The Multi-Line Optical Character Reader Input Sub System (MLOCR-ISS) and the Remote Computer Read (RCR) system are two such components. During the past five years, the Postal Service has continuously upgraded these systems, in order to enhance the aggregate MLOCR-ISS/RCR finalization rate.

As a result of these efforts, the mail processing cost differences that have existed among the three single-piece machinable mail types have been shrinking over time, all else equal.[7] I discussed this cost "convergence" issue at length in Docket No. R97-1.[8] This phenomenon is especially evident in the case of Qualified Business Reply Mail (QBRM).[9]

The QBRM cost study compares the mail processing costs for a preapproved, prebarcoded QBRM mail piece to the mail processing costs for the same reply mail piece were it to have a handwritten address as an alternative. The savings measured for QBRM letters and cards decreased from 4.016 cents in Docket No. R97-1 to 1.541 cents in Docket No. R2000-1.[10] This fact is not surprising, given that the RCR 2000 project was designed to improve the RCR finalization rate to 69%.[11] In May 2001, the Board of Governors again approved a Decision Analysis Request (DAR) for the Letter Recognition Enhancement Program that will boost the aggregate MLOCR-ISS/RCR finalization rate to 93.2%.[12] Consequently, the QBRM worksharing related savings estimate measured in this docket is now 1.647 cents.[13]

[7] It is possible that increased wage rates could offset the impact letter recognition enhancement programs have had on these cost differences, but, at least in some cases, they do not appear to have done so.
[8] Docket No. R97-1, Tr.33/17477-17480.
[9] The QBRM cost study can be found in section IV in my testimony.
[10] The Docket No. R2000-1 figure has been adjusted to correct an error made by witness Campbell. This correction will be discussed in detail in Section IV of this testimony.
[11] This figure was an improvement over the initial RCR finalization rate of 25% when the system was first deployed. The updated RCR 2000 information can be found in Docket No. R2000-1, USPS LR-I-164.
[12] Docket No. R2001-1, USPS LR-J-62.
[13] The QBRM cost study can be found in Section IV of this testimony.

2. FIRST-CLASS AND STANDARD NONAUTOMATION PRESORT LETTERS AND CARDS

The costs for First-Class Mail and Standard Mail nonautomation presort letters and cards have also been affected by enhanced letter mail processing technologies. The machinable nonautomation presort mail pieces exhibit characteristics that are similar to the First-Class single-piece "machine printed" mail. They have machine-printed addresses and are not prebarcoded. Therefore, the costs for nonautomation presort mail pieces would have been affected in a similar manner as the single-piece machine printed mail pieces described above. As the aggregate MLOCR-ISS/RCR finalization rate has improved over time, the mail processing costs for machinable nonautomation presort letters and cards have decreased, all else equal.[14]

The nonmachinable nonautomation presort mail pieces, however, must be processed manually. Therefore, the mail processing costs for these mail pieces have likely increased over time. As a result, the Postal Service has proposed basing the nonautomation discount on the machinable worksharing related savings and applying a nonmachinable surcharge to the nonmachinable mail pieces.[15]

3. FIRST-CLASS AND STANDARD AUTOMATION PRESORT LETTERS AND CARDS

Because First-Class Mail and Standard Mail presort mail pieces are prebarcoded, their total mail processing unit costs have been affected to a lesser extent by enhanced letter and card mail processing technologies than have nonautomation presort mail pieces. However, there are components of the automation program that have affected the costs for all mail pieces. Namely, the widespread usage of the Delivery Bar Code Sorter (DBCS) for non-incoming secondary operations has helped reduce the average handlings per piece.

The worksharing related savings estimates for automation presort mail pieces, however, have been affected. For example, the benchmark for First-Class Mail letters is Bulk Metered Mail (BMM) letters. BMM letters are a subset of the First-Class Mail single-piece mail stream and consist predominantly of mail pieces with machine printed addresses. Therefore, the mail processing costs for BMM letters would be affected by

[14] It is possible that increased wage rates could offset the impact letter recognition enhancement programs have had on mail processing costs, but, at least in some cases, they do not appear to have done so.

letter and card mail processing technologies in a manner similar to that for machine printed single-piece and machinable nonautomation presort First-Class Mail. Consequently, a reduction in the benchmark costs over time could, in turn, reduce the measured savings for the First-Class automation presort letters and cards rate categories, all else equal.[16]

4. FUTURE IMPACTS

In today's mail processing environment, mail pieces with prebarcoded addresses, machine-printed addresses, and handwritten addresses are not processed through all of the same operations. Despite this fact, it has been shown that the worksharing related savings estimates, in some cases, have decreased.

In the future, it is likely that two of these three mail types will be processed through the same operations. The Direct Connect System (DCS) being tested in Ft. Myers, Florida merges the mail from two of the three AFCS-ISS separations into a series of transport modules that will ultimately feed a DBCS with Output Sub System capabilities (DBCS-OSS).[17] This change could further reduce the cost differences that might exist between prebarocoded, machine printed, and handwritten mail pieces.

The enhanced letter and card mail processing technologies implemented by the Postal Service do indeed affect the costs for all letters and cards. These enhancements could also result in worksharing related savings estimates that shrink over time, if the impact of these changes are not offset by increased wage rates. As the Postal Service continues to invest in improved sortation technologies, the costs and/or worksharing related savings measured for those mail pieces being sorted will continue to change as well.

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[15] The nonmachinable surcharge cost study can be found in Section VI of this testimony.

[16] It is possible that increased wage rates could offset the impact letter recognition enhancement programs have had on the worksharing related savings estimates, but, at least in some cases, they do not appear to have done so.

[17] The machine printed and handwritten mail pieces will be routed to an automation outgoing secondary operation performed on a DBCS-OSS. The prebarcoded mail pieces will be routed to an automation outgoing primary operation performed on a DBCS-OSS that is designed to efficiently sort and finalize reply mail pieces.

B. TOTAL MAIL PROCESSING UNIT COST METHODOLOGY

In Docket Nos. R90-1 and MC95-1, the Commission employed a "hybrid" cost methodology that used both Cost and Revenue Analysis (CRA) mail processing unit costs and model-based mail processing unit costs to estimate the worksharing related savings.[18] In Docket No. R97-1, Postal Service witnesses Hatfield and Daniel also used a hybrid cost methodology that was subsequently relied upon, with some modifications, by the Commission.[19] In Docket No. R2000-1, I again used a hybrid cost methodology, but included several improvements. The Commission accepted that methodology, with some revisions.[20] Consequently, I am using the same hybrid cost methodology in this docket that the Commission used in Docket No. R2000-1. However, I have again made some modifications that will be discussed in detail later in this testimony. My estimates of total mail processing unit costs and worksharing related savings by rate category are summarized below in Table 1 on page 25.

1. CRA MAIL PROCESSING UNIT COSTS

My analysis relies upon shape-specific CRA mail processing unit costs, which are reported by cost pool in the In-Office Cost System (IOCS).[21] In some cases, the IOCS provides relevant mail processing unit costs at the rate category level. For example, it produces CRA mail processing unit costs for the First-Class Mail nonautomation presort letters rate category.

These CRA mail processing unit costs are subdivided into 54 cost pools. Each cost pool represents a specific mail processing task performed at either 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 Reporting System (PIRS) or MODS operation number associated with each IOCS tally.

I have classified each cost pool into one of three categories: worksharing related proportional, worksharing related fixed, or non-worksharing related fixed.[22]

The "worksharing related proportional" cost pools contain the costs for piece or package distribution operations that are directly affected by the presorting and/or

[18] PRC Op. MC95-1 at paragraph 4221.
[19] Docket No. R97-1, USPS-T-25 and USPS-T-29, respectively; see also PRC Op. R97-1 at paragraph 5089.
[20] Docket No. R2000-1, PRC-LR-12.
[21] Docket No. R2001-1, USPS LR-J-53.
[22] Docket No. R2001-1, USPS LR-J-60.

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 cost pools contain the costs for the tasks that have actually been modeled. The bar code sorter ("/bcs") cost pool is an example of a worksharing related proportional cost pool. This classification represents the largest percentage of 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 business mail entry and verification ("LD79") cost pool is an example of a worksharing related fixed cost pool. As an example, the acceptance and verification unit costs for automation 3-digit and automation 5-digit letter mail should be roughly the same. Had a proportional classification been used, the cost difference between these two rate categories would have been artificially expanded after the model costs were tied back to the CRA. Thus, assigning these costs as worksharing related fixed is reasonable. This classification represents 15-30 percent of CRA mail processing unit costs.

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.

In Docket No. R2000-1, the Commission did not fully embrace the cost pool classifications that I used.[23] In this docket, I have used those revised Commission cost pool classifications, with two exceptions for both First-Class Mail and Standard Mail. The Commission had classified the "1suppf1" and "1suppf4" cost pools as "worksharing related fixed" cost pools. These cost pools contain costs for tasks performed in Function 1 (the accounting definition of "mail processing"), as well as the identical tasks performed in Function 4 (the accounting definition of "customer service"), respectively. The tasks included in these cost pools are for union activities, Quality of Working Life

[23] Docket No. R2000-1, PRC-LR-12.

(QWL) programs, travel time for training or other reasons, and clerical/administrative activities. The costs to perform these tasks are not affected by whether an individual mail piece is presorted and/or prebarcoded. I have therefore reclassified them as "nonworksharing related fixed."

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, I have used cost models to de-average an appropriate CRA mail processing unit cost category. Cost models have been developed for each rate category. For example, I have developed cost models for the First-Class Mail letters automation mixed Automated Area Distribution Center (AADC), AADC, 3-digit, 5-digit, and carrier route presort rate categories. These models are then used to de-average the CRA mail processing unit costs for "First-Class automation presort letters."

Each of my cost models consists of two spreadsheets: a mail flow spreadsheet and a cost spreadsheet.[24] 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 mail volumes and is tied back to the CRA using adjustment factors. These factors are then applied to the model costs in order to estimate the total mail processing unit costs by rate category.

a. MAIL FLOW SPREADSHEET

For this docket, I have created updated mail flow spreadsheets that incorporate recent mail processing changes.[25] Each spreadsheet "flows" 10,000 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 using the various inputs described below. 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

[24] The methodology for estimating First-Class cards costs is somewhat different. Card/letter cost ratios are applied to letter model costs using the same methodology that I used in Docket No. R2000-1 (USPS-T-24).
[25] Docket No. R2001-1, USPS LR-J-60.

values are what are ultimately accessed by the cost sheet and used to calculate model costs.

i. ENTRY PROFILE

The 10,000 pieces are initially input into the "PCS IN" box at the top of each mail flow spreadsheet. Data from the "ENTRY PROFILE" spreadsheet then distribute these 10,000 pieces to the appropriate operation(s) in the "ENTRY POINTS" section based on their presort level. The entry profile data have been taken from the mail characteristics studies conducted for Docket No. R97-1.[26] Each operation then pulls the "ENTRY POINTS" mail volumes directly into the appropriate cell.

ii. COVERAGE FACTORS

In general, a coverage factor represents the amount of mail that has access to a specific type of equipment. Coverage factors are expressed in percentage terms and have historically been used in the letter mail processing cost models.

From the early 1990's to the present, the Postal Service has invested significantly in letter automation technology. In past rate proceedings, much of this technology was in the process of being deployed such that the application of coverage factors had a big impact on the cost model results. In today's environment, these projects have been fully implemented. As a result, equipment coverage factors are no longer required to accurately model letter mail processing operations. Therefore, I do not use them in the letter cost models in my testimony. This methodology is consistent with that used in my Docket No. R2000-1 cost studies.

iii. ACCEPT AND UPGRADE (FINALIZATION) RATES

The accept and upgrade rates, or finalization rates, utilized in my spreadsheets reflect the fact that, for a variety of reasons, some machinable mail will not be accepted by the different types of automated letter mail processing equipment and will have to be diverted to manual operations for processing. These accept and upgrade rates come from three sources.

The Input Sub System (ISS) finalization rates have been taken from engineering studies. The accept and upgrade study was originally conducted for Docket No. R97-

[26] Docket No. R97-1, USPS LR-H-105, LR-H-185, and LR-H-195.

1.[27] Since that time, the Postal Service has continued to improve the Multi-Line Optical Character Reader Input Sub System (MLOCR-ISS) and Remote Computer Read (RCR) systems' ability to finalize mail. Consequently, data from recent engineering studies that measure the aggregate MLOCR-ISS/RCR rate have been used in the mail flow spreadsheets. Separate data were available for mail pieces with machine printed addresses and mail pieces with handwritten addresses. Each figure was increased an additional eight percentage points to reflect the fact that the Board of Governors recently approved a Decision Analysis Request (DAR) for the Letter Recognition Enhancement Program.[28] This program will further increase the aggregate MLOCR-ISS/RCR finalization rate to 92.3% by the test year.

The accept and upgrade rates for the Output Sub Systems (OSS) have been taken from the Docket No. R97-1 study.[29] However, one minor change has been made. The percentage of mail with Postal Numeric Encoding Technique (POSTNET) barcode verification errors has now been added to the percentage of mail that is accepted by the OSS. This change reflects the fact that the Remote Bar Code System (RBCS) identification (ID) tag on the back of the mail piece can now be used to sort the mail piece if a BCS cannot read the POSTNET barcode on the front of the mail piece.[30]

Finally, the automation accept rates that are used for Bar Code Sorter (BCS) mail processing operations in the mail flow spreadsheets are taken from a recent study that used FY 2000 MODS data.[31]

iv. 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 using a given sort plan. In my mail flow spreadsheets, density percentages are used to flow mail to succeeding operations. In Docket No. R2000-1, the mail flow densities were updated

[27] Docket No. R97-1, USPS LR-H-130.
[28] Docket No. R2001-1, USPS LR-J-62.
[29] Docket No. R97-1, USPS LR-H-130.
[30] This technology is referred to as the Identification Code Sort (ICS) system.
[31] Docket No. R2001-1, USPS LR-J-56.

using the results from a field study conducted under my direction.[32] Those same figures have been used here.

v. MISCELLANEOUS FACTORS

Several miscellaneous factors are also used to flow mail through the models. These factors include: the Automated Area Distribution Center (AADC) tray factor, the "local originating" factor, the RBCS leakage rate, the automated incoming secondary factors, the automation carrier route Carrier Sequence Bar Code Sorter (CSBCS) factor, the Carrier Route finalization rate for plants, and the Post Office Box destination factor.

AADC Tray Factor: The AADC tray factor represents the percentage of letter mail that must first be processed through a Managed Mail Program (MMP) operation at an AADC before being routed to the destinating facility. For purposes of my testimony, I rely upon the coverage factor study submitted in Docket No. R97-1.[33] In my cost models, it is applied to the mail characteristics data in the entry profile spreadsheets.

Local Originating Factor: "Local originating" is a term that refers to mail that originates at the same facility where that mail also destinates. This factor is calculated on the basis of FY 1998 ODIS data and is used in the models to flow mail that is not fully upgraded (to the finest-depth-of-sort bar code) by RBCS. The local originating mail that is not upgraded is routed directly to a "5-digit sort" operation so that the mail can be sorted to that ZIP Code level before being processed in manual operations. The non-local originating mail is first processed through the outgoing secondary, incoming MMP and/or incoming Sectional Center Facility (SCF)/Primary operations before being routed to the "5-digit sort" operation at the destinating facility. The figures used in my Docket No. R2000-1 cost studies are also used in this docket.[34]

RBCS Leakage Rate: "Leakage" refers to the situation where a mail piece is finalized by the RCR or Remote Encoding Center (REC), but the result is never obtained from the Decision Storage Unit (DSU). In Docket Nos. R97-1 and R2000-1, the operations leakage target of 5% was used. Over time, the actual leakage

[32] A description of the study can be found in Docket No. R2000-1, USPS-T-24, Appendix IV. The data can be found in Docket No. R2000-1, USPS-T-24, Workpaper 1.
[33] Docket No. R97-1, USPS LR-H-128.
[34] Docket No. R2000-1, USPS LR-I-162.

percentages have been decreasing and approaching that target value. Therefore, a leakage rate of 5% is also used in this docket.

Automated Incoming Secondary Factors: Mail can be finalized in a variety of incoming secondary operations (e.g., delivery point sequence) based on the depth-of-distribution commitment for a given ZIP Code. The percentage of mail processed in each type of incoming secondary operation is calculated using data from the Finalization on Automation Secondary Tracking (FAST) system on the Corporate Information System (CIS) database.[35]

Automation Carrier Route CSBCS Factor: The automation carrier route rate category can only be used for mail that destinates at ZIP Codes which use the CSBCS to finalize their mail in Delivery Point Sequence (DPS), or ZIP Codes for which an automated incoming secondary operation does not sort the mail beyond the carrier route level. Therefore, it is necessary to estimate the volume of mail that destinates at CSBCS facilities. The FAST data were once again used for this purpose. This factor was calculated by dividing the 3-Pass DPS (CSBCS) percentage by the sum of the 3-Pass DPS, Carrier Route, and Delivery Unit percentages.

Carrier Route Finalization Rate For Plants: This factor refers to the percentage of manual incoming secondary mail that is finalized to the carrier route level at plants. Because the incoming secondary productivity for plants is lower than the corresponding productivity for Delivery Units, it is necessary to separate this mail from the mail that is finalized to the carrier route level at Delivery Units (DU). Once again, FAST data are used to perform this calculation. Even though this factor only affects manual operations, the automation data contained in FAST are used as a proxy, given the absence of any other data source.[36]

Post Office Box Destination Factor: After being finalized in either an automation incoming secondary or manual incoming secondary operation, mail for post office boxes is then routed to a box section where a clerk sorts the mail into the appropriate boxes. The factor that is used to estimate box section mail volumes has been taken from the coverage factor calculations performed for Docket No. R97-1.[37]

[35] FY2000 FAST Data from the Corporate Information System (CIS) were used in this docket.
[36] Docket No. R2000-1, Attachment USPS-T-24A.
[37] Docket No. R97-1. USPS LR-H-128.

The data inputs described above are used in my 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. The two automation 5-digit presort mail flow models are the exception. The sum of the mail pieces in the "PCS OUT" box from both mail flow spreadsheets combined equals 10,000 mail pieces.

b. COST SPREADSHEET

Each cost spreadsheet accesses the mail volumes from each operation in the corresponding mail flow spreadsheet.[38] This volume information, in conjunction with the other data inputs described below, is used to calculate a mail processing cost for the mail volumes flowing through each operation. Each operation cost is then divided by the "PCS OUT" mail volumes in order to determine the weighted operation cost. The sum of these weighted operation costs is the model cost.

i. MARGINAL (VOLUME VARIABLE) PRODUCTIVITIES

For my cost model spreadsheets, productivity values by operation have been calculated using FY 2000 MODS data.[39] The marginal productivity values are calculated by dividing the MODS productivity values for each operation by the volume variability factors found in USPS-T-13, Table 1.[40]

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.[41]

iii. “PIGGYBACK” (INDIRECT COST) FACTORS

[38] Docket No. R2001-1, USPS LR-J-60.
[39] Docket No. R2001-1, USPS LR-J-56.
[40] Weighted volume variability factors are developed for Bar Code Sorter (BCS) factors using FY2000 MODS data concerning the percentage of mail for a given operation that is processed on the Delivery Bar Code Sorter (DBCS) compared to the Mail Processing Bar Code Sorter (MPBCS).
[41] Docket No. R2001-1, USPS LR-J-50.

"Piggyback" factors are used to estimate indirect costs.[42] I used the FY 2000 MODS mail volumes by machine type to calculate weighted piggyback factors for Bar Code Sorter (BCS) operations. This methodology is consistent with the methodology used by the Commission in Docket No. R2000-1.[43]

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. In general, 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).[44] Therefore, the First-Class Mail factor is greater than the Standard Mail factor.[45]

v. PACKAGE SORTING COSTS

Packages (bundles) can be used to prepare letter mail in specific instances. For example, First-Class Mail and Standard Mail "NON-OCR" trays can contain packages. My calculation of the costs related to package sorting is consistent with the methodology relied upon by the Commission in Docket No. R2000-1.[46]

vi. DPS PERCENTAGES

The percentage of mail that is finalized in Delivery Point Sequence (DPS) operations is calculated on the cost spreadsheet for each respective rate category. These percentages are the sum of the mail volumes finalized in both the Carrier Sequence Bar Code Sorter (CSBCS) and DBCS incoming secondary operations in the mail flow spreadsheet, divided by the total 10,000 mail pieces processed in that same mail flow spreadsheet. The DPS percentages are used to estimate delivery unit costs by rate category.[47]

[42] Docket No. R2001-1, USPS LR-J-52.
[43] Docket No. R2000-1, PRC-LR-12.
[44] Some Standard Mail processing, like the second pass of DPS, does occur during Tours 1 and 3.
[45] Docket No. R2001-1, USPS LR-J-52.
[46] Docket No. R2000-1, PRC-LR-12.
[47] Docket No. R2001-1, USPS LR-J-117.

c. CRA ADJUSTMENTS

The model costs for each rate category are weighted together using base year mail volumes.[48] 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)

With the exception of the cost pool classification changes discussed earlier, this methodology is identical to that relied upon by the Commission in Docket No. R2000-1.[49]

C. WORKSHARING RELATED SAVINGS COST METHODOLOGY

In Docket No. R2000-1, I used an improved worksharing related savings calculation that was subsequently relied upon by the Commission.[50] I again use that methodology in this docket. In cases where the CRA mail processing unit costs are available and cost models are not required, the mail processing worksharing related unit costs are equivalent to the sum of the "worksharing related proportional" and "worksharing related fixed" cost pools. For those cases where model costs are used to de-average CRA mail processing unit costs, the mail processing worksharing related unit costs are calculated as follows.

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

1. FIRST-CLASS MAIL LETTERS

The methodology that I use to calculate the First-Class Mail letters worksharing related savings by rate category is the same as that used in Docket No. R2000-1. The worksharing related mail processing unit cost for a given benchmark is compared to the worksharing related mail processing unit cost for a specific rate category.

[48] Docket No. R2001-1, USPS LR-J-98.
[49] Docket No. R2000-1, PRC-LR-12.
[50] Docket No. R2000-1, PRC-LR-12.

a. BENCHMARKS

As was the case in Docket No. R2000-1, I use Bulk Metered Mail (BMM) letters as the benchmark for First-Class Mail nonautomation presort letters, automation mixed AADC presort letters, automation AADC presort letters, automation 3-digit presort letters, and automation 5-digit presort letters.[51] As the Commission discussed in that docket, this is the mail most likely to convert to worksharing.[52] For the automation carrier route presort rate categories, the benchmark is an automation 5-digit presort mail piece that destinates at either a CSBCS or manual site.[53]

i. BULK METERED MAIL LETTERS EXIST

In Docket No. R2000-1, two witnesses representing intervening parties questioned the very existence of BMM letters.[54] I addressed these contentions in my rebuttal testimony in that docket through my discussion of meter bypass mail (MODS operation 020B).[55]

Meter bypass mail is metered mail that has already been trayed and therefore can bypass the meter belt operation (MODS operation 020) where meter packages (bundles) are typically sorted and/or broken and trayed. This operation is where BMM letters can typically be found in a given facility.

To support that testimony, I conducted an e-mail survey that was distributed to the 180 In-Plant Support managers in the field. This survey asked them whether their plant used an 020B operation, what tasks were included in that operation, where the mail came from, and how it entered the facility. I received 98 responses to that survey.

Of those responses, 96 (98%) said that they did have an 020B operation and that the mail entering that operation consisted of at least some full-rate single-piece BMM letters that were entered in full trays. The volume of BMM letters entered at a given facility, however, seemed to vary a great deal. For example, some sites close to major business centers received a great deal of trayed BMM letters that were entered either at the dock or at the BMEU directly by their customers. Other sites had made agreements

[51] In this docket, the Postal Service has proposed de-averaging the automation basic presort letters and cards rate categories into automation mixed AADC and automation AADC presort letters and cards rate categories.
[52] PRC Op., R2000-1, paragraph 5089.
[53] By definition, the only First-Class letters and cards that qualify for automation carrier route presort rates are those mail pieces that destinate at either a CSBCS or manual site.
[54] Docket No. R2000-1, Tr. 26/12418 at 18-19 and Tr. 26/12296 at 8-9.
[55] Docket No. R2000-1, Tr. 45/19648-19650.

with local Delivery Units (DU) whereby the employees at those facilities would tray up the metered mail collected at that facility, even if it was entered in packages.

In order to corroborate these findings, I also visited seven facilities and observed the operations where the BMM letters were entered in full trays by business customers. From these surveys and observations, it became apparent that BMM letters, as they have been defined in Commission proceedings, came from one of two sources.

The first source consists of those mailers that, for whatever reason, are not currently engaged in worksharing activities. In my field observations, I have noticed that a large number of small banks fall into this category. It was difficult to discern why some mailers engaged in worksharing while others did not. However, I can give an example that demonstrates how the mail generated by this group is a likely candidate for worksharing.

One plant that responded to the survey was located in a state capital. A government agency in that city submitted its mailings as BMM letters to the plant and was not attempting to prebarcode and/or presort that mail. In another state capital, several government agencies had pooled their resources and purchased a Multi Line Optical Character Reader (MLOCR). That machine was being used to prebarcode and/or presort the outgoing letter mail for those agencies.

A second source of BMM letters is presort houses themselves. Presort houses have operational cutoff times that they must adhere to in order to meet Postal Service critical entry times. If they cannot prebarcode and/or presort all mail pieces in the time allowed, the remaining mail is often entered in full trays and is assessed the full single-piece rate. Had the cutoff times been met, some of those mail pieces could have been entered as prebarcoded and/or presorted letters.

Are BMM letters the most likely mail pieces to convert to worksharing? The answer is obviously yes.

ii. BMM LETTER COSTS ARE DIFFICULT TO QUANTIFY

Using the IOCS system, it is possible to isolate the mail processing unit costs for metered letters from the mail processing unit costs for First-Class Mail single-piece letters as a whole. However, it is not possible to use IOCS to isolate the specific costs for BMM letters. In order to further isolate the costs for BMM letters from those for

metered letters, the value of the cancellation and metered mail preparation cost pool ("1Cancmmp") was set to zero in both Docket Nos. R97-1 and R2000-1. This change was made to reflect the assumption that BMM letters are entered in full trays. In Docket No. R97-1 the Commission supported that methodology. However, in Docket No. R2000-1, it did not.

Consequently, I have used the mail processing unit costs for metered letters as a proxy for BMM letters. Given that BMM benchmark mail processing unit costs are truly metered letter costs, these costs are likely overstated. The costs for the package sorting cost pools (Opbulk, Oppref, and Pouching) can be used to illustrate this point. These cost pools contain costs for package sorting activities. The total costs for these cost pools for metered letters are 1.047 cents. The total costs for those same cost pools for nonautomation presort letters are 1.499 cents. Nonautomation presort letters can contain packaging, but BMM letters should be entered in full trays (i.e., there should be little to no packaging). Given the magnitude of these costs, there are likely costs imbedded in the metered letters cost pools that are related to package sorting. As a result, the mail processing unit costs and the worksharing related savings that are calculated using the BMM letters proxy as a benchmark may be somewhat overstated.

In Docket No. R2000-1, I assumed that the delivery unit costs for BMM letters were the same as the delivery unit costs for First-Class Mail nonautomation presort letters. The Commission subsequently employed that same methodology.[56] In this docket, I have refined that assumption and have assumed that delivery unit costs for BMM letters are the same as the delivery unit costs for First-Class machinable mixed AADC nonautomation presort letters.

b. CRA MAIL PROCESSING UNIT COSTS

The CRA includes mail processing unit costs for First-Class Mail nonautomation presort letters. Therefore, cost models are not required to determine the total mail processing unit costs for this rate category. However, models have been included that isolate the costs for machinable and nonmachinable mail pieces at each presort level in order to support the Postal Service's proposal to institute a nonmachinable surcharge.[57]

[56] Docket No. R2000-1, PRC-LR-12.
[57] That cost study can be found in Section VI of this testimony.

CRA mail processing unit costs are also obtained for First-Class automation presort letters. Models for the other rate categories (automation mixed AADC, AADC, 3-digit, 5-digit, and carrier route presort) are used to de-average these costs.

c. COST MODELS

In addition to the nonautomation presort cost models described above, six cost models have been created for the automation presort rate categories: automation mixed AADC, automation AADC, automation 3-digit, automation 5-digit CSBCS/manual sites and automation 5-digit other sites, and automation carrier route. The aggregate costs for the two 5-digit models are used to calculate the total mail processing unit costs and worksharing related savings for the 5-digit rate category.

As stated above, the "automation 5-digit CSBCS/manual sites" results are used as the benchmark for First-Class automation carrier route presort because automation carrier route presort letters must be destined for either CSBCS or manual sites. The 5-digit presort mail that destinates at those same sites is therefore the appropriate benchmark.

d. WORKSHARING RELATED SAVINGS CALCULATIONS

The worksharing related savings are calculated using the same methodology relied upon by the Commission in Docket No. R2000-1:[58]

[(Benchmark Worksharing Related Mail Proc Unit Costs) + (Delivery Unit Costs)] -
[(Rate Category Worksharing Related Mail Proc Unit Costs) + (Delivery Unit Costs)]
= Worksharing Related Savings

1. FIRST-CLASS MAIL CARDS

The methodology that I used to calculate the First-Class Mail cards worksharing related savings is the same as that used for First-Class letters, with one exception.

a. BENCHMARKS

There is no cost benchmark for First-Class Mail cards similar to the BMM letter mail benchmark used for First-Class Mail letters. As a result, there is no worksharing related savings estimate calculated for nonautomation presort cards. The automation carrier route presort cards category uses a 5-digit benchmark similar to that described

[58] Docket No. R2000-1, PRC-LR-12.

above for letters. The remaining card rate categories (automation AADC, AADC, 3-digit, and 5-digit) use the nonautomation presort cards rate category as the benchmark.

b. CRA MAIL PROCESSING UNIT COSTS

It is possible to obtain the same CRA mail processing unit costs for cards as it is for letters: nonautomation presort and automation presort. The first is a rate category for which the CRA provides estimates. Accordingly, no cost models are required. Models for the remaining rate categories (automation AADC, AADC, 3-digit, 5-digit, and carrier route presort) are used to de-average the latter category.

c. COST MODELS

The letter models contain many data inputs that represent "average" data for both letters and cards. Since the mail volumes processed through the operations in my models are predominantly letters, these "average" data can be used to accurately model letters mail processing costs. These data, however, may not accurately reflect the costs for cards. As a result, a card/letter cost ratio is used to estimate the model costs for each card rate category. This ratio is calculated as shown below.[59]

Card/Letter Cost Ratio = (Card CRA Mail Proc Unit Costs / Presort Mix Adjustment Factor / Letters CRA Mail Proc Unit Costs)

The model costs for each card rate category are then calculated using these ratios as follows:[60]

Card Rate Category Model Cost = Card/Letter Cost Ratio * Corresponding Letter Rate Category Model Cost

Finally, a weighted card model cost is calculated using base year mail volumes. It is then tied back to the CRA mail processing unit costs for cards using the same adjustment factors and cost methodology that are applied to letters.

d. WORKSHARING RELATED SAVINGS

The worksharing related savings for the First-Class Mail automation presort cards rate categories are calculated as follows:[61]

[59] A presort mix adjustment factor is used to reflect the fact that the presort mixes for letters and cards are slightly different.
[60] Docket No. R2001-1, USPS LR-J-60.
[61] Docket No. R2001-1, USPS LR-J-60.

[(Benchmark Worksharing Related Mail Proc Unit Costs) + (Delivery Unit Costs)] - [(Rate Category Worksharing Related Mail Proc Unit Costs) + (Delivery Unit Costs)] = Worksharing Related Savings

3. STANDARD LETTERS

The methodology that I use to calculate the worksharing related savings for Standard Mail letters is also the same as that relied upon by the Commission in Docket No. R2000-1.[62]

a. BENCHMARKS

The benchmark for the Standard nonautomation basic letters rate category is the Standard nonautomation flats rate category. In other words, the savings estimate is based on the letter/flat cost differential. The benchmarks for the Standard automation rate categories are other rate categories as shown below in Table 1.

b. CRA MAIL PROCESSING UNIT COSTS

Separate CRA mail processing unit costs have been obtained for the nonautomation and automation rate categories. Unlike the First-Class Mail rate structure, Standard nonautomation presort has two rate categories: nonautomation basic and nonautomation 3/5-digit. Therefore, cost models must also be used to de-average the costs for Standard nonautomation presort letters.

c. COST MODELS

As with First-Class letters, nonautomation presort models have been included that isolate the costs for machinable and nonmachinable mail pieces at each presort level in order to support the Postal Service's proposal to institute a nonmachinable surcharge. Aggregate costs have then been developed for each of the two rate categories.

In addition, four cost models have been created for the automation presort rate categories: automation mixed AADC, automation AADC, automation 3-digit, and automation 5-digit.

[62] Docket No. R2000-1, PRC-LR-12.

d. WORKSHARING RELATED SAVINGS CALCULATIONS

The worksharing related savings are calculated using the same methodology relied upon by the Commission in Docket No. R2000-1:[63]

[(Benchmark Worksharing Related Mail Proc Unit Costs) + (Delivery Unit Costs)] -
[(Rate Category Worksharing Related Mail Proc Unit Costs) + (Delivery Unit Costs)]
=Worksharing Related Savings

D. LETTERS AND CARDS RESULTS

The total mail processing unit cost estimates and the worksharing related savings estimates for First-Class Mail letters and cards and Standard Mail letters are displayed below in Table 1.[64]

[63] Docket No. R2000-1, USPS PRC-LR-12.
[64] Docket No. R2001-1, USPS LR-J-60, pages 1, 2 and 55.

TABLE 1:
LETTERS AND CARDS TOTAL MAIL PROCESSING UNIT COST ESTIMATES AND WORKSHARING RELATED SAVINGS ESTIMATES

RATE CATEGORY	TOTAL MAIL PROCESSING UNIT COST (CENTS)	WORK SHARING RELATED SAVINGS (CENTS)*	RATE CATEGORY BENCHMARK
FIRST-CLASS MAIL LETTERS			
Nonautomation Letters	14.212	(4.834)	Bulk Meter Mail Letters
Automation Mixed AADC Letters	4.904	5.091	Bulk Meter Mail Letters
Automation AADC Letters	4.177	5.966	Bulk Meter Mail Letters
Automation 3-Digit Letters	3.897	6.282	Bulk Meter Mail Letters
Automation 5-Digit Letters	2.946	7.419	Bulk Meter Mail Letters
Automation Carrier Route Letters	2.003	1.636	Automation 5-Digit Letters (CSBCS/Manual Sites)
FIRST-CLASS MAIL CARDS			
Nonautomation Cards	3.228	---	---
Automation Mixed AADC Cards	2.496	0.557	Nonautomation Cards
Automation AADC Cards	2.138	1.012	Nonautomation Cards
Automation 3-Digit Cards	2.001	1.173	Nonautomation Cards
Automation 5-Digit Cards	1.533	1.762	Nonautomation Cards
Automation Carrier Route Cards	1.069	0.821	Automation 5-Digit Cards (CSBCS/Manual Sites)
STANDARD MAIL LETTERS			
Nonautomation Basic Letters	13.037	10.797	Nonautomation Basic Flats
Nonautomation 3/5-Digit Letters	12.148	0.679	Nonautomation Basic Letters
Automation Mixed AADC Letters	5.044	2.425	Nonautomation Basic Letters (Machinable Mixed AADC)
Automation AADC Letters	4.326	3.203	Nonautomation Basic Letters (Machinable AADC)
Automation 3-Digit Letters	4.048	3.077	Nonautomation 3/5 Letters (Machinable 3-Digit)
Automation 5-Digit Letters	3.106	4.093	Nonautomation 3/5 Letters (Machinable 5-Digit)

***** The worksharing related savings include both mail processing and delivery savings. For details see Docket No. R2001-1, USPS LR-J-60, pages 1, 2 and 55.

IV. QBRM WORKSHARING RELATED SAVINGS ESTIMATE

In Docket No. R97-1, the Postal Service proposed that a 3-cent discount be extended to Qualified Business Reply Mail (QBRM) letters and cards.[65] This discount was based on an analysis conducted in my testimony that measured a 4.016-cent savings.[66] That savings was calculated to be the difference in mail processing costs between a preapproved, prebarcoded First-Class Mail reply mail piece and a handwritten First-Class Mail reply mail piece.[67] Cost models were developed that captured mail processing costs up to the point where each mail piece received its first sortation on a BCS.[68] The worksharing related savings measured between the two mail pieces was driven by the fact that handwritten mail pieces incurred additional costs as they were processed through the RBCS.[69]

In Docket No. R2000-1, witness Campbell was responsible for updating this cost study.[70] In my discussions with witness Campbell and his manager, I suggested that the Docket No. R97-1 study could be expanded to include costs up to the point that a preapproved, prebarcoded reply mail piece and a handwritten reply mail piece were isolated in the incoming primary operation. The incoming primary operation is normally where QBRM would be isolated so that it could be routed to the operation(s) where those mail pieces would be sorted, counted, rated, and billed.[71] As a part of witness Campbell's testimony, the analysis was expanded beyond the incoming primary operation and included incoming secondary costs as well.[72]

In retrospect, it is apparent that the extension of the analysis beyond the incoming primary operation should not have been made. QBRM mail pieces are typically addressed to "phantom" post office box numbers using specific ZIP Codes for a given plant. These mail pieces are isolated in one or more bins on an incoming primary BCS operation and routed to a downstream operation where they are further sorted to permit number. For purposes of this discussion, I will assume that BRMAS is used to

[65] Docket No. R97-1, USPS-T-32, page 7 at 2-4.
[66] Docket No. R97-1, USPS-T-23, Exhibit USPS-T-23D.
[67] Docket No. R97-1, USPS-T-23, page page 2 at 12-14.
[68] Docket No. R97-1, USPS-T-23, page 3 at 8-10.
[69] Docket No. R97-1, USPS-T-23, page 11 at 5-6.
[70] Docket No. R2000-1, USPS-T-29, pages 38-40.
[71] Counting, rating, and billing costs are covered by various fees. The cost studies for these fees can be found in Section VII of this testimony.
[72] Docket No. R2000-1, USPS-T-29, page 39 at 5-9.

perform that sortation. The term "BRMAS" actually refers to the software used to sort QBRM and does not refer to a unique MODS operation number. In fact, most BRMAS activity is charged to incoming secondary operation numbers. Were a handwritten reply mail piece used as an alternative and addressed to the same post office box, it would undergo the same processing steps. Although it would not be processed using the BRMAS software, it would be processed in an incoming secondary box section operation. In other words, these mail pieces would incur the same "incoming secondary" sortation costs. Accordingly, these costs should not have been included in the analysis.

The incoming secondary costs witness Campbell measured for the QBRM and handwritten reply mail pieces were 0.890 and 2.391 cents, respectively.[73] Therefore, the inclusion of these costs alone was responsible for 1.501 cents of the total model cost difference (2.391 - 0.890). The incoming secondary cost difference represented 54 percent of the total model cost difference [1.501 / (6.600 - 3.840)]. If the incoming secondary costs for both cost models had been set to zero, the overall savings would have decreased to 1.541 cents. In this docket, I have corrected this error. I have developed QBRM and handwritten reply mail cost models that are more consistent with those used in Docket No. R97-1. The test year worksharing related savings estimate from this analysis is 1.647 cents. [74]

As I stated earlier in this testimony, it should come as no surprise that the automation investments made by the Postal Service during the last decade are now having an effect on costs. My cost model can be used to illustrate this point. If the MLOCR-ISS/RCR finalization rate for handwritten mail is changed to 25 percent, the savings are 5.504 cents.[75] When the MLOCR-ISS/RCR finalization rate is increased to 69.03 percent, those savings decrease to 2.565 cents.[76] When the MLOCR-ISS/RCR finalization rate is increased to that forecast in the test year (82.77 percent), the savings decrease to 1.647 cents.[77]

[73] Docket No. R2000-1, USPS LR-I-160
[74] Docket No. R2001-1, USPS LR-J-60, pages 10-14.
[75] This was the RCR finalization rate when the RCR system was first deployed.
[76] This is the RCR finalization rate associated with the RCR 2000 project. See Docket No. R2000-1, USPS LR-I-164.
[77] Docket No. R2001-1, USPS LR-J-62.

V. NONSTANDARD SURCHARGE ADDITIONAL COST ESTIMATES

In Docket No. R2000-1, I presented an updated nonstandard surcharge cost study that attempted to address criticisms that had surfaced in the previous docket.[78] Despite that fact, the Postal Service's nonstandard surcharge proposal and supporting cost study again drew criticism from one intervening party. The Office of the Consumer Advocate (OCA) challenged some of the assumptions in the cost model and proposed that the nonstandard surcharge be eliminated for nonstandard letter mail pieces that, by definition, did not meet the aspect ratio requirement.[79] I rebutted several elements of the OCA's proposal.[80] The Commission ultimately recommended that the nonstandard surcharge remain unchanged.[81] After careful evaluation, I have modified some elements of the cost study based on the OCA's concerns. These modifications, however, have little impact on the results.

A. NONSTANDARD-SIZE LETTER DEFINITION

The Postal Service first proposed a specific nonstandard surcharge rate for First-Class single-piece and presort mail pieces in Docket No. R78-1. The surcharge still exists today and applies to those mail pieces that weigh one ounce or less and do not meet one or more of the following criteria: (1) length less than or equal to 11.5", (2) height less than or equal to 6.125", (3) thickness less than or equal to 0.25", and (4) aspect ratio (length/height) between 1.3 and 2.5, inclusive.

The nonstandard-size letter definition is the cornerstone upon which today's automated letter mail processing network has been built. In fact, the current generation of letter mail processing equipment has been designed around these standards. In addition, many other countries maintain standard-size letter definitions that are similar, if not more strict.[82]

The Advanced Facer Canceler System Input Sub System (AFCS-ISS) can be used to illustrate this point. The AFCS-ISS is used to cancel First-Class Mail single-piece "collection" letters in Operation 015. The cancellation operation is one of the first operations through which many First-Class Mail pieces are processed in a mail

[78] Docket No. R2000-1, USPS-T-24, pages 19-24.
[79] Docket No. R2000-1, Tr. 22/10147-10167.
[80] Docket No. R2000-1, Tr. 45/19675-19682.
[81] PRC Op. R2000-1, paragraphs 5137-5139.
[82] Docket No. R2000-1, Tr.45/19676.

processing plant. Given this fact, the AFCS has several features designed to cull out mail pieces that exceed the dimensions of a standard-size letter. The nonstandard mail pieces are culled from the remaining single-piece mail pieces because the AFCS-ISS and the other letter processing equipment have been designed to accommodate standard-size letter mail.

The "Advanced Facer/Canceler Operating System Guidelines" specifically show the maximum length (11.5"), height (6.125"), and thickness (0.25") dimensions that can be processed on the AFCS.[83] These guidelines also include a description of the culling mechanisms that isolate nonstandard mail pieces from the single piece mail stream.

1. THICKNESS

Conveyors that contain the Dual Pass Rough Cull (DPRC) system often feed the AFCS-ISS. The DPRC system uses two separate rollers to cull out mail that is over ½" thick. The two-roller system minimizes the chance that some mail pieces might be culled from the system in error (e.g., pieces stacked on top of each other). The AFCS-ISS system itself also has two "overthick separators" that are used to cull out thick mail. These separators remove mail that is over ¼" thick. Once again, a two-roller system is used to minimize the possibility that some mail pieces are erroneously culled from the system.

2. HEIGHT

Mail that meets the thickness requirement then moves on to an edging channel. The edging channel consists of a series of rollers and flaps that align each mail piece so that it rests on its long edge. This channel then feeds the flats extractor. The flats extractor consists of a pair of vertical rollers that grasp mail pieces taller than 6.125" and remove them from the system.

3. LENGTH

Mail pieces that have met both the height and thickness standards eventually pass by a series of light barriers in the "fine cull" mechanism. The first two light barriers measure the length of each mail piece. Any mail pieces that exceed 11.5" in length are removed from the system and directed to a reject hamper.

[83] Docket No. R2000-1, USPS LR-I-154, Handbook PO-424, Figure 1.1-1.

4. ASPECT RATIO

The AFCS-ISS does not have a mechanism that can completely cull out mail pieces that do not meet postal aspect ratio standards. Some mail pieces with nonstandard aspect ratios may be rejected on the AFCS-ISS because the flaps and rollers that are designed to force each mail piece onto its “long edge” (i.e., the bottom or top of the mail piece) will have forced the mail piece onto its side instead. As a result, the sensors may not be able to locate the stamps, meter marks, or indicia and the mail piece could be sorted to the reject bin.

Mail pieces with nonstandard aspect ratios are problematic because they can “tumble” on postal equipment, so that the address on the mail piece may not be aligned properly. In these situations, the equipment will not be able to read the address and/or barcode and the mail piece will be rejected. During recent field observations, I have riffled through AFCS-ISS reject bins and found low aspect ratio letters that "tumbled" on those machines. Even mail pieces that contain postal-applied barcodes can be rejected in subsequent operations after the barcode has been applied. Thus, mail pieces with nonstandard aspect ratios may be processed correctly on the AFCS-ISS and therefore be routed to downstream automation operations. However, these mail pieces could still be rejected by any downstream mail processing equipment at some later point because of their nonstandard aspect ratios.

As stated earlier, the Commission supported the application of the nonstandard surcharge to low aspect ratio mail:

> The Commission has no doubt that a low aspect ratio mail piece may be successfully processed on some pieces of mail processing equipment. However, this fact is not sufficient to recommend a classification change that may adversely effect overall mail processing operations.[84]

B. MANUAL LETTER PROCESSING ASSUMPTION

One-ounce mail pieces that exceed the standard letter thickness, height, or length dimension requirements change “shape” status (i.e., they become flats or parcels). Therefore, nonstandard one-ounce mail pieces that are not technically flats or parcels are, by definition, letters that do not meet the aspect ratio requirement.

[84] PRC Op. R2000-1, paragraph 5139.

Mail pieces that do not meet aspect ratio requirements tend to cause problems when sorted on postal equipment. In some cases, nonstandard letters are successfully processed through one or more operations. The presence of a barcode on a delivered nonstandard letter shows that this letter has been successfully processed on either the Multi Line Optical Character Reader Input Sub System (MLOCR-ISS) or the Output Sub System (OSS); it does not mean that the letter has been successfully processed on automation through the entire mail processing network.

In order to fully understand how the aspect ratio affects mail processing operations, it would be necessary to observe all nonstandard letter operations at both the originating and destinating facilities. In other words, the letters with nonstandard aspect ratios would have to be followed through the entire postal network. Such an undertaking would be costly. It is not likely that the benefits obtained from such a study would outweigh the costs.

In Docket No. R97-1, I assumed that all nonstandard letters are processed manually, despite the fact that this may not have always been the case. In the current docket, I have adopted the assumption of OCA witness Callow that 75% of nonstandard letters are accepted by postal mail processing equipment.[85] This assumption, however, has little impact on the results, as nonstandard mail pieces are overwhelmingly flat shaped. In other words, the percentage of nonstandard pieces that are flat-shaped is the primary cost driver in the nonstandard surcharge cost study.

C. CRA MAIL PROCESSING UNIT COSTS

In Docket No. R97-1, Postal Service witness Daniel used average CRA mail processing unit costs to calculate the nonstandard surcharge costs.[86] Her use of this average cost data as a proxy for mail pieces that should, by definition, weigh less than one ounce drew criticism.[87]

The Docket No. R2000-1 testimony of witness Daniel responded to that criticism by reporting mail processing unit costs for mail pieces (including letters, flats, and parcels) that weigh less than one ounce.[88]

[85] Docket No. R2000-1, Tr. 22/10162 at 16.
[86] Docket No. R97-1, Exhibit USPS-T-43C.
[87] Docket No. R97-1, NDMS-T-1, page 24.
[88] Docket No. R2000-1, USPS-T-28.

However, an analysis of that data indicated that it was difficult to precisely estimate CRA mail processing unit costs by both ounce increment and shape for low volume categories such as nonstandard First-Class Mail pieces. Therefore, in order to be conservative, I used average mail processing unit costs.[89] I have done so again in the instant proceeding.

D. COST STUDY RESULTS

The FY 2000 volume percentages by shape are used to calculate a weighted nonstandard cost for both nonstandard single piece letters and nonstandard presort letters.[90] The single-piece formula is shown below.

Single-Piece Nonstandard Cost Formula:

(Manual SP Letters Unit Cost – Avg SP Letters Unit Cost) * (% SP Letters)
+ (Avg SP Flats Unit Cost – Avg SP Letters Unit Cost) * (% SP Flats)
+ (Avg SP Flats Unit Cost – Avg SP Letters Unit Cost) * (% SP Parcels)

In terms of the impact on the final cost result, the inputs used in this formula are conservative because the data for flats and parcels weighing less than one ounce were not used. Average costs were used. In addition, it was assumed that 75% of the nonstandard letters would be successfully processed on automation.

The majority of nonstandard mail pieces are flats. Therefore, this component has the biggest impact on the cost results. The flats component relies on average CRA mail processing unit costs which are lower in value than those costs for flats weighing less than one ounce. Therefore, the use of average mail processing unit cost data leads to conservative results.

I also use the flats CRA mail processing unit costs as a proxy in the parcel component of the formula. Parcel CRA mail processing unit costs are not used because of the relatively low mail volumes, and therefore tallies, for nonstandard First-Class single-piece parcels and presort parcels. Once again, the use of average flats data leads to conservative results.

[89] Docket No. R2000-1, USPS-T-24, page 22 at 19-20.
[90] Docket No. R2001-1, USPS LR-J-60.

The formula that is used to calculate the additional costs required to process First-Class presort nonstandard mail pieces is similar to that used for First-Class single-piece nonstandard mail pieces. This formula differs, however, in that it relies on a letter presort factor to estimate the impact that presorting has on flats and parcels costs.

Presort Factor =
(Avg Presort Letters Unit Cost / Avg Single-Piece Letters Unit Cost)

Presort Nonstandard Cost Formula:

(Manual Prst Letters Unit Cost – Avg Prst Letters Unit Cost) * (% Prst Letters)
+ (Avg SP Flats Unit Cost – Avg SP Letters Unit Cost) * (Prst Factor) * (% Prst Flats)
+ (Avg SP Flats Unit Cost – Avg SP Letters Unit Cost) * (Prst Factor) * (% Prst Parcels)

Once again, the inputs used in this formula lead to conservative results. Had the presort mail processing unit costs for flats and parcels been used, the results would have been higher.

The results from my cost study show that the test year additional costs required to process First-Class nonstandard single-piece and nonstandard presort mail pieces are estimated to be 23.720 cents and 9.365 cents, respectively (USPS LR-J-60, page 45).

VI. NONMACHINABLE SURCHARGE ADDITIONAL COST ESTIMATES

In this docket, the Postal Service proposes that First-Class Mail and Standard Mail nonmachinable nonautomation presort letters be assessed a surcharge to cover the additional costs required to process these mail pieces manually.[91] Data from the letter cost studies are used to evaluate the additional costs required to process nonmachinable letters.[92]

A. 25-35 PERCENT OF NONAUTOMATION PRESORT LETTERS MUST BE PROCESSED MANUALLY

Nonautomation presort letters can be entered in "OCR UPGR" or "NON-OCR" trays. There is currently no rate distinction between these two entry formats. There are only mail preparation differences. In addition, some mail in "NON-OCR" trays can be processed on automated letter mail processing equipment. In many plants, employees cull this machinable mail from "NON-OCR" trays and route it to automation operations.

Past mail characteristics studies have shown that 25-35% of the total nonautomation presort letter mail volume must be processed manually.[93] In addition, mailers can now specify on tray labels that they want their mail processed manually, whether it could otherwise be processed on automation or not.[94] Consequently, it is possible that the percentage of nonautomation presort letters that must be processed manually has increased over time. Despite the fact that these mail pieces must be processed manually, they still qualify for the nonautomation presort discounts.

B. THE COST DATA SHOW THAT NONMACHINABLE NONAUTOMATION PRESORT LETTERS COST MORE TO PROCESS

The cost data show that nonmachinable nonautomation presort letters do, indeed, cost significantly more to process than do machinable nonautomation presort letters. For both First-Class Mail and Standard Mail letters, I have created eight separate cost models based on the machinability and presort level of the mail pieces. These cost models are: nonmachinable mixed AADC, nonmachinable AADC,

[91] Docket No. R2001-1, USPS-T-29 Section IV.C.1.d and USPS-T-32 Section II.A.1, respectively.
[92] Docket No. R2001-1, USPS LR-J-60, pages 6 and 59.
[93] Docket No. R97-1, USPS LR-H-105, LR-H-185, and LR-H-195.
[94] Postal Bulletin 22016 (1-27-00).

nonmachinable 3-digit, nonmachinable 5-digit, machinable mixed AADC, machinable AADC, machinable 3-digit, and machinable 5-digit.[95]

The total mail processing and delivery unit costs for the nonmachinable letters at a given presort level are then compared to the costs for the machinable letters at that corresponding presort level. In all cases, there are significant cost differences. I have also compared the aggregate mail processing and delivery unit costs for all nonmachinable letters to the same costs for all machinable letters for each rate category. The estimated additional test year cost difference for processing First-Class Mail nonmachinable nonautomation presort letters is 12.812 cents (USPS LR-J-60, page 6). The estimated additional test year cost differences for processing Standard Mail nonmachinable nonautomation basic presort letters and nonmachinable nonautomation 3-/5-digit presort letters are 15.572 cents and 8.360 cents, respectively (USPS LR-J-60, page 59).

[95] Docket No. R2001-1, USPS LR-J-60.

VII. FEE COST STUDIES

This section of my testimony covers the cost studies that support several special service fees. These fees are: the annual permit fee, the annual accounting fee, the QBRM quarterly fee, the non-letter size BRM monthly fee, the high volume QBRM per-piece fee, the basic QBRM per-piece fee, the high volume BRM per-piece fee, the basic BRM per-piece fee, and the non-letter size BRM per-piece fee. Unless otherwise noted, the cost estimates for these fees can be found in USPS LR-J-60, page 93.

A. ANNUAL PERMIT FEE

Mailers have the option of using a permit imprint (e.g., a BRM permit) to pay for postage, rather than using either stamps or meter strips. Permits must be obtained at the post office point-of-entry. The requesting mailer can apply by submitting Postal Form 3615, Mailing Permit Application and Customer Profile. The mailer is assessed a fee for the costs related to this application process.

The cost methodology that has been used to estimate these costs remains unchanged from that used in Docket No. R2000-1.[96] The cost study quantifies three elements related to the application process: permit issuance, literature and pamphlets, and permit revocation. The test year cost estimate for the annual permit fee is $119.377.

B. ANNUAL ACCOUNTING FEE

In order to qualify for some special service fee categories, mailers must establish an advance deposit account. After postal clerks have performed all counting, rating, and billing tasks, they then deduct the appropriate funds from these accounts. From time to time, inadequate funds are available such that postage due clerks must contact the mailer. The annual accounting fee covers such costs related to the oversight and maintenance of the accounts, including those used for Business Reply Mail (BRM), bulk parcel return service, merchandise return service, and shipper paid forwarding.

The cost methodology remains unchanged from that used in Docket No. R2000-1. The test year cost estimate for the annual accounting fee is $379.530.

[96] Docket No. R2000-1, USPS LR-I-160.

C. QBRM QUARTERLY FEE

In Docket No. R2000-1, a new rate category was established for high volume QBRM mailers. A premise for this change was the concept that the rating and billing costs for this mail were fixed in nature. As such, a quarterly fee was established to cover the rating and billing costs for these mail pieces.

The cost methodology remains unchanged from that used in Docket No. R2000-1. The test year cost estimate for the QBRM quarterly fee is $767.403.

D. NON-LETTER SIZE BRM MONTHLY FEE

The non-letter size BRM rate category was first established in Docket No. MC99-2. This mail typically consists of BRM that contains film and/or film canisters that are being sent to film processors. The mail pieces are weight averaged in bulk using computers and special software that have been set up at participating facilities. The non-letter size BRM monthly fee was established to cover the costs related to billing and sampling. The sampling is performed periodically to ensure that weight averaging conversion factors are current.

The cost methodology remains unchanged from that used in Docket No. R2000-1. The test year cost estimate for the non-letter size BRM monthly fee is $537.376.

E. HIGH VOLUME QBRM PER-PIECE FEE

QBRM mail pieces must meet specific Postal Service prebarcoding standards. In addition, the postage and fees must be paid using an advance deposit account. As stated previously, high volume QBRM mailers are assessed a quarterly fee to cover the fixed rating and billing costs. The per-piece fee covers the counting costs above and beyond any related activities (e.g., sorting) that are covered by the First-Class postage.

The cost methodology used in this docket contains modifications that address concerns raised in the previous docket.[97] The issues addressed here include: BRMAS costs, counting methods, manual sorting productivity, and weight averaging productivity.

1. BRMAS COSTS

In Docket No. R2000-1, KeySpan witness Bentley modified the cost study developed by witness Campbell by completely removing any costs related to the Business Reply Mail Accounting System (BRMAS) operation. Witness Bentley claimed

[97] Docket No. R2000-1, Tr. 29/14045-14054.

that sorting costs were included in the First-Class postage.[98] This claim is not entirely accurate.

The BRMAS operation is basically an "incoming secondary" for BRM mail pieces that are processed on automation, and incoming secondary costs are included in the First-Class postage. However, there are specific tasks associated with the BRMAS operation that are not found in a typical incoming secondary operation. Namely, the mail processing clerks must print out the bill on the system computer. In talking to field employees, I learned that this task alone can take 20-30 minutes depending on the number of permits. This is time that the machine is down and cannot be used for another operation. In addition, these bills must be separated and placed with the corresponding mail pieces before they are sent to the postage due section where the postage due clerk deducts the appropriate accounts.

In Docket No. R97-1, these tasks were included in a second productivity referred to as "additional workload for BRMAS."[99] Therefore, that productivity has been adjusted for volume variability and is included in the per-piece fee cost studies.

2. COUNTING METHODS

A survey was conducted under my direction which sought to determine the percentage of mail that was processed using each of the following counting methods: BRMAS software, other software, End-of-Run (EOR) reports, counting machines, manual counting, and weight averaging.

Fiscal Year (FY) 2000 Corporate Business Customer Information System (CBCIS) data were used to identify the top 150 BRM accounts. In addition, the largest volume BRM account, which does not register in CBCIS, was also included. Employees were contacted from each facility at which this BRM destinated and were asked how the mail for each account was processed. The mail volumes that were processed using each method were summed and divided by the total volume in order to estimate the percent of mail volume that is processed using each method.[100]

[98] Docket No. R2000-1, Tr. 29/14045.
[99] Docket No. R97-1, USPS LR-H-213.
[100] Docket No. R2001-1, USPS LR-J-60.

3. MANUAL COUNTING PRODUCTIVITY

In the past, a manual sorting productivity has been used as a proxy for manual counting.[101] In this docket, I have used the productivity for "riffling" letter mail (MODS operation 029) as a proxy for manual counting. Postal clerks often riffle, or "flip" through trayed mail pieces with their fingers, for various reasons. For example, they may be searching for mis-sorts. This productivity figure is higher than a manual sorting productivity where an employee must read each mail piece and then case that mail piece in the appropriate letter case holdout. As such, it is a better approximation of counting costs. The FY 2000 riffling productivity was 2,134 pieces per hour. That figure was adjusted using a volume variability factor and entered as an input to the cost model representing the manual counting productivity.

4. WEIGHT AVERAGING

In this docket, a weight averaging productivity was developed using data from the predetermined time system Methods Time Measurement (MTM). This analysis was based on direct observation of a weight averaging operation involving QBRM letters.

A "normal" time estimate (minutes per piece) was developed which included the time to perform the following tasks: daily setup, daily weight averaging one tray, daily weight averaging one package, daily counting of residue pieces, daily teardown, and bi-weekly conversion factor development. A personal, fatigue and delay allowance was applied to the normal time in order to estimate the "standard" time (minutes per piece).[102] The standard time estimate was then converted to hours per piece by dividing by 60 minutes per hour. The productivity was equivalent to one divided by the standard hours per piece estimate. The weight averaging productivity that was calculated in this analysis was 36,351 pieces per hour. That figure was adjusted using a volume variability factor and entered as an input to the cost model representing the weight averaging productivity.

The remaining elements of this cost model, outside of the four modifications discussed above, remain unchanged from those used in Docket No. R2000-1. The test year cost estimate for the high volume QBRM per-piece fee is 0.387 cents.

[101] Docket No. R2000-1, USPS-T-29, page 13 at 9.
[102] A P-F-D factor of 15% was applied. This figure is fairly standard in industrial engineering analyses. Note: Standard time = normal time x P-F-D factor.

F. BASIC QBRM PER-PIECE FEE

For those QBRM mailers that do not have the mail volume sufficient to justify paying the quarterly fee, the basic QBRM rate category can be used as an alternative. Basic QBRM mail pieces must also meet Postal Service prebarcoding standards. In addition, the postage and fees must be paid using an advance deposit account. The basic QBRM per-piece fee covers the costs for counting, rating, and billing these mail pieces.

The cost methodology used in this docket includes the same modifications described above for the high volume QBRM rate category, with the exception that the counting method percentages from Docket No. R2000-1 are again used.[103] The test year cost estimate for the basic QBRM per-piece fee is 3.929 cents.

G. HIGH VOLUME BRM PER-PIECE FEE

For those mailers that cannot, or choose not to, meet Postal Service prebarcoding standards, the high volume BRM rate category can be used as an alternative. However, the postage and fees must still be paid using an advance deposit account. The high volume BRM per-piece fee covers the costs for counting, rating, and billing these mail pieces.

The cost methodology used in this docket includes the same modifications described above for the high volume QBRM rate category, with the exception that the counting method percentages from Docket No. R2000-1 are again used. The test year cost estimate for the high volume BRM per-piece fee is 5.271 cents.

H. BASIC BRM PER-PIECE FEE

For smaller volume mailers that choose not to pay an annual accounting fee, the basic BRM rate category can be used as an alternative. The basic BRM per-piece fee covers the costs for counting, rating, billing, and collecting funds for these mail pieces.

In addition to the modifications described for the high volume QBRM rate category, the cost methodology used in this docket includes one additional modification. A high percentage of these mail pieces (79.3%) have their postage and fees paid using postage due accounts. Postage due accounts also require some form of account maintenance and oversight, similar to the advance deposit account. As such, I have

[103] Docket No. R2000-1, KE-T-1, Exhibit KE-1B.

included costs from the annual accounting fee to reflect that fact. These costs were divided by an estimated 1,000 pieces per account per year. In addition, these costs were multiplied by the percentage of the total mail volume in which the postage and fees were paid using postage due accounts. The test year cost estimate for the basic BRM per-piece fee is 55.847 cents.

I. NON-LETTER SIZE BRM PER-PIECE FEE

The non-letter size BRM per-piece fee covers the costs for counting these mail pieces. The weight averaging method is used to count non-letter size BRM. As stated previously, this rate category is used by film processors at specific postal facilities that have been set up to accommodate the weight averaging operation. The mail is weighed and a piece count is derived using conversion factors that are updated regularly.

The cost methodology remains unchanged from that used in Docket R2000-1. The test year cost estimate for the non-letter size BRM per-piece fee is 0.586 cents.