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

NOTICE OF THE UNITED STATES POSTAL SERVICE OF FILING OF REVISION TO THE DIRECT TESTIMONY OF ABDULKADIR M. ABDIRAHMAN(ERRATA) (May 24, 2005)

The United States Postal Service hereby provides notice that it is filing revisions to the Direct Testimony of Abdulkadir M. Abdirahman. The revisions reflect the incorporation into witness Abdirahman's testimony of Section III of witness Moser's original testimony on Address Correction Service. See Notice of United States Postal Service on Replacement of Witness Moser (May 20, 2005). The revisions also reflect that witness Page will take over witness Moser's testimony on final adjustments. Finally, the revisions reflect changes to the testimony that result from the revisions to library references USPS-K-48 and USPS-K-110, which were filed today. Because these changes impact numerous pages, the entire testimony has been refiled.

Specifically, the testimony amends the Table of Contents to reflect the addition of the Address Correction Service and the sponsorship of Attachment 1 to USPS-K-59 on Address Correction Service. Page 1 lines 7 and 30 replace witness Page for witness Moser. Page 1, line 12, adds that witness Abdirahman will also sponsor Attachment 1 to USPS-K-59. Page 1, line 18 removes the reference to witness Taufique since he does not sponsor the USPS-LR-K-77. Page 2, line 15, adds USP-J-69 as a data source.

1

Page 16, Table 1 is revised to reflect the updated unit cost and work sharing related savings from USPS-LR-K-48. Page 17 inserts a new section on Address Correction Service, which includes a table depicting the Test Year ACS Costs. Page 18, Table 2 is renumbered to Table 3 and now reflects the updated numbers from USPS-LR-K-48 and USPS-LR-K-110. It also adds a comparison of the Postal Service version and Postal Rate Commission version of ACS costs.

The revised testimony is attached.

Respectfully submitted,

UNITED STATES POSTAL SERVICE

By its attorneys:

Daniel J. Foucheaux, Jr. Chief Counsel, Ratemaking

Nan K. McKenzie Attorney

475 L'Enfant Plaza West, S.W. Washington, D.C. 20260–1137 (202) 268–3089; Fax –5402 May 24, 2005

CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing document upon all participants of record in this proceeding in accordance with section 12 of the Rules of Practice.

Nan K. McKenzie

Revised 05/24/05

USPS-T-21

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

2

POSTAL RATE AND FEE CHANGES : PURSUANT TO PUBLIC LAW 108-18 :

Docket No. R2005-1

DIRECT TESTIMONY OF ABDULKADIR M. ABDIRAHMAN ON BEHALF OF UNITED STATES POSTAL SERVICE

1	TABLE OF CONTENTS	
2 3	AUTOBIOGRAPHICAL SKETCH	iii
4 5	I. PURPOSE AND SCOPE OF TESTIMONY	1
6 7	II. ASSOCIATED LIBRARY REFERENCE	1
8 9	III. GUIDE TO TESTIMONY AND SUPPORTING DOCUMENTATION	1
10 11	IV. DATA SOURCES	2
12 13 14	V. LETTER/CARD TOTAL MAIL PROCESSING UNIT COST ESTIMATES AND WORKSHARING RELATED SAVINGS ESTIMATES	2
15 16 17	A. TOTAL MAIL PROCESSING UNIT COST METHODOLOGY	3
17 18 19	1. CRA MAIL PROCESSING UNIT COSTS	3
20 21 22 23 24 25 26	2. MODEL-BASED MAIL PROCESSING UNIT COSTS a. MAIL FLOW SPREADSHEET i. ENTRY PROFILE ii. COVERAGE FACTORS iii. ACCEPT AND UPGRADE (FINALIZATION) RATES iv. MAIL FLOW DENSITIES v MISCELLANEOUS FACTORS	4 5 5 6 7
27 27 28 29 30 31 32 33 34 25	 b. COST SPREADSHEET i. MARGINAL (VOLUME VARIABLE) PRODUCTIVITIES ii. WAGE RATES iii. "PIGGYBACK" (INDIRECT COST) FACTORS iv. PREMIUM PAY FACTORS v. BUNDLE SORTING COSTS vi. DPS PERCENTAGES 	8 9 9 9 9 9 10 10
35 36 27	c. CRA ADJUSTMENTS	10
37 38 20	B. WORKSHARING RELATED SAVINGS COST METHODOLOGY	11
40 41 42 43 44	1. FIRST-CLASS MAIL LETTERS a. BENCHMARKS b. CRA MAIL PROCESSING UNIT COSTS c. COST MODELS d. WORKSHARING RELATED SAVINGS CALCULATIONS	11 11 12 12 13
45 46	2. FIRST-CLASS MAIL CARDS	13

1 2 3 4	a. BENCHMARKS
5	3. STANDARD LETTERS
6	a. BENCHMARKS
7	b. CRA MAIL PROCESSING UNIT COSTS
8	C. COST MODELS
9	d. WORKSHARING RELATED SAVINGS CALCULATIONS 15
10 11 12	C. LETTERS AND CARDS RESULTS 15
12 13 14	VI. NONMACHINABLE SURCHARGE ADDITIONAL COST ESTIMATES 17
14	VIL ADDRESS CORRECTION SERVICE 17
15	A Introduction 17
17	B. Methodology
18	C. Results
19	
20 21	VIII. PROPOSED CHANGES RELATIVE TO PRC METHODOLOGY 18
22	LIST OF TABLES
23	
24 25	TABLE 1: LETTERS AND CARDS TOTAL MAIL PROCESSING UNIT COSTESTIMATES AND WORKSHARING RELATED SAVINGS ESTIMATES 16
26 27	TABLE 2: TEST YEAR ACS COSTS
28 29 30	TABLE 3: USPS and PRC LETTERS AND CARDS TOTAL MAIL PROCESSING UNIT COST ESTIMATES AND WORKSHARING RELATED SAVINGS ESTIMATES
31 32 33 34 35	CATEGORY 2 LIBRARY REFERENCEUSPS-LR-K-48 CATEGORY 2 LIBRARY REFERENCEUSPS-LR-K-68 CATEGORY 2 LIBRARY REFERENCE

	DI
ABD	ULI

2

3

4

5

6

DIRECT TESTIMONY OF ABDULKADIR M. ABDIRAHMAN

AUTOBIOGRAPHICAL SKETCH

My name is Abdulkadir M. Abdirahman. I have testified before the Postal Rate Commission on two separate occasions. In Docket No. R2001-1, I testified before the Commission on the costing of Special Services. In Docket No. MC2005-1, I testified as a cost witness concerning Premium Forwarding Service (PFS).

I am an economist for the Special Studies Division of Corporate Financial 11 Planning since 2001. I began working for the Postal Service in 1989 as a letter carrier 12 and later became a distribution and retail window clerk. In that capacity, I was 13 responsible for explaining and selling to postal customers a variety of postal products 14 including the different kinds of Special Services that the Postal Service offers. 15 In the private sector, I worked as an economic consultant for Amal Express 16 International, an export and import firm based in Dubai, United Arab Emirates. In that 17 capacity, I conducted market feasibility cost studies and developed labor cost estimates 18 19 concerning livestock exports. I have also performed consulting work for the United Nations on issues related to peacekeeping deployments in Africa. 20 I earned a Bachelor Degree in Management from National Louis University in 21

Evanston, Illinois in 1990 and a Master Degree in International Transactions with a concentration in International Economics in 1996 from George Mason University in Fairfax, Virginia.

Revised 05/24/05

1 I. PURPOSE AND SCOPE OF TESTIMONY

This testimony presents the Test Year (TY) 2006 First-Class Mail cards and letters and Standard Mail letters mail processing unit cost estimates, worksharing related savings estimates, and nonmachinable surcharge additional cost estimates, which are being provided in light of the Postal Rate Commission's views expressed in Docket No. R94-1, PRC Op., R94-1, Vol. I, at 10. Some of the estimates are also relied upon by witness Page (USPS-T-23) for use in developing the final adjustments.

8

II. ASSOCIATED LIBRARY REFERENCE

I am sponsoring the following Category 2 library references in association with
my testimony: USPS-LR-48, Test Year Letter/Card Processing Cost Models (FCM,
Standard Mail, and Nonmachinable Surcharge), and USPS-LR-K-68, Acceptance Rate
Study. I also sponsor Attachment 1 of Library Reference USPS-LR-K-59 on the Address
Correction Service

14

III. GUIDE TO TESTIMONY AND SUPPORTING DOCUMENTATION

I develop my cost estimates using inputs I obtain from the following witnesses in 15 this case: Witness Smith (USPS-T-13) provides piggyback factors (USPS-LR-K-52) 16 and CRA mail processing unit cost estimates (USPS-LR-53); witness Van-Ty-Smith 17 (USPS-T-11) provides volume variability factors, premium pay factors and deaveraged 18 wage rates (USPS-LR-K-55); witness Kelley (USPS-T-16) provides delivery unit cost 19 estimates (USPS-LR-K-67); and witness Bozzo (USPS-T-12) provides MODS 20 productivities (USPS-LR-K-56). I use billing determinant data from the following 21 Category library 1 reference: (USPS-LR-77). I also sponsor USPS-LR-K-68 as a source 22 for acceptance rate data, which I use to develop the cost estimates in USPS-LR-K-48. 23 My test year cost estimates are provided to witnesses Robinson (USPS-T-27) 24 and Taufique (USPS-T-28); I provide to witness Hatcher (USPS-T-22) operation specific 25 piggyback factors, operation specific volume variability factors and Bulk Metered Mail 26 (BMM) CRA adjustment factor for use in developing the test year cost avoidance for a 27 QBRM piece. I also provide the acceptance data to witness Hatcher. The test year 28 unit cost estimates for automation and nonautomation letters and cards are also relied 29 upon by witness Page (USPS-T-23) for use in developing final adjustments. 30

31

1 IV. DATA SOURCES

Numerous data sources have been used to calculate the cost estimates included
 in this testimony, as indicated below.

Docket No. Data Source Data Description 4 5 R2005-1 USPS-T-21 Electronic Spreadsheets LR-K-48 Acceptance Rates LR-K-68 6 7 **Piggyback Factors** LR-K-52 **CRA Mail Processing Unit Cost Estimates** LR-K-53 8 Wage Rates / Premium Pay Factors 9 LR-K-55 MODS Productivities LR-K-56 10 **Base Year Mail Volumes** LR-K-77 11 **Delivery Unit Cost Estimates** LR-K-67 12 13 R2001-1 Accept and Upgrade Finalization LR-J-62 14 Cost Models for ACS LR-J-69 15 16 R2000-1 Mail Flow Densities USPS-T-24 17 Carrier Route Finalization Rate For Plants USPS-T-24A 18 19 R97-1 20 Standard Regular Mail Characteristics LR-H-105 Accept and Upgrade Rates LR-H-130 21 **First-Class Mail Characteristics** LR-H-185 22 Standard Nonprofit Mail Characteristics LR-H-195 23 AADC Tray Factor LR-H-128 24 25 MC95-1 **Bundle Sorting Productivity** USPS-T-10B 26 Post Office Box Productivities USPS-T-10F 27 Post Office Box Coverage Factor USPS-T-10I 28 **Bundle Sorting Information** USPS-T-10 29 (WP VII) 30 31

32V.LETTER/CARD TOTAL MAIL PROCESSING UNIT COST ESTIMATES AND33WORKSHARING RELATED SAVINGS ESTIMATES

The cost methodology that was used in Docket No. R2001-1 has again been

35 used in this docket to develop letter and card total mail processing unit cost estimates

³⁶ and worksharing related savings estimates by rate category.

A. TOTAL MAIL PROCESSING UNIT COST METHODOLOGY

In past dockets, the Commission has employed a "hybrid" cost methodology that uses both Cost and Revenue Analysis (CRA) mail processing unit costs and modelbased mail processing unit costs to estimate the worksharing related savings.¹ I rely on a hybrid cost methodology in this docket. The total mail processing unit cost estimates and worksharing related savings estimates are summarized below in Table 1 on page 15.

8

1. CRA MAIL PROCESSING UNIT COSTS

My analysis relies upon shape-specific CRA mail processing unit costs.² The
CRA mail processing unit costs are subdivided into 63 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 Management System
(PIMS) or MODS operation number associated with each IOCS tally.

Each cost pool is classified into one of three categories: worksharing related proportional, worksharing related fixed, or non-worksharing related fixed.³

The "worksharing related proportional" cost pools contain the costs for piece or 17 bundle distribution operations that are directly affected by the presorting and/or 18 prebarcoding activities performed by mailers. These cost pools are "proportional" in that 19 the magnitude of the costs, and therefore worksharing related savings, are directly 20 related to the specific level of presorting and/or prebarcoding. In addition, these cost 21 pools contain the costs for the tasks that have actually been modeled. The bar code 22 sorter ("/bcs") cost pool is an example of a worksharing related proportional cost pool. 23 The "worksharing related fixed" cost pools contain costs for other activities that 24 are also affected by worksharing. However, these costs do not vary as a direct result of 25 the specific worksharing options chosen by a given mailer. These costs represent tasks 26 that have not actually been modeled. The business mail entry and verification ("LD79") 27 cost pool is an example of a worksharing related fixed cost pool. As an example, the 28 acceptance and verification unit costs for automation 3-digit and automation 5-digit letter 29

¹ PRC Op., MC95-1 at paragraph 4221.

² Docket No. R2005-1, USPS LR-K-53.

³ Docket No. R2005-1, USPS LR-K-48.

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.

5 The "non-worksharing fixed" category consists of those remaining costs that are 6 not affected at all by the types of worksharing activities covered in this testimony. The 7 Express Mail ("express") cost pool is an example of a non-worksharing related fixed cost 8 pool.

9

2. MODEL-BASED MAIL PROCESSING UNIT COSTS

I have updated the cost models used by witness Miller in Docket No. R2001-1 to de-average an appropriate CRA mail processing unit cost category. Cost models have been developed for each rate category. For example, I have updated 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.⁴ 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.

23

a. MAIL FLOW SPREADSHEET

For this docket, I have used updated mail flow spreadsheets that incorporate recent mail processing changes.⁵ 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 righthand section represents the actual number of physical pieces processed in a given

⁴ The methodology for estimating First-Class Mail cards costs is somewhat different. Card/letter cost ratios are applied to letter model costs using the same methodology that has been used in the past several dockets.
⁵ Docket No. R2005-1, USPS LR-K-48.

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

- 5
- 6

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. R97-1.⁶ Each operation then pulls the "ENTRY POINTS" mail volumes directly into the appropriate cell.

13

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 17 significantly in letter automation technology. In past rate proceedings, much of this 18 technology was in the process of being deployed such that the application of coverage 19 factors had a big impact on the cost model results. In today's environment, these 20 projects have been fully implemented. As a result, equipment coverage factors are no 21 longer required to accurately model letter mail processing operations. Therefore, I do 22 not use them in the letter cost models in my testimony. This methodology is consistent 23 with that used in the Docket No. R2001-1 cost studies. 24

25

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 two sources.

⁶ Docket No. R97-1, USPS LR-H-105, LR-H-185, and LR-H-195.

The Input Sub System (ISS) finalization rates have been taken from engineering 1 studies. The accept and upgrade study was originally conducted for Docket No. R97-1.7 2 Since that time, the Postal Service has continued to improve ability of the Multi-Line 3 Optical Character Reader Input Sub System (MLOCR-ISS) and Remote Computer 4 Read (RCR) systems to finalize mail. Consequently, data from recent engineering 5 studies that measure the aggregate MLOCR-ISS / RCR rate have been used in the mail 6 flow spreadsheets. Separate data were available for mail pieces with machine printed 7 addresses and mail pieces with handwritten addresses. Each figure was increased an 8 additional eight percentage points to reflect improvements associated with the Letter 9 Recognition Enhancement Program.⁸ This program further increased the aggregate 10 MLOCR-ISS/RCR finalization rate to 92.3%. 11 The accept and upgrade rates for the Output Sub Systems (OSS) and the 12

automation accept rates that are used for Bar Code Sorter (BCS) mail processing
 operations in the mail flow spreadsheets are taken from the data collected during the
 1999 Letters / Cards Mail Flow Densities Study described in Docket No. R2000-1
 USPS-T-24, page 6 at 18-24.⁹

17

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 using the results from a field study conducted under witness Miller's direction.¹⁰ Those same figures have been used here.

- 25
- 26
- 27

⁷ Docket No. R97-1, USPS LR-H-130.

⁸ Docket No. R2001-1, USPS LR-J-62.

⁹ See Docket No. R2005-1, USPS-LR-K-68.

¹⁰ See R2000-1, USPS-T-24, page 6 at lines 18-24. As noted in that testimony, a description of the study can be found in Docket No. R2000-1, USPS-T-24, Appendix IV, while the supporting data can be found in Docket No. R2000-1, USPS-T-24, Workpaper 1.

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
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. R97-1.¹¹ In my cost
 models, it is applied to the mail characteristics data in the entry profile spreadsheets.

RBCS Leakage Rate: "Leakage" refers to the situation where a mail piece is finalized by the Remote Computer Read (RCR) system or the 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. In this docket, I use the actual Remote Bar Code System (RBCS) leakage rate of 6.10%.

Automated Incoming Secondary Factors: Mail can be finalized in a variety of incoming secondary operations (e.g., delivery point sequence) based on the depth-ofdistribution 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.¹²

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

¹¹ Docket No. R97-1, USPS LR-H-128.

¹² GFY2004 FAST Data from the Corporate Information System (CIS) were used in this docket.

was calculated by dividing the 3-Pass DPS (CSBCS) percentage by the sum of the 3-1 Pass DPS, Carrier Route, and Delivery Unit percentages. 2

Carrier Route Finalization Rate For Plants: This factor refers to the percentage 3 of manual incoming secondary mail that is finalized to the carrier route level at plants. 4 Because the incoming secondary productivity for plants is lower than the corresponding 5 productivity for Delivery Units, it is necessary to separate this mail from the mail that is 6 finalized to the carrier route level at Delivery Units (DU). Once again, FAST data are 7 used to perform this calculation. Even though this factor only affects manual 8 operations, the automation data contained in FAST are used as a proxy, given the 9 absence of any other data source.¹³ 10

11 **Post Office Box Destination Factor:** After being finalized in either an automation incoming secondary or manual incoming secondary operation, mail for post 12 office boxes is then routed to a box section where a clerk sorts the mail into the 13 appropriate boxes. The factor that is used to estimate box section mail volumes has 14 been taken from the coverage factor calculations performed for Docket No. MC95-1.¹⁴ 15

The data inputs described above are used in my mail flow spreadsheets to "flow" 16 10,000 mail pieces through a modeled representation of the postal mail processing 17 network. After the 10,000 mail pieces are finalized in either an automation or manual 18 incoming secondary operation, the finalized mail volumes are totaled for each of those 19 operations and the sum is entered in the "PCS OUT" box at the top of the page. This 20 calculation is performed to ensure that all 10.000 pieces that are entered into the model 21 are also processed through the model. The two automation 5-digit presort mail flow 22 models are the exception. The sum of the mail pieces in the "PCS OUT" box from both 23 mail flow spreadsheets combined equals 10,000 mail pieces. 24

25

b. COST SPREADSHEET

Each cost spreadsheet accesses the mail volumes from each operation in the 26 corresponding mail flow spreadsheet.¹⁵ This volume information, in conjunction with the 27 other data inputs described below, is used to calculate a mail processing cost for the 28 mail volumes flowing through each operation. Each operation cost is then divided by 29

¹³ Docket No. R2000-1, Attachment USPS-T-24A. ¹⁴ Docket No. MC95-1, USPS-T-10.

¹⁵ Docket No. R2005-1, USPS LR-K-48.

the "PCS OUT" mail volumes in order to determine the weighted operation cost. The 1 sum of these weighted operation costs is the model cost. 2 i. MARGINAL (VOLUME VARIABLE) PRODUCTIVITIES 3 For my cost model spreadsheets, productivity values by operation have been 4 calculated using GFY 2004 MODS data.¹⁶ The marginal productivity values are 5 calculated by dividing the MODS productivity values for each operation by the volume 6 variability factors found in USPS-T-11, Table 1.¹⁷ 7 **ii. WAGE RATES** 8 Two separate wage rates are used to calculate model costs. The first wage rate 9 reflects the wages for mail processing employees working at REC sites. The "other mail 10 11 processing" wage rate is an aggregate rate for all other mail processing employees who do not work at REC sites.¹⁸ 12 iii. "PIGGYBACK" (INDIRECT COST) FACTORS 13 "Piggyback" factors are used to estimate indirect costs.¹⁹ I used the GFY 2004 14 MODS mail volumes by machine type to calculate weighted piggyback factors for Bar 15 Code Sorter (BCS) operations. This methodology is consistent with the one used by the 16 Commission in Docket No. R2001-1.²⁰ 17 **iv. PREMIUM PAY FACTORS** 18 Premium pay factors are used to account for the fact that employees earn 19 "premium pay" for evening and Sunday work hours. In general, First-Class Mail is 20 processed during the premium pay time periods (Tours 3 and 1) while Standard Mail is 21 processed during regular business hours (Tour 2).²¹ Therefore, the First-Class Mail 22 factor is greater than the Standard Mail factor.²² 23 24 25 26

¹⁶ Docket No. R2005-1, USPS LR-K-56.

¹⁷ Weighted volume variability factors are developed for Bar Code Sorter (BCS) factors using GFY2004 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).

¹⁸ Docket No. R2005-1, USPS LR-K-55.

¹⁹ Docket No. R2005-1, USPS LR-K-52.

²⁰ Docket No. R2001-1, PRC-LR-4.

²¹ Some Standard Mail processing, like the second pass of DPS, does occur during Tours 1 and 3.

v. BUNDLE SORTING COSTS
Bundles can be used to prepare letter mail in specific instances. For example,
First-Class Mail and Standard Mail "MANUAL" trays can contain bundles. My
calculation of the costs related to bundle sorting is consistent with the methodology
relied upon by the Commission in Docket No. R2001-1.23
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. ²⁴
c. CRA ADJUSTMENTS
The model costs for each rate category are weighted together using base year
mail volumes. ²⁵ 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 Unit Cost) * (Worksharing Related Proportional Adjustment Factor) + (Worksharing Related Fixed Factor) + (Non-Worksharing Related Fixed Factor)
This methodology is identical to that relied upon by the Commission in Docket No.
R2000-1. ²⁶

 ²² Docket No. R2005-1, USPS LR-K-55.
 ²³ Docket No. R2001-1, PRC-LR-4.
 ²⁴ Docket No. R2005-1, USPS LR-K-67.
 ²⁵ Docket No. R2005-1, USPS LR-K-77.

B. WORKSHARING RELATED SAVINGS COST METHODOLOGY

In Docket No. R2000-1, witness Miller used an improved worksharing related 3 savings calculation that was subsequently relied upon by the Commission.²⁷ I also use 4 that methodology in this docket. In cases where the CRA mail processing unit costs 5 are available and cost models are not required, the mail processing worksharing related 6 unit costs are equivalent to the sum of the "worksharing related proportional" and 7 "worksharing related fixed" cost pools. For those cases where model costs are used to 8 9 de-average CRA mail processing unit costs, the mail processing worksharing related unit costs are calculated as follows: 10

11

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

14 15

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 Nos. R2000-1 and 2001-1. 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.

21

a. **BENCHMARKS**

As was the case in Docket No. R2000-1 and R2001-1, I rely on Bulk Metered 22 23 Mail (BMM) letters as the benchmark for First-Class Mail nonautomation presort letters, automation mixed AADC presort letters, automation AADC presort letters, automation 3-24 digit presort letters, and automation 5-digit presort letters. As the Commission 25 discussed in Docket No. R2000-1, BMM letters is the mail most likely to convert to 26 worksharing.²⁸ Given that postal data collection systems cannot isolate a cost estimate 27 for BMM letters, a proxy must be used. In Docket No. R2001-1, the mail processing unit 28 cost estimate for First-Class Mail single-piece metered letters was relied upon as the 29 proxy for BMM letters. I use that same proxy in the the instant proceeding. 30

²⁶ Docket No. R2000-1, PRC-LR-12.

²⁷ Docket No. R2000-1, PRC-LR-12.

²⁸ PRC Op., R2000-1, paragraph 5089.

In Docket No. R2001-1, witness Miller assumed that the delivery unit costs for BMM letters were the same as the delivery unit costs for First-Class Mail machinable mixed AADC nonautomation presort letters. That same assumption is again used in this docket.

5

For the automation carrier route presort rate category, the benchmark is an automation 5-digit presort mail piece that destinates at either a CSBCS or manual site.²⁹

6 7

b. CRA MAIL PROCESSING UNIT COSTS

It is possible to isolate mail processing unit costs for First-Class Mail 8 nonautomation presort letters from the CRA. Therefore, cost models are not required to 9 determine the total mail processing unit costs for this rate category. However, models 10 have been included that isolate the costs for machinable and nonmachinable mail 11 pieces at each presort level in order to support the nonmachinable surcharge.³⁰ CRA 12 mail processing unit costs are also obtained for First-Class Mail automation presort 13 letters. Models for the other rate categories (automation mixed AADC, AADC, 3-digit, 5-14 digit, and carrier route presort) are used to de-average these costs. 15

16

c. COST MODELS

In addition to the nonautomation presort cost models described above, there are six cost models 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 Mail 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.

- 28
- 29

²⁹ 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.

³⁰ That cost study can be found in Section IV of this testimony.

1	d. WORKSHARING RELATED SAVINGS CALCULATIONS
2	The worksharing related savings are calculated using the same methodology
3	relied upon by the Commission in Docket No. R2000-1: ³¹
4	
5 6	[(Benchmark Worksharing Related Mail Proc Unit Costs) + (Delivery Unit Costs)] - [(Bate Category Worksharing Related Mail Proc Unit Costs) + (Delivery Unit Costs)]
7	= Worksharing Related Savings
8 9	2. FIRST-CLASS MAIL CARDS
10	The methodology that I used to calculate the First-Class Mail cards worksharing
11	related savings is the same as that used for First-Class Mail letters, with one exception.
12	a. BENCHMARKS
13	There is no cost benchmark for First-Class Mail cards similar to the BMM letter
14	mail benchmark used for First-Class Mail letters. As a result, there is no worksharing
15	related savings estimate calculated for nonautomation presort cards. The automation
16	carrier route presort cards category uses a 5-digit benchmark similar to that described
17	above for letters. The remaining card rate categories (automation AADC, AADC, 3-
18	digit, and 5-digit) use the nonautomation presort cards rate category as the benchmark.
19	b. CRA MAIL PROCESSING UNIT COSTS
20	It is possible to obtain the same CRA mail processing unit costs for cards as it is
21	for letters: nonautomation presort and automation presort. The first is a rate category
22	for which the CRA provides estimates. Accordingly, no cost models are required.
23	Models for the remaining rate categories (automation AADC, AADC, 3-digit, 5-digit, and
24	carrier route presort) are used to de-average the latter category.
25	c. COST MODELS
26	The letter models contain many data inputs that represent "average" data for
27	both letters and cards. Since the mail volumes processed through the operations in my
28	models are predominantly letters, these "average" data can be used to accurately model
29	letters mail processing costs. These data, however, may not accurately reflect the costs

³¹ Docket No. R2000-1, PRC-LR-12.

1	for cards. As a result, a card/letter cost ratio is used to estimate the model costs for
2	each card rate category. This ratio is calculated as shown below. ³²
3 4	Card/Letter Cost Ratio = (Card CRA Mail Proc Unit Costs / Presort Mix Adjustment Factor) / Letters CRA Mail Proc Unit Costs
5 6	The model costs for each card rate category are then calculated using these
7	ratios as follows:
8 9 10 11	Card Rate Category Model Cost = Card/Letter Cost Ratio * Corresponding Letter Rate Category Model Cost
12	Finally, a weighted card model cost is calculated using base year mail volumes.
13	It is then tied back to the CRA mail processing unit costs for cards using the same
14	adjustment factors and cost methodology that are applied to letters.
15	d. WORKSHARING RELATED SAVINGS
16	The worksharing related savings for the First-Class Mail automation presort
17	cards rate categories are calculated as follows: ³⁴
18 19 20 21 22	[(Benchmark Worksharing Related Mail Proc Unit Costs) + (Delivery Unit Costs)] - [(Rate Category Worksharing Related Mail Proc Unit Costs) + (Delivery Unit Costs)] = Worksharing Related Savings
23	3. STANDARD LETTERS
24	The methodology that I use to calculate the worksharing related savings for
25	Standard Mail letters is also the same as that relied upon by the Commission in Docket
26	No.R2000-1. ³⁵
27	a. BENCHMARKS
28	The benchmark for the Standard nonautomation basic letters rate category is the
29	Standard nonautomation flats rate category. In other words, the savings estimate is
30	based on the letter/flat cost differential. The benchmarks for the Standard automation
31	rate categories are other rate categories as shown below in Table 1 on page 16.
32	

 ³² A presort mix adjustment factor is used to reflect the fact that the presort mixes for letters and cards are slightly different.
 ³³ Docket No. R2005-1, USPS LR-K-48.
 ³⁴ Docket No. R2005-1, USPS LR-K-48.
 ³⁵ Docket No. R2000-1, PRC-LR-12.

1	b. CRA MAIL PROCESSING UNIT COSTS
2	Separate CRA mail processing unit costs have been obtained for the
3	nonautomation and automation rate categories. Unlike the First-Class Mail rate
4	structure, Standard nonautomation presort has two rate categories: nonautomation
5	basic and nonautomation 3/5-digit. Therefore, cost models must also be used to de-
6	average the costs for Standard nonautomation presort letters.
7	c. COST MODELS
8	As with First-Class Mail letters, nonautomation presort models have been
9	included that isolate the costs for machinable and nonmachinable mail pieces at each
10	presort level in order to support the nonmachinable surcharge. Aggregate costs have
11	then been developed for each of the two rate categories.
12	In addition, four cost models have been created for the automation presort rate
13	categories: automation mixed AADC, automation AADC, automation 3-digit, and
14	automation 5-digit.
15	d. WORKSHARING RELATED SAVINGS CALCULATIONS
16	The worksharing related savings are calculated using the same methodology
17	relied upon by the Commission in Docket No. R2000-1: ³⁶
18 19 20 21 22	[(Benchmark Worksharing Related Mail Proc Unit Costs) + (Delivery Unit Costs)] - [(Rate Category Worksharing Related Mail Proc Unit Costs) + (Delivery Unit Costs)] =Worksharing Related Savings
23	C. LETTERS AND CARDS RESULTS
24	The total mail processing unit cost estimates and the worksharing related savings
25	estimates for First-Class Mail letters and cards and Standard Mail letters are displayed
26	below in Table 1.
27 28 29 30 31 32 33	

³⁶ Docket No. R2000-1, USPS PRC-LR-12.

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	13.737	(1.315)	Bulk Meter Mail Letters
Automation Mixed AADC Letters	4.827	5.101	Bulk Meter Mail Letters
Automation AADC Letters	4.053	6.084	Bulk Meter Mail Letters
Automation 3-Digit Letters	3.780	6.450	Bulk Meter Mail Letters
Automation 5-Digit Letters	2.842	7.637	Bulk Meter Mail Letters
Automation Carrier Route Letters	2.317	.938	Automation 5-Digit Letters (CSBCS/Manual Sites)
FIRST-CLASS MAIL CARDS			
Nonautomation Cards	6.549		
Automation Mixed AADC Cards	2.668	3.226	Nonautomation Cards
Automation AADC Cards	2.197	3.921	Nonautomation Cards
Automation 3-Digit Cards	2.031	4.169	Nonautomation Cards
Automation 5-Digit Cards	1.461	4.996	Nonautomation Cards
Automation Carrier Route Cards	1.141	0.618	Automation 5-Digit Cards (CSBCS/Manual Sites)
STANDARD MAIL LETTERS			
Nonautomation Basic Letters	17.407	14.708	Nonautomation Basic Flats
Nonautomation 3/5-Digit Letters	15.030	0.662	Nonautomation Basic Letters
Automation Mixed AADC Letters	4.660	4.329	Nonautomation Basic Letters (Machinable Mixed AADC)
Automation AADC Letters	3.942	5.260	Nonautomation Basic Letters (Machinable AADC)
Automation 3-Digit Letters	3.690	4.937	Nonautomation 3/5 Letters (Machinable 3-Digit)
Automation 5-Digit Letters	2.819	6.065	Nonautomation 3/5 Letters (Machinable 5-Digit)
	1	1	

* The worksharing related savings include both mail processing and delivery savings. For details see Docket No.
R2005-1, USPS LR-K-48, pages 1 and 57.

VI. NONMACHINABLE SURCHARGE ADDITIONAL COST ESTIMATES

In Docket No. R2001-1, the Postal Service proposed that the application of the nonstandard surcharge be expanded and that the surcharge be renamed the "nonmachinable" surcharge. The Commission subsequently agreed. Two cost studies were provided by witness Miller to support that proposal.³⁷ Those cost studies have been updated and are included in my cost models as well.³⁸

7

8 VII. ADDRESS CORRECTION SERVICE

9 A. Introduction

Address Correction Service provides mailers with changes of address 10 information for recipients who have moved. Address correction notifications are sent to 11 mailers through one of two methods: (1) manual Address Correction Service or (2) 12 Address Change Service (ACS). Manual Address Correction Service provides a 13 14 photocopy of the mail piece with the recipient's forwarding address on a USPS Form 3547 card for First-Class Mail and Standard Mail. The original mail piece is either 15 forwarded to the recipient's new address or treated as waste, depending on the 16 17 sender's preference and/or the class of mail. For Periodicals, the Postal Service provides mailers with the front cover of the recipient's periodical, with the change-of-18 address label affixed on the cover (known as Form 3579). The periodical is treated as 19 waste. These activities are conducted at a Computerized Forwarding System (CFS) 20 unit, normally housed within a Processing and Distribution Center. The Postal Service 21 charges a fee for each address correction notification provided to a mailer. 22 ACS is an electronic notification service providing changes of address and 23

reasons for non-delivery. Users of this service access the data electronically via a

³⁷ Docket No. R2001-1, USPS LR-J-60, pages 6, 45, and 59.

1	computer modem. The Postal Service charges a fee for each address correction and				
2	reason for non-delivery provided to the customer. ACS mail pieces that are				
3	undeliverable are called "ACS nixie mail pieces."				
4	B. Methodology				
5	The cost methodology presented in USPS-LR-K-59 is unchanged from the				
6	methodology in USPS-LR-J-69. I have updated the wage rates, piggyback factors, roll				
7	forward data and volumes for the test year.				
8	C. Results				
9	The estimated test year costs resulting from the address correction service study				
10	are shown in Table 1 below.				
11	Table 2. Test Year ACS Costs				
	Manual Cost per Piece \$0.5063				
10	Automated Cost per Piece \$0.147				
12					
13					
14	VIII. PROPOSED CHANGES RELATIVE TO PRC METHODOLOGY				
15					
16	The material changes between my cost model, USPS-LR-K-48, Test Year				
17	Letter/Card Processing Cost Models (FCM, Standard Mail, and Nonmachinable				
18	Surcharge) and USPS-LR-K-110 PRC Version of Test Year Letter/Card Processing				
19	Cost Models (FCM, Standard Mail, and Nonmachinable Surcharge) are volume				
20	variabilities, CRA mail processing unit cost estimates, piggybacks factors and premium				
21	pay factors.				
22	The following chart compares the impact on the test year cost estimates				
	produced in LD K 40 and the appendixed in the DDC version LD K 440;				

produced in LR-K-48 and the ones produced in the PRC version LR-K-110:

TABLE 3:

Letters and Cards Total Mail Processing Unit Cost And Work Sharing Related Savings Estimates				
	USPS LR-K-48 Cost Results		PRC LR-K-110 Cost Results	
RATE CATEGORY	Total	Work	Total	Work
-	Mail	sharing	Mail	sharing
	Processing	Related	Processing	Related
	Unit costs	Savings	Unit costs	Savings
FIRST-CLASS MAIL LETTERS				
Nonautomation Letters	13.737	(1.315)	15.944	(1.563)
Automation Mixed AADC Letters	4.827	5.101	5.426	6.131
Automation AADC Letters	4.053	6.084	4.501	7.230
Automation 3-Digit Letters	3.780	6.450	4.168	7.641
Automation 5-Digit Letters	2.842	7.637	3.051	8.966
Automation Carrier Route	2.317	0.938	2.407	1.056
FIRST-CLASS MAIL CARDS				
Nonautomation Cards	6.549		7.382	
Automation Mixed AADC Cards	2.668	3.266	3.196	3.466
Automation AADC Cards	2.197	3.921	2.648	4.142
Automation 3-Digit Cards	2.031	4.169	2.450	4.397
Automation 5-Digit Cards	1.461	4.966	1.787	5.242
Automation Carrier Route Cards	1.141	0.618	1.406	0.645
STANDARD MAIL LETTERS				
Nonautomation Basic Letters	17.407	14.708	18.665	18.380
Nonautomation 3/5-Digit Letters	15.030	0.662	16.071	1.485
Automation Mixed AADC Letters	4.660	4.329	5.131	4.408
Automation AADC Letters	3.942	5.260	4.275	5.348
Automation 3-Digit Letters	3.690	4.937	3.967	5.152
Automation o-Digit Letters	2.819	6.065	2.929	6.290
ADDRESS CORRECTION SERVICE	USPS LR-K-59	Cost Results	USPS LR-K-1	11 Cost Results
Manual – Cost per Piece	\$0.506		\$0.521	
Automated – Cost per Piece	\$0.147		\$0.156	

1

To the extent that, in response to Commission Rule 53, I discuss and compare 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 preexisting methodology does not mean that
they are sponsoring it.

14

1

15 Order No. 1380 (August 7, 2003) at 7. Therefore, although I may be compelled to refer to the PRC

16 methodologies and versions corresponding to the Postal Service proposals which are the subject of my

17 testimony, my testimony does not sponsor those PRC materials