

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

Postal Rate and Fee Changes, 2006	Docket No. R2006-1
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DIRECT TESTIMONY
OF
MARC A. SMITH
ON BEHALF OF THE
UNITED STATES POSTAL SERVICE

TABLE OF CONTENTS

Page

LIBRARY REFERENCES TO BE SPONSORED WITH TESTIMONY
USPS-T-13.....ii

AUTOBIOGRAPHICAL SKETCH.....iii

I. PURPOSE AND SCOPE OF TESTIMONY AND GUIDE
TO SUPPORTING DOCUMENTATION1

II. EQUIPMENT AND FACILITY-RELATED COSTS
IN THE BASE AND TEST YEAR.....6

A. Mail Processing and Other Equipment-Related Costs.....7

1. Development of Cost Pools for Base Year and Test Year.....7

2. Variability of Equipment-Related Costs.....11

3. Distribution of Equipment-Related Costs.....12

4. Distribution of Cost Reductions and Other Programs Costs.....13

B. Facility-Related Costs.....14

1. Development of Cost Pools.....15

2. Variability of Facility-Related Costs.....19

3. Distribution of Facility-Related Costs.....19

III. PIGGYBACK FACTORS.....21

A. Piggyback Factors by Major Function and Subclass.....22

B. Piggyback Factors for Final Adjustments.....25

C. Mail Processing Operation Specific Piggyback Factors.....25

D. Calculation of Caller Service Costs30

IV. MAIL PROCESSING UNIT COSTS BY SHAPE
FOR TEST YEAR.....32

V. SUMMARY.....37

VI. PROPOSED CHANGES RELATIVE TO PRC METHODOLOGY39

List of Attachments

Library References To Be Sponsored With Testimony USPS-T-13

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17

USPS-LR-L-22	APC Cost Reduction Distribution Factors and Volume Variability
USPS-LR-L-52	Development of Piggyback and Related Factors
USPS-LR-L-53	Mail Processing Unit Costs by Shape
USPS-LR-L-54	Equipment and Facility Related Costs

AUTOBIOGRAPHICAL SKETCH

1
2
3 My name is Marc A. Smith. I have been employed by the Postal Service since
4 February, 1987, as an Economist in the Cost Attribution group of Finance.

5 In Docket No. R2005-1, I provided testimony, USPS-T-13, on the non-volume variability
6 of the test year escrow funding, the study of Facility Space Usage in 1999, on mail
7 processing costs by shape, the development of base year and test year plant and mail
8 processing equipment costs, piggyback factors and other inputs needed for the
9 worksharing avoided costs calculation.

10 In Docket No. R2001-1, I provided testimony, USPS-T-15, on mail processing
11 costs by shape, the development of base year and test year plant and mail processing
12 equipment costs, piggyback factors and other inputs needed for the worksharing
13 avoided costs calculation. In Docket No. R2000-1, I provided testimony, USPS-T-21,
14 covering the development of the same costs.

15 In Docket No. R97-1, I provided testimony, USPS-ST-45, on mail processing
16 costs by shape, piggyback factors and other inputs needed for the worksharing avoided
17 costs and testimony, and USPS-ST-46, on Standard A dropship discount cost
18 avoidances.

19 In Postal Rate Commission Docket No. MC95-1, I testified for the Postal Service,
20 USPS-T-10, on First-Class letter mail processing costs. In Docket No. R94-1, I worked
21 in support of the base year witness Dana W. Barker regarding facility-related and mail
22 processing equipment-related costs. In Docket No. R90-1, I provided testimony on
23 behalf of the Postal Service, USPS-T-8 and USPS-RT-3, to improve the development of
24 plant and equipment costs and the new development of piggyback factors for specific
25 mail processing operations to better determine the indirect costs for cost avoidance

1 calculations. In Docket No. R87-1, I worked in support of Paul R. Kleindorfer's
2 testimony on the peak load cost issue.

3 Prior to coming to the Postal Service, I was a Senior Economist with the New
4 York Department of Public Service. I testified as an expert witness in numerous electric
5 and telephone rate proceedings, primarily on the marginal costs of electricity. This
6 testimony was in support of both retail and co-generation electric rate proposals. In
7 1981, I served as an economist at the Interstate Commerce Commission. There, I
8 worked on modifying railroad regulations to conform with the Staggers Rail Act of 1980.

9 I received a B.A. with honors in Economics from the George Washington
10 University in 1975. I received a M.A. in Economics from the University of Michigan in
11 1978. While at the University of Michigan, I completed all requirements toward a Ph. D
12 in Economics except the dissertation. As a graduate student, I served as a teaching
13 fellow, in introductory economics and econometrics courses. I also worked as a
14 research assistant at the Institute for Social Research in Ann Arbor, Michigan on a study
15 of electric utility load management and peak load pricing experiments.

16

17 My papers, publications and presentations are as follows:

18

19 Evaluation of the Federal Energy Administration's Load Management and Rate Design
20 Demonstration Projects, with Daniel Hill et al., Electric Power Research Institute, 1979.

21

22 Analysis of Residential Response to Time-of-Day Prices, with Daniel Hill et al., Electric
23 Power Research Institute, 1981.

24

25 "The Effect of Maintenance Requirements in Peak Load Pricing", with Mark Reeder.
26 Presented at the Advanced Workshop in Regulation and Public Utility Economics, May,
27 1983.

28

29 "Pricing Rivalry Between Railroads in the Transportation of Coal in Western United
30 States in the 1970s." Presented at the Advanced Workshop in Regulation and Public
31 Utility Economics, May, 1984.

32

- 1 “Econometric Evaluation of Electric Utility Operation and Maintenance Expenses” in
2 Proceedings of the Fifth NARUC Biennial Regulatory Information Conferences, National
3 Regulatory Research Institute, September 3-5, 1986 pp. 1871 - 1912.
4
- 5 “Peak-Load Pricing in Postal Services” with Michael A. Crew and Paul R. Kleindorfer,
6 Economic Journal, September, 1990.
7
- 8 “The Analytical Basis for Cost Measurement at the United States Postal Service” with
9 Michael D. Bradley and Jeffrey L. Colvin. Presented at the Advanced Workshop in
10 Regulation and Public Utility Workshop in Cooperstown, NY, May 1991.
11
- 12 “Measuring Product Costs for Ratemaking: The United States Postal Service,” with
13 Michael D. Bradley and Jeffrey L. Colvin, edited by Michael A. Crew and Paul R.
14 Kleindorfer Regulation and the Nature of Postal and Delivery Service. Boston: Kluwer
15 Academic Publishers, 1993, pp. 133-157.
16
- 17 “Peak Loads and Postal Services: Some Implications of Multi-Stage Production” with
18 Michael A. Crew and Paul R. Kleindorfer, edited by Michael A. Crew and Paul R.
19 Kleindorfer Managing Change in Postal and Delivery Industries. Boston: Kluwer
20 Academic Publishers, 1997, pp. 42-64.
21
- 22 “Balancing Competition and Public Utility: Postal Service Here and Abroad.”
23 Presented at the Advanced Workshop in Regulation and Competition at Rutgers
24 University in Newark, NJ, January, 2004.
25
26

1 **I. PURPOSE AND SCOPE OF TESTIMONY, AND GUIDE TO SUPPORTING**
2 **DOCUMENTATION**
3

4 There are three main purposes of my testimony. First, I provide
5 methodology and inputs necessary to determine the volume variable equipment
6 and facility-related costs by subclass for both the base year and test year for
7 witnesses Milanovic, USPS-T-9, and Waterbury, USPS-T-10. Second, I provide
8 piggyback factors used to incorporate indirect costs into the cost avoidance
9 estimates and to compute final adjustments. These factors are used by witnesses
10 Abdirahman, USPS-T-22, Cutting, USPS-T-26, Mayes, USPS-T-25, Miller,
11 USPS-T-20 and USPS-T-21, Page, USPS-T-23, and Talmo, USPS-T-27. In
12 addition, I assist witness Kaneer, USPS-T-41, by providing test year costs for
13 Caller Service using an updated method. Third, I calculate labor and indirect mail
14 processing unit costs by shape, by cost pool. These costs are used by witnesses
15 Abdirahman, USPS-T-22, Miller, USPS-T-20 and USPS-T-21, Page, USPS-T-23,
16 and Talmo, USPS-T-27, in determining the cost avoidance estimates. Much of this
17 testimony updates my work in Docket No. R2005-1 in these same areas, using
18 methods similar to, or the same as, I used in that Docket. Below, I outline specific
19 sections of my testimony.

20 Part II of my testimony is on equipment and facility-related costs. I provide
21 base year equipment-related costs for mail processing and other equipment
22 depreciation (component 20.1¹), interest expense (component 20.5), maintenance

¹ This component number refers to the numbering system for cost components used in the Summary Description, USPS LR-L-1, and in the segments and component report (e.g., see witness Milanovic, USPS-T-9, Exhibit USPS-9A).

1 labor (component 11.2), and parts & supplies (component 16.3.2), accounting for
2 about 3.7 percent of accrued costs. I apportion these costs by equipment type into
3 24 cost pools, using data from Postal accounting and engineering records. For
4 each of these cost pools, I also prescribe the variabilities and distribution keys to
5 relate these costs to subclasses. For the test year, I apportion mail processing
6 and other equipment depreciation into the 25 cost pools, based on data from the
7 accounting system and capital budget. My testimony introduces 5 new cost pools
8 including mail processing, retail and delivery related equipment. In addition, I
9 supply a distribution key and volume variability for Automated Postal Center (APC)
10 cost savings for the test year.

11 The facility-related costs in the base year and test year are for space
12 provision and space support. The space provision costs are rents (component
13 15.1), depreciation (component 20.3) and interest (component 20.5). The space
14 support costs are fuel and utilities (component 15.2), custodial services labor
15 (component 11.1), contract cleaners (component 11.1.2), building equipment
16 maintenance labor (component 11.3), custodial supplies and services (component
17 16.3.1) and building security (component 18.1.2). I divide these costs, accounting
18 for about 6 percent of accrued costs, into cost pools (or by activity) based on the
19 Facility Space Usage Study for FY1999, updated using information on equipment
20 deployments and other information. I also prescribe variabilities and distribution
21 keys for these cost pools. Part II of my testimony is supported by USPS LR-L-54,
22 "Equipment and Facility-Related Costs" and USPS LR-L-22 "APC Cost Reduction
23 Distribution Factors and Volume Variability."

1 Part III of my testimony presents piggyback and related factors. Piggyback
2 factors are employed in worksharing-related cost studies to add supervisor,
3 administration, facility-related and equipment-related costs to labor cost estimates.
4 A piggyback factor is, in general terms, the ratio of total volume variable costs to
5 volume variable labor costs for a specific function (e.g. city carrier) or operation
6 (e.g. OCR). Total costs, as contained in the numerator, include labor, supervisor,
7 administrative, facility-related and equipment-related costs. Labor costs, in the
8 denominator, are all non-supervisory, non-administrative labor cost associated with
9 the function or operation.

10 There are three sets of factors:

- 11 1. piggyback factors by major function,
- 12 2. piggyback factors used for final adjustments, and
- 13 3. mail processing cost pool and operation specific piggyback factors.

14 The first set of piggyback factors (or ratios) is for major functions (e.g., mail
15 processing, window service, city delivery, rural delivery, and vehicle service
16 drivers) for each subclass² for the test year. The second set of piggyback factors
17 is provided for the test year final adjustments performed by witness Page, USPS-
18 T-23. The third set of piggyback factors is provided for specific mail processing
19 operations, consistent with the cost pools for mail processing labor costs, for the
20 test year. Piggyback factor calculations are based on base year and test year
21 costs of witnesses Milanovic, USPS-T-9 and Waterbury, USPS-T-10 and in part II
22 of my testimony.

² These piggyback factors are computed for each row of the test year (before rates) segments and components report, which is USPS-10J.

1 The final portion of Part III provides Caller Service costs for the test year
2 before rates, including piggyback or indirect costs. This calculation uses an
3 updated method to calculate Caller Service costs, using an approach that relies
4 more on CRA data. This calculation splits out facility-related space provision and
5 space support costs as well. These costs are used by witness Kaneer, USPS-T-
6 41, to determine Caller Service rates. Part III of my testimony is supported by
7 USPS LR-L-52, "Development of Piggyback and Related Factors."

8 Part IV of my testimony concerns Mail Processing Unit Costs by Shape for
9 the test year. These costs are inputs in developing costs avoided due to
10 worksharing. They are test year volume variable mail processing unit costs by
11 shape and presort level. These costs include labor and indirect costs and are
12 provided by cost pool. As done in Docket No. R2005-1, an adjustment for
13 Standard Regular flats and parcels addresses an inconsistency between the cost
14 and volume data. A significant amount of parcel-shaped Standard Regular pieces
15 qualify for flats rates. These pieces are included in flats volumes, but their costs
16 are recorded as parcels. As discussed below, the Standard Regular flat-parcel
17 adjustment reduces parcel costs by about 23% and raises flats costs by about 6%.
18 Also, as discussed below, presort letter costs are not provided separately for
19 automation and non-automation rate mail, and in addition, costs for First-Class
20 single-piece letters are not split out for metered letters. This part of my testimony
21 is supported by USPS LR-L-53, "Mail Processing Unit Costs by Shape." My work
22 in Part IV is based on that of witnesses Milanovic, USPS-T-9, Waterbury, USPS-T-
23 10 and Van-Ty-Smith, USPS-T-11, as well as part III of my testimony.

1 Part V is a summary of my testimony. Finally, Part VI provides the
2 “Proposed Changes Relative to the PRC Methodology”. The proposed changes
3 discussed relate to distribution of facility space (due to different Non-MODS mail
4 processing labor cost pool definitions), differences in piggyback factors due to the
5 differences between USPS and PRC base year and test year versions, and
6 differences in cost by shape due to differences between USPS and PRC base year
7 and test year versions.

1 **II. EQUIPMENT AND FACILITY-RELATED COSTS IN THE BASE AND**
2 **TEST YEAR**

3
4 This part of my testimony develops the equipment and facility-related
5 information shown in Attachments 1 to 7. Attachments 1-3, 5 and 6 apportion, or
6 can be used to apportion, the accrued equipment and facility-related costs by
7 function in order to form cost pools (or costs by activity). The volume variability for
8 each facility-related cost pool as specified in Attachment 7 is used by witnesses
9 Milanovic, USPS-T-9, and Waterbury, USPS-T-10, to relate these costs to the
10 subclasses for the base year and test year. The distribution keys for each cost
11 pool as specified in Attachments 4 and 7 are used by witnesses Milanovic, USPS-
12 T-9, and Waterbury, USPS-T-10, to relate these costs to the subclasses for the
13 base year and test year. In addition, witness Waterbury, USPS-T-10, also uses
14 these Attachments as guidance to distribute cost reductions and other program
15 costs related to new equipment deployments and programs. I also provide witness
16 Waterbury the distribution key and volume variability for the Automated Postal
17 Center (APC) cost savings. The detailed calculations of the results shown in
18 Attachments 1 to 7 are contained in USPS LR-L-54. The APC cost savings
19 distribution key and volume variability are detailed in USPS LR-L-22. The
20 development of equipment and facility related costs is summarized in sections A
21 and B below.

1 **A. Mail Processing and Other Equipment-Related Costs**

2 The mail processing and other equipment-related costs that I develop are
3 depreciation (component 20.1), interest expense (component 20.5)³, maintenance
4 labor (component 11.2), and parts & supplies (component 16.3.2). The base year
5 accrued costs for this equipment, for depreciation, interest, maintenance labor, and
6 parts & supplies, respectively, in millions of dollars are 900.8, 0.7, 1,221.8 and
7 426.1, totaling about 3.7 percent of accrued cost. My testimony on equipment
8 costs in Docket No. R2005-1 and prior dockets was solely on mail processing
9 equipment. This testimony extends the work presented in Docket No. R2005-1, in
10 USPS-T-13 and USPS LR-K-54, to include some of the non-mail processing
11 equipment as discussed below.

12 **1. Development of Cost Pools for Base Year and Test Year**

13 The first step in determining the volume variable costs by subclass
14 associated with any cost segment or component is to identify costs by cost pool or
15 activity. There are many different types of equipment, with different purposes and
16 uses. In this testimony, I have updated the mail processing cost pools to reflect
17 new types of equipment and I have added categories of non-mail processing

³ This refers to the portion of interest expense which is related to mail processing equipment. Interest expense is composed of three components: Civil Service Retirement Supplemental Liability, interest on debt, and other interest. Interest on debt has the same variability and distribution as total depreciation on equipment, vehicles, land and buildings. As a result, interest on debt can be apportioned to equipment, vehicles and facilities in proportion to depreciation expenses for these categories. See USPS LR-L-1, page 20-5.

1 equipment. The base year has 24 categories, as shown in Attachments 1 and 2.⁴

2 The new categories are as follows:

3 MERLIN – Mail Evaluator, Reliability and Lookup

4 LCTS/RCS – Low Cost Tray Sorter/Robotic Containerization System

5 PARS – Postal Automated Redirection System for Letters

6 POS ONE – Point of Service Retail Terminal

7 The first three new categories or cost pools are for mail processing equipment.

8 MERLIN equipment is used in bulk mail acceptance, to check mail makeup
9 compliance with presorting, pre-barcoding and other requirements. LCTS/RCS
10 equipment is used in sorting letter trays and flat tubs for dispatch or to other sorting
11 operations within the facility. PARS for Letters is a new system designed to
12 reduce the processing and transportation costs associated with mail to be
13 forwarded or returned to sender. PARS will replace CFS. POS ONE retail
14 terminals have been deployed over the past eight years to replace the Integrated
15 Retail Terminals (IRTs) and are used in window service retail transactions. POS
16 ONE captures detailed transactions data, provides tools to better serve customers
17 and facilitates better management of retail operations. The LSM category is
18 eliminated as this equipment has been removed.

19 Apart from these new categories (or cost pools), additional equipment from
20 deployments during FY 2005 has been included in the existing categories.
21 Significant new mail processing costs arise from emergency preparedness
22 measures that respond to the use of mail as a delivery vehicle for biological
23 terrorism. Since FY 2002, two systems have been added to reduce the risk to

⁴ The equipment for each of these categories is listed in USPS LR-L-54, part IV at the end. The testimony of witness McCrery, USPS-T-42, contains a description of much of this equipment.

1 employees and customers: the Biohazard Detection Systems (BDS) and the
2 Ventilation and Filtration System (VFS) for Mail Processing Equipment.⁵ These
3 systems have been added to the Advanced Facer Canceler System (AFCS) and to
4 culling of collection mail. Appropriations pay the depreciation costs for these
5 systems, but do not cover their maintenance and supplies costs. These costs
6 have been included in the category “Edge, Face and Cancel – Letters.”⁶

7 Except for Tray Transport and Staging Systems⁷, Attachment 1 shows the
8 apportionment of costs for maintenance labor and parts & supplies of the
9 equipment categories for the base year. This is done using Engineering’s
10 Maintenance Activity, Reporting and Scheduling (MARS) data for FY2005. These
11 data track maintenance work hours, parts and supplies by equipment type, for
12 plants and other facilities. Maintenance labor costs by equipment category are
13 calculated to include an apportionment of supervisor and administrative costs. The
14 calculations are shown in USPS LR-L-54, part II (see pages II-4 and II-5 in
15 particular), and summarized in Attachment 1.

⁵ See USPS LR-L-49, Section 2A and witness Loutsch, USPS-T-7, Part IV.B.2 on Emergency Preparedness Appropriations.

⁶ The other primary changes in equipment have been in flats sorting with improvements to AFSM 100s and FSM 1000s. Removal of FSM 881s was completed in FY2005. APPS were deployed to supplement and in some cases replace SPBSs. For letter sorting, PARS for letters, additional stackers for DBCS and improvements for RBCS and AFCS were deployed. MPBCS removals continued. Dispatch systems such as RCS and LCTS, AAA and sleeving and strapping equipment were also added. These improvements are described in the testimony of witness McCrery, USPS-T-42. See also LR-L-54, part II for a glossary on Acronyms.

⁷ Costs for Tray Transport & Staging Systems, the 17th category, are apportioned among certain piece distribution equipment based on the relative number of equipment by type as shown in USPS LR-L-54, page II-7. The types include OCR, MPBCS, DBCS, and FSM. The costs for all 24 categories are shown in USPS LR-L-54, Page II-6.

1 Except for Tray Transport and Staging Systems, Attachment 2 shows the
2 base year depreciation costs for the equipment categories.⁸ The depreciation by
3 equipment category is calculated using FY2005 equipment accounting records.

4 For the test year there is one new cost pool, and two cost pools have been
5 modified. The new equipment category is Intelligent Mail Device (IMD) Scanners
6 which will replace Mobile Data Collection Devices (MDCDs). The scanner is a
7 hand held scanner device primarily for carriers and post office box clerks. It is
8 used to support products and management tools. The IMD will have the same
9 capabilities as the MDCD, but will also have electronic signature capture, two-
10 dimensional barcode reading and wireless short-range communications. The
11 costs for this category cover 300,214 IMDs, including the hand held scanners,
12 scanner cradles for each scanner and local computers used to support the
13 collection and transmission of the data. Approximately 86 percent of the IMD
14 Scanners will be used by carriers and 13 percent by post office box clerks, with the
15 remaining one percent for use in various processing activities. Deployment is
16 expected in FY2007.⁹

17 The two modified cost pools are as follows. CFS is replaced by
18 "CFS/PARS-Letters," and "PARS" is replaced by "CFS/PARS-Flats". The change
19 is prompted by the deployment of Postal Automated Redirection System (PARS)
20 for flats. This permits separating forwarding costs into those for letters and those
21 for flats, and giving separate distribution to each.

⁸ See USPS LR-L-54, page IV-2 to see the costs for all 24 categories.

⁹ The program for this equipment is called Intelligent Mail Data Acquisition System (IMDAS). This is described in USPS LR-L-49, in Section 1.

1 Except for Tray Transport and Staging Systems, Attachment 3 shows the
2 test year depreciation costs for the 25 categories. The test year depreciation is
3 projected by category by augmenting base year costs with information from the
4 capital budget. Aside from IMD Scanners and PARS, significant investments are
5 anticipated to replace the MLOCs, enhance flats sorting equipment (the
6 Automated Flat Sorting Machine 100 and the Upgraded Multi-Position Flats Sorting
7 Machine), for APPS deployment and dispatch equipment such as Robotic
8 Containerization Systems (RCS), tray banders, automatic tray sleeves and
9 unsleevers, flat tray ladders, Automated Airline Assignment (AAA) systems and
10 Low Cost Tray Sorter (LCTS). These new developments are described by witness
11 McCrery, USPS-T-42.

12 **2. Variability of Equipment-Related Costs**

13 My testimony continues the past practice of applying the cost variability of
14 the labor operating the equipment to equipment-related costs.¹⁰ This implies that
15 the ratio of labor to equipment-related costs (for a type of equipment) would not
16 change, other things equal, in response to a (small) change in volume on the
17 margin.

18 The mail processing labor variabilities for the equipment categories are
19 developed by using witness Bozzo's (USPS-T-12) variabilities by cost pool, which
20 are shown in witness Van-Ty-Smith's testimony, USPS-T-11, Table 1. The
21 variabilities by equipment category are shown in LR-L-55, part VI. They either are
22 identical to the labor variabilities in Table 1 of witness Van-Ty-Smith or represent

¹⁰ See Docket No. R2005-1, USPS-T-13, Part V.A.2 and USPS LR-K-1 at page 20-2.

1 an averaging of two or more of these variabilities. The latter occurs for equipment
2 categories or equipment which is widely used in more than one labor cost pool.

3 I apply this same approach to the variability of POS ONE and IMD Scanners
4 costs. The costs for these new categories take on the variability of labor using the
5 equipment. POS ONE equipment costs are as volume variable as window service
6 labor, cost segment 3.2. This is because the POS ONE costs and requirements
7 are driven by the same retail transactions workload as those for window service
8 labor.

9 Costs for IMD Scanners used by carriers (about 86 percent of scanners),
10 are as volume variable as carrier labor because each route requires one scanner.
11 For the IMD Scanners used by post office box clerks (13 percent) in sorting to post
12 office boxes and firms, costs are driven primarily by the number of post office
13 boxes and so are fully variable, as are costs for the post office boxes. The
14 remaining one percent of the IMD Scanner costs are institutional.

15 **3. Distribution of Equipment-Related Costs**

16 My testimony continues the past practice of distributing equipment-related
17 costs to subclass based on the distribution to subclass of labor costs to operate
18 the equipment.¹¹ For instance, in the case of automated letter sorting equipment
19 (e.g., OCR, DBCS) the machine time by subclass is, for the most part,
20 proportionate to the equipment operators' labor time by subclass. The time the
21 operators spend loading and sweeping the mail from the equipment for each
22 subclass is likely a good indicator for the machine time for each subclass.

¹¹ See my testimony in Docket No. R2005-1, USPS-T-13, Attachment 4.

1 Therefore, the labor time by subclass should be a reasonable basis for equipment
2 cost distribution.

3 The new equipment categories for the base year and test year essentially
4 follow this approach. Attachment 4, pages 1 and 2 shows the distribution keys
5 used for each of the equipment categories in the base year and test year,
6 respectively. For the base year, MERLIN costs are distributed based on the labor
7 costs associated with business mail entry units (LDC 79). LCTS/RCS costs are
8 distributed based on the labor costs for the mechanized tray sorting cost pool (in
9 which this equipment is used). The costs for PARS are distributed through the use
10 of a proxy, CFS labor, the operation being replaced by PARS. POS ONE costs
11 are distributed based on the distribution of window service labor costs (cost
12 segment 3.2). For the test year, the new categories CFS/PARS-Letters and
13 CFS/PARS-Flats require distribution keys. They are the mail processing labor cost
14 pool distribution key for CFS (LDC 49) for letters and for flats, respectively. IMD
15 Scanner costs for carriers is distributed in the same way as carrier labor, and IMD
16 Scanner costs for post office box clerks are distributed as the costs for Post Office
17 Boxes.¹²

18 **4. Distribution of Cost Reductions and Other Programs Costs**

19 Cost Reductions and Other Programs for FY2006, FY2007 and FY2008 are
20 generally associated with efficiencies obtained through new equipment
21 deployments. In some cases, they reflect management initiatives to improve
22 operations in a certain area, as discussed in USPS LR-L-49. Cost reductions in

¹² See USPS LR-L-54, part III for the calculation of the distribution key for IMD capital costs for the test year.

1 mail processing labor (component 3.1) or mail processing equipment maintenance
2 labor (component 11.2) from equipment deployments and initiatives are
3 distributed to subclasses using the same variabilities and distribution keys as used
4 for the equipment-related costs and facility related costs, as shown in Attachments
5 4 and 7. I assisted witness Waterbury in choosing appropriate distribution keys for
6 these programs.¹³

7 In addition, I provide the distribution key and cost variability for the window
8 service labor savings from the Automated Postal Center (APC), see USPS LR-L-
9 22. This work is based on information from Retail on APC transactions, which
10 allow us to form a distribution for the reductions in window transactions due to the
11 APC. The variability of the labor savings is taken from the variability of the window
12 service labor costs for this transactions mix. The distribution of the window labor
13 savings is based on the distribution of the labor costs for these transactions. For
14 example, the savings on selling stamps at the window is distributed to classes and
15 subclasses in the same way as the costs for selling stamps at the window. This
16 library reference has an addendum to correct errors (of small consequence).
17 Witness Waterbury, USPS-T-10, Appendix F contains an addendum based on LR-
18 L-22's addendum, which demonstrates the small impact of the error.

19 **B. Facility-Related Costs**

20 I develop, for the base year and test year, facility-related space provision
21 and space support costs. The space provision costs are rents (component 15.1),

¹³ Also, see witness Waterbury, USPS-T-10, Appendices A and B, and LR-L-49 for more on Cost Reductions and Other Programs.

1 depreciation (component 20.3) and interest (component 20.5).¹⁴ The space
2 support costs are fuel and utilities (component 15.2), custodial services labor
3 (component 11.1), contract cleaners (component 11.1.2), building equipment
4 maintenance labor (component 11.3), custodial supplies and services (component
5 16.3.1) and building security (component 18.1.2). The accrued costs in the base
6 year, in millions of dollars, for rents, depreciation and interest for space provision
7 are 863.4, 760.8, and 0.6. The accrued base year costs, in millions of dollars, for
8 maintenance and custodial labor, contract cleaners, fuel & utilities, custodial
9 building supplies, and USPS protection force are 1,598.6, 90.0, 585.3, 167.1 and
10 71.5. These space provision and space support costs account for over six percent
11 of the base year accrued costs. As has been done since Docket No. R90-1 and
12 earlier, the development of variable space provision costs by subclass employs
13 imputed rents, capped at book cost, as described below.

14 **1. Development of Cost Pools**

15 The first step in developing facility-related costs is the development of cost
16 pools. This involves determining the Postal Service facility space usage by activity or
17 function and determining imputed rents (or market rental value) for this space. The
18 share of facility space by function is used to apportion the space support costs listed
19 above by function, while the imputed rents by function, along with the variabilities for
20 each function, are used to determine the split of accrued space provision costs by
21 function as described below.

¹⁴ As noted above in footnote 3, this is for the portion of interest which is treated as variable and distributed the same as facility depreciation.

1 Base year and test year estimates of facility space and rents by category
2 are shown in Attachments 5 and 6, and are based on the FY1999 facility study.¹⁵
3 The FY1999 estimates of facility space by category are adjusted by using
4 information on equipment deployments, operational changes¹⁶ and overall Postal
5 Service facility space growth for the base year and test year. For categories where
6 information on equipment deployments is available, such as space categories 1 to
7 4, 7 and 12 in Attachment 5, the estimated square footage is adjusted in proportion
8 to the amount of deployment, or is based on engineering estimates of the space
9 needed by new types of equipment. For instance, the significant growth in the
10 space in the SPBS categories (nos. 7 and 34) for the test year due to the APPS
11 deployment was estimated based on projections of the number of APPS to be
12 deployed for the test year and estimates on the amount of space per APPS. In the
13 remaining categories, where there is no information on deployments or other
14 operational information, square footage is assumed to grow at the same rate as
15 overall facility space, net of the space adjustments made for equipment
16 deployments or other operational changes.

17 The facility cost pools were adjusted to be consistent with changes in the
18 mail processing cost pools discussed by witness Van-Ty-Smith, USPS-T-11. First,
19 all plant letter barcode sorters are consolidated into one cost pool. Second, the

¹⁵ The Facility Space Usage Study is described in Docket No. R2005-1, USPS LR-K-62.

¹⁶ In addition, space categories for operations affected by equipment deployment (such as manual letter sorting) also are adjusted. For FY 2005 space estimates by category, there were significant reductions made in the plant space for manual letter and flat sorting.

1 FSM 881 cost pool is dropped reflecting removal of this equipment. Third, the
2 PMPC cost pool has been eliminated. The space for PMPCs was apportioned to
3 the other plant cost pools based on the share of PMPC work hours for each of
4 these cost pools. Finally, costs for the international mail processing operations of
5 a particular BMC were shifted from the BMC cost pools to the ISC cost pool. The
6 facility space for these operations was shifted from the BMC category to the ISC
7 category based on the FY1999 Survey data for this facility.¹⁷

8 As done in my R2005-1 testimony, a modified treatment of Remote
9 Encoding Center (REC) space was utilized to reflect the multi-purpose nature of
10 RECs in the test year. Remote encoding is now presently done for letters and flats
11 at RECs.¹⁸ The distribution of mail processing labor for RECs, which is used as
12 the distribution key for this space, reflects both work for letters and flats, as
13 discussed by witness Van-Ty-Smith, USPS-T-11. However, for the test year, the
14 APPS and PARS will also utilize remote encoding, for parcels and forwarding
15 respectively.¹⁹ In order to align REC facility space for these purposes with the
16 space categories best suited for distribution, the REC space associated with
17 parcels and PARS was included in the SPBS and CFS categories. Letter and flat
18 REC space remains in the RBCS category. Similarly, CFS space for the test year

¹⁷ These calculations for PMPC and ISC space are shown in LR-L-54, part I. In addition, two categories without space (LSM and Scan Where You Band) were also dropped, leading to a total reduction of 5 facility space categories. LSMs had been removed earlier and SYWB had been included with Air Contract Data Collection Systems/SWYB category.

¹⁸ In FY 2005 there was approximately 15 percent of REC hours for PARS and parcels (see USPS LR-L-52, page III-3C).

¹⁹ Improvements in software and technology have reduced and will further reduce the amount of REC space needed for letters and flats.

1 included the projected space for the Combined Output Input Subsystem (CIOSS),
2 since it is an element of the PARS program.

3 The imputed rents for each category are updated from FY1999 to reflect the
4 changes in facility space just discussed, and also to reflect changes in the rental
5 rates, using the Global Insight rent-residential index. The methods used to project
6 base year and test year square footage and imputed rents by space category
7 shown in Attachments 5 and 6 are the same as those used in Docket No. R2005-
8 1.²⁰

9 The square footage and imputed rent estimates shown in Attachments 5
10 and 6 are used to determine the cost pools for both space provision and space
11 support costs. The development of the space support costs by cost pool or space
12 category is based on the square footage for each category shown in the
13 Attachments. For instance, for the base year, the accrued costs of maintenance
14 and custodial labor, contract cleaners, fuel & utilities, custodial building supplies,
15 and USPS protection force are divided into cost pools on the basis of relative
16 square footage shown in Attachment 5. Likewise, the test year space support
17 costs are divided into cost pools using the square footage from Attachment 6.

18 The determination of space provision costs by cost pool or space category,
19 however, is more complex, reflecting the PRC's decisions in Docket Nos. R76-1
20 and R90-1. The base year space provision costs by space category are the
21 imputed rents shown in Attachment 5, which are used in place of the accrued or
22 "book" space provision costs (rents, depreciation, and interest), with the caveat

²⁰ This is an update of the work presented in Part 1 of library reference USPS LR-K-54 of Docket No. R2005-1.

1 that the total volume variable imputed rents²¹ are capped at “book” costs. In other
2 words, if total volume variable imputed rent for all space categories exceeds “book”
3 costs, then volume variable imputed rent for each space category is reduced by the
4 ratio of “book” costs to the total volume variable imputed rent. This sets it equal to
5 “book” cost – thus capping imputed rent at “book” cost. For the test year, space
6 provision costs are based on the imputed rents in Attachment 6 in the same fashion.
7 In both the base year and test year, the volume variable imputed rents exceed the
8 “book” costs, and are capped at “book” cost.

9 **2. Variability of Facility-Related Costs**

10 My testimony provides the variabilities for each of the space categories.
11 These are shown in Attachment 7 and also are described in the Summary
12 Description, USPS LR-L-1, pages 15-2 to 15-4. These variabilities stem from
13 procedures presented in Docket No. R76-1, USPS-T-9 and USPS-T-16.
14 Variabilities for each new category stemming from the 1999 space survey were the
15 same as the most similar former category.

16 **3. Distribution of Facility-Related Costs**

17 My testimony also provides the distribution key for each of the space
18 categories. These are shown in Attachment 7 and are also described in the
19 Summary Description, USPS LR-L-1, page 15-4. With a few exceptions, the
20 distribution keys for the mail processing categories are the same as for the mail

²¹ Total volume variable imputed rents are computed by multiplying the variability for each space category, as described in the next section, by the category imputed rent, and summing results for all categories.

1 processing labor cost pools. The exceptions occur where a facility category
2 corresponds to combinations of labor cost pools, in which case the distribution key is
3 the combination of these cost pools. An example of this in Attachment 7 is category
4 7, which corresponds to “SPBS – Priority Mail” and “SPBS—Non-Priority Mail,”
5 combined.

6 This continues the past practice of distributing facility-related costs to
7 subclass based the distribution of costs for the labor using the space.²² For
8 example, in the case of a Delivery Barcode Sorter (DBCS), the facility space
9 usage by subclass within the DBCS operation is taken to be proportionate to the
10 equipment operators’ labor time by subclass. If 40 percent of the DBCS operator
11 time were spent loading and sweeping Standard Mail letters, then 40 percent of
12 the utilization of DBCS would be for Standard Mail letters, and 40 percent of the
13 DBCS space provision and space support costs would be distributed to Standard
14 Mail letters.

²² See LR-K-1 of Docket No. R2005-1.

1 III. PIGGYBACK FACTORS

2 Attachments 8 to 12 contain the various piggyback factors, and related
3 costs provided by my testimony. Piggyback factors are used to incorporate
4 indirect costs into the cost avoidance estimates and are used to compute final
5 adjustments. For example, piggyback factors are employed in cost avoidance
6 studies to augment labor cost estimates by adding the costs associated with
7 supervisors and administration, as well as facility-related costs and equipment-
8 related costs, in the same way that such costs are treated in the development of
9 base year and test year costs by witnesses Milanovic and Waterbury.

10 The costs used in calculating test year piggyback factors are those
11 developed in the test year before rates costs of witness Waterbury, USPS-T-10.²³
12 Generally, piggyback factors are ratios of total volume variable cost to volume
13 variable labor cost for specific functions or operations (e.g. city carriers or OCRs).
14 Total costs, contained in the numerator, include labor, supervisor, administrative,
15 service-wide benefits, facility-related and equipment-related costs. Labor costs, in
16 the denominator, are all non-supervisory, non-administrative labor cost associated
17 with the function or operation. Division of the numerator by the denominator
18 produces a ratio that indicates the relationship between total costs and non-
19 supervisory, non-administrative labor costs. The ratio is greater than 1.00, since
20 the numerator includes all costs, while the denominator includes only the non-
21 supervision, non-administrative labor costs. The amount by which the ratio is

²³ The specific costs referred to are the test year before rates costs (with mix adjustment) of witness Waterbury in Exhibit USPS-10J.

1 greater than 1.00 indicates the degree to which all costs exceed non-supervision
2 and non-administrative labor costs.

3 For example, the test year mail processing piggyback factor for First-Class
4 Mail, single-piece letters & parcels, is 1.577 as shown in Attachment 8. This ratio
5 indicates that in the average mail processing operation, for every dollar of labor
6 costs for First-Class single-piece letters & parcels, the Postal Service incurs 57.7
7 cents of supervision, administrative costs, service-wide benefits, facility-related
8 costs and equipment-related costs.

9 There are three main sets of piggyback factors for the test year: factors by
10 major function and subclass, shown in Attachment 8; factors used for final
11 adjustments, shown in Attachment 9; and mail processing cost pool factors, shown
12 in Attachment 10. Attachment 11 contains some additional piggyback factors and
13 related costs, used in developing cost avoidance estimates. Attachment 12
14 contains the results of the calculation of test year Caller Service costs used by
15 witness Kaneer, USPS-T-41, in setting rates. The detailed calculations of the
16 results shown in Attachments 8 to 12 are contained in USPS LR-L-52. The
17 methodology used is essentially the same as that employed in Docket No. R2005-
18 1 in USPS LR-K-52. There are some changes, which I discuss below, for the
19 three main sets of piggyback factors and the Caller Service costs.

20 **A. Piggyback Factors by Major Function and Subclass**

21 Attachment 8 contains the test year piggyback factors by major function and
22 subclass. The major functions are shown at the top of the columns. They are mail
23 processing, window service, city delivery carriers, vehicle service drivers, rural

1 carrier delivery and postmasters.²⁴ Subclasses are indicated in the rows of the
2 attachment.

3 The development of the mail processing piggyback factor for “First-Class
4 Mail, single-piece letters”²⁵ of 1.577, is typical of factor development generally.
5 Development of this piggyback factor uses volume variable costs from the Test
6 Year from witness Waterbury. As shown in LR-L-52 in part II, pages 7 to 9, the
7 piggyback factor 1.577, for the top row, which is highlighted, is the ratio of
8 5,940,213 in column 29 (total estimated volume variable costs for mail processing)
9 to the sum of 3,764,592 and 1,358, columns 1 and 4 (total volume variable labor
10 costs).

11 The volume variable labor costs of 3,764,592 and 1,358 (in thousands of
12 dollars) are taken directly from witness Waterbury’s exhibit USPS-10J at pages C-
13 7 and C-8 for First-Class single-piece letters. Total volume variable costs for mail
14 processing 5,940,213, from column 29 in page 9, is calculated by summing the
15 different component costs for labor, supervision, administrative, service-wide
16 benefits, facility-related and equipment-related for mail processing shown in pages
17 7-9. Some of these costs, such as mail processing supervision costs of 262,351
18 (at column 2 of page 7), are also taken directly from witness Waterbury’s exhibit
19 USPS-10J at page C-4 for First-Class single piece letters.

²⁴ The Clerk/Messengers has been abolished, eliminating piggyback factors for this category. A new category, “Postmasters” takes the place of Accounting and Auditing.

²⁵ This category refers to First-Class single piece letters, flats and parcels. It excludes First-Class single-piece cards.

1 Often, the component costs presented by witness Waterbury must be
2 disaggregated for use in piggyback calculations. An example is the calculation of
3 the mail processing portion of benefits contained in component 18.3, which is
4 found to be 272,864 in column 19 on page 8 of LR-L-52. Witness Waterbury
5 provides the total benefits cost for First-Class single-piece letters of 474,984 as
6 shown at USPS-10J, page C-24. Calculation of the mail processing portion of this
7 cost for piggyback factor calculations parallels the variability and distribution
8 procedures used to develop these costs in witness Waterbury's testimony. As
9 indicated at USPS LR-L-1 at pages 18-6 to 18-8, the non-institutional components
10 of cost segment 18.3 are variable to the same degree as composite postal labor
11 costs and are distributed based on the distribution of composite postal labor costs.
12 Therefore, the portion of the total benefits cost that is associated with mail
13 processing, for a given subclass, is the equal to the ratio of the volume variable
14 mail processing labor to total composite volume variable postal labor, for that
15 subclass. In this way, the disaggregation of test year costs, when necessary for
16 the piggyback factors, is done by employing the same methods used in computing
17 the test year costs.

18 Thus, the variability and distribution procedures for the calculation of
19 piggyback factors parallels those provided in the testimonies of witnesses
20 Milanovic, USPS-T-9, and Waterbury, USPS-T-10, and in testimonies supporting
21 their work. Piggyback factors are intended to reflect the same procedures as used
22 by those who develop to the base year and test year costs.

B. Piggyback Factors for Final Adjustments

The piggyback factors for final adjustments, contained in Attachment 9, are applied to the labor cost changes associated with final adjustments provided by witness Page, USPS-T-23, to mirror the development of test year costs that occurs in the roll forward. The roll forward process for reflecting mail volume growth adjusts volume variable “direct” or craft labor cost in proportion to this growth. In addition, certain indirect costs such as supervision, quality control, equipment maintenance personnel, office and clerical, and time and attendance, are also adjusted proportionately.²⁶ The final adjustment piggyback factors applied by witness Page, USPS-T-23, reflect these same changes in indirect costs as would occur for mail volume changes in the roll forward process.²⁷

C. Mail Processing Operation-Specific Piggyback Factors

Test year mail processing operation-specific piggyback factors, contained in Attachment 10, are developed for each of the 50 mail processing labor cost pools provided by witness Van-Ty-Smith.²⁸ In addition, some of the cost pool piggyback

²⁶ This proportional treatment of certain indirect costs reflects mail volume changes, while holding operational procedures the same. While appropriate for changes in mail volume, this treatment is not necessarily correct for all changes in direct labor costs. For instance, the reduction in manual sorting costs through automation would generally involve significant changes to the operational environment, making invalid any assumption of proportionality between changes in direct labor costs and indirect costs.

²⁷ See USPS LR-L-52, Part II, pages 29-31, which shows the calculation of the mail processing final adjustment piggyback factors. For instance, for First-Class, single-piece, letters, the numerator is 4,636,771 (from column 29). It is the sum of the columns 1 to 28. The denominator is the same as discussed above in part A; it is the sum of 3,764,592 and 1,358 (3,765,950). The final adjustments piggyback factor for mail processing for this subclass is the ratio of 4,636,771 to 3,765,950, which is 1.231 as shown in column 30.

²⁸ See USPS-T-11, Table 1.

1 factors are disaggregated as shown in Attachment 10, page 2. These calculations
2 are shown in detail in USPS LR-L-52, Part III.

3 Operation-specific piggyback factors are used in two ways. First, they are
4 an input into the calculation of costs by shape as discussed in part IV of this
5 testimony. Second, these piggyback factors are inputs for the mail processing cost
6 models of witnesses Abdirahman, USPS-T-22, Miller, USPS-T-20 and USPS-T-
7 21, and Page, USPS-T-23.

8 Much the same method is used in these calculations as used in Docket No.
9 R2005-1, USPS LR-K-52, Part III. The process involves determining the following
10 costs by cost pool: the clerk and mail handler labor costs; supervisor, service-wide
11 benefits and administrative costs; and facility-related and equipment related costs.
12 Then these costs are combined to compute the piggyback factors for the cost
13 pools as shown on page III-2 of USPS LR-L-52.

14 I obtain the base year volume variable mail processing labor costs by cost
15 pool from witness Van-Ty-Smith, USPS-T-11, Table 1. To obtain the test year
16 costs, these base year volume variable processing labor costs by cost pool are
17 "rolled forward" using an approximation of the methods described by witness
18 Waterbury in her testimony. This calculation is done in USPS LR-L-52, Part III,
19 page III-3. This projection of test year costs approximates the wage escalation,
20 mail volume growth and cost reductions and other programs calculations of
21 witness Waterbury in her development of test year before rates costs, presented in
22 Exhibit USPS-10J. Functionally, it is the equivalent to a disaggregation of witness

1 Waterbury's costs. The resulting test year volume variable mail processing labor
2 costs by cost pool is shown in column 1 of page III-2 of USPS LR-L-52.

3 Test year supervisor, service-wide benefits and administrative costs for
4 each of the cost pools is shown in column 2 of page III-2 of USPS LR-L-52. These
5 are based on the calculations supporting the test year mail processing labor
6 piggyback factors by subclass presented in Attachment 8. Pages III-18 and III-19
7 show the calculation of the cost ratios needed to compute these costs for the cost
8 pools.

9 The calculation of facility related costs shown in the columns 3 and 4 of
10 page III-2, USPS LR-L-52, for each of the cost pools is accomplished in pages III-8
11 to III-16. The calculation is essentially the same as done previously²⁹, in that
12 square feet and rents by category are used to split facility-related costs by
13 category.³⁰ As done previously, the square feet and rents by category shown in
14 Attachment 6 were modified for the purposes of the cost pool piggyback factors.
15 As mentioned above, Attachment 6 includes REC space square feet and rents
16 used for "parcels" in the SPBS (APPS) category, and square feet and rents for
17 PARS in the CFS category. CIOSS (modified DBCS) is an element of PARS, and
18 therefore was in the CFS category. However, in order to be most consistent with
19 the mail processing labor cost pools as presently defined, I shifted the REC square
20 feet and rents back to the RBCS category, and the CIOSS square feet and rents
21 back to the DBCS category. In addition, to relate REC costs to PARS and APPS,

²⁹ See Docket No. R2005-1, USPS LR-K-52, part III.

³⁰ In cases where a facility category involves two labor cost pools, the facility-related costs are split based on relative labor costs.

1 and to also relate CIOSS to CFS for the purposes of piggyback factors, I
2 supplemented the cost pool piggyback factors with piggyback factors for additional
3 operations (See LR-L-52, page III- 2A). After relating the facility-related costs to
4 the labor cost pools based on the actual space used in the operations, support
5 costs such as for employee facilities, office space, processing equipment
6 maintenance and mail transport equipment centers are related to the labor cost
7 pools consistent with treatment of these costs in the base year and the test year,
8 see Attachment 7.

9 Test year equipment-related costs by processing labor cost pool are
10 shown in columns 5 to 7 of page III-2 of LR-L-52. To obtain these, base year
11 maintenance labor and parts & supplies costs presented in Attachment 1 must be
12 “rolled forward” to the test year, again paralleling the calculations of witness
13 Waterbury, as shown on pages III-15 and III-16 of USPS LR-K-52. Mail
14 processing depreciation is available for the test year as presented in Attachment 3.

15 The next step was to relate costs for the 21 categories associated with
16 equipment depreciation, maintenance labor, and supplies costs to the 50
17 processing labor cost pools. A number of equipment categories could be directly
18 matched to labor cost pools. Where that was not possible, one of two additional
19 methods were used to link the categories to the cost pools. First, the Facility
20 Space Usage Study provided information on the split of processing equipment like
21 DBCS between Plants and Non-MODS facilities or BMCs. That was used to split
22 equipment related costs. Second, a portion of the “old” cross walk matrix was
23 used to relate the costs for “Dispatch Scanning,” “Strapping, Sleeving and

1 Unsleeving” and “Powered Transport Equipment” to the labor cost pools. Costs for
2 the new category, RCS/LCTS, were split between Dispatch and Mechanized Tray
3 Sorting based on the split of labor costs to these categories. All CFS and PARS
4 costs were related to the cost pool LDC 49 – Centralized Forwarding System.
5 Finally, equipment cost in the categories “General and Logistics, BMC”, “General
6 and Logistics, Non-BMC”, and “Mail Transport Equipment” were computed for
7 each of the 50 labor cost pools, based on their treatment (variability and
8 distribution) in the base year and test year cost development. For example, as
9 shown in Attachment 4, line 18, “General and Logistics, BMC” costs are distributed
10 to subclasses in proportion to the subclass distribution of mail processing labor
11 costs at BMCs. These costs are apportioned to the 6 cost pools at BMCs as
12 shown on page III-2 of USPS LR-K-52, in proportion to the labor cost for each,
13 shown in column 1.

14 For each category, the total cost shown on page III-2 was divided by the
15 labor costs for each of the mail processing labor costs to obtain the piggyback ratio
16 in column 9, and providing the piggyback factors for each of the 50 mail processing
17 labor cost pools listed in my Attachment 10, page 1.

18 Additional mail processing piggyback factors by operation are provided
19 on Attachment 10, page 2. The Primary Parcel Sorting Machine (PPSM) and
20 Secondary Parcel Sorting Machine (SPSM) piggyback factors have been adjusted
21 to maintain consistency between the piggyback factor and the corresponding labor
22 costs. The piggyback factors for PPSM and SPSM are initially calculated based
23 on the BMC PSM labor cost pool. However, witness Miller, USPS-T-21, has

1 computed PSM labor productivities and costs based on the BMC MODS hours
2 reported for PSM operations. To maintain consistency with witness Miller's
3 approach, the piggyback factors initially computed using the BMC PSM cost pool
4 labor costs were adjusted to reflect the MODS based PSM labor costs. See USPS
5 LR-L-52, page III-2B.

6 **D. Calculation of Caller Service Costs**

7 Witness Waterbury, USPS-T-10, presents test year before rates volume
8 variable costs for Post Office Box, Caller Service and Reserve Number in USPS-
9 10J, page C-2. These costs total 618.525 million dollars, as shown in the row
10 labeled "Post Office Box". Witness Kaneer, USPS-T-41, required the cost of Caller
11 Service contained within this category, divided into costs for space provision,
12 space support and other. This testimony identifies Caller Service costs of 29.1
13 million dollars, comprised of 8.4 million dollars for space provision, 7.8 million
14 dollars for space support, and 12.9 million dollars for other. Calculations are
15 summarized in Attachment 12 and shown in detail in USPS LR-L-52, part IV.

16 The calculations shown in Attachment 12 for Window Retrieval and Mail
17 Processing Platform Retrieval of mail for Caller Service reflect a new procedure as
18 compared to that done previously. Previously these costs were estimated using a
19 special study (see R2005-1, LR-K-K-59, Attachment 2, page 2). The new
20 methods are instead CRA based, so that the labor costs for retrieval at the window
21 and on the platform are taken from IOCS rather than a special study. This new
22 approach improves the consistency of estimates by relying [solely] on IOCS data.

- 1 Accounting costs and Storage costs are developed as before and are provided by
- 2 witness Page, USPS-T-23, and see USPS LR-L-59, Attachment 1.

1 **IV. MAIL PROCESSING UNIT COSTS BY SHAPE FOR TEST YEAR**

2 Attachment 14 contains test year mail processing unit costs by shape and
3 subclass or CRA category for First-Class, Periodicals, Standard and Package
4 Service. These costs include piggyback or indirect costs and are provided
5 separately by cost pool in USPS LR-L-53, part VI. They are used by the following
6 witnesses in determining cost avoidance estimates: Abdirahman, USPS-T-22,
7 Miller, USPS-T-20 and USPS-T-21, and Page, USPS-T-23. The detailed
8 calculations of the results in Attachment 14 are contained in USPS LR-L-53.³¹
9 Below, I summarize the procedure used for these calculations, and I follow the
10 summary by describing each step of the procedure in more detail.

11 Mail processing unit costs by shape and cost pool for the test year are a
12 disaggregation of witness Waterbury's test year costs, developed as follows. I
13 start with the base year mail processing labor cost data by subclass, cost pool,
14 disaggregated by shape, and apply to these costs the same adjustments that
15 witnesses Milanovic, USPS-T-9, and Waterbury, USPS-T-10, apply to component
16 3.1 costs in their workpapers and models. For the base year, I adjust costs by
17 subclass for premium pay. Then I reflect the effects on costs of wage escalations,
18 mail volume changes by subclass, cost reduction programs, and other programs,
19 to adjust base year costs to test year levels. I apply piggyback factors by cost pool
20 to reflect indirect costs and to obtain preliminary test year mail processing costs by
21 shape. These costs are preliminary because my calculations, including the
22 calculation of the piggyback factors, approximate the calculations

³¹ This is an update of USPS LR-K-53 of Docket No. R2005-1.

1 by witnesses Milanovic and Waterbury. As a result, I must reconcile these costs
2 with test year costs and adjust them to be consistent at the subclass level. In
3 addition, I adjust Standard Regular flats and parcels costs to eliminate an
4 inconsistency in the volume and cost data that overstates parcels unit costs.

5 In performing the calculations summarized above, and detailed below, I use
6 mail processing labor costs by shape from witness Van-Ty-Smith, USPS-T-11, in
7 USPS LR-L-55, part III, table III, and volumes by shape from witness Loetscher,
8 USPS-T-28, based on RPW and Postal One! as shown in USPS LR-L-87.

9 I start out with the mail processing labor costs by cost pool, by shape, as
10 developed by witness Van-Ty-Smith. For all non-BMC mail processing labor costs,
11 I apply the same premium pay adjustments that witness Milanovic applies to costs
12 in his workpapers and model.

13 Next, I adjust labor costs for each cost pool for the percentage change in
14 costs projected between the base year and the test year. This approximates the
15 wage escalation, mail volume changes by subclass, and cost reductions and other
16 programs adjustments that witness Waterbury has employed in developing test
17 year before rates costs. These projections, by cost pool, use the same information
18 and process used to develop the operation-specific piggyback factors (see USPS
19 LR-L-52, part III). At this stage, costs are summed by subclass and reconciled for
20 any differences with test year costs (component 3.1) of witness Waterbury, in
21 Exhibit USPS-10J. This reconciliation imparts the class specific distribution of cost
22 reductions and other programs as well as the effects of volume growth.

1 Piggyback factors are applied to the reconciled labor costs to develop total
2 mail processing costs, and the results are divided by subclass volumes to obtain
3 unit costs by subclass. The final step is to reconcile these unit costs with the test
4 year mail processing labor and indirect costs presented by witness Waterbury.
5 These calculations are shown in USPS LR-L-53, and the results are shown in
6 Attachment 14 of this testimony.

7 The final step also incorporates the Standard Regular flat-parcel adjustment
8 to compensate for an inconsistency between the cost and volume data. The
9 inconsistency arises for “parcel-size” pieces between $\frac{3}{4}$ th and 1 $\frac{1}{4}$ th inches thick.
10 Since the inception of the parcel rate surcharge and according to regulations in
11 DMM 301.3.4.2, such pieces can pay either flats or parcel rates depending on their
12 make up. Pieces prepared as automation flats pay flats rates and avoid a parcel
13 surcharge. RPW by Shape Report information, which is based on postage
14 statement data, provided by witness Loetscher (in USPS LR-L-87) reflect these
15 pieces as flats. IOCS, however, collects data without the benefit of postage
16 statements, and most likely reports the costs for these pieces as parcels. Parcel
17 shaped pieces mailed at automation flats rates appear to be a significant share of
18 parcel shape pieces for Standard Regular, and given IOCS treatment of these
19 pieces, the costs for such pieces are a significant share of the Standard Regular
20 parcel costs. As a result, there appears to be a significant inconsistency between
21 volume and cost data for Standard Regular parcels, resulting in inappropriately
22 high processing and other unit costs reported for parcels.

1 An estimate of the inconsistency can be obtained by comparing RPW by
2 Shape Report data (from USPS LR-L-87) and ODIS-RPW sample based Standard
3 Regular volumes by shape. ODIS-RPW volume reporting by shape is consistent
4 with the reporting of cost by shape since both ODIS-RPW and cost systems are
5 sample based and use the same methods to determine piece shape. Since the
6 inception of the parcel rate surcharge and DMM 301.3.4.2 allowing certain “parcel-
7 shaped” pieces to qualify for flats rates, there has been a growing divergence
8 between Standard Regular parcel volumes reported by ODIS-RPW (sample
9 based) and RPW by Shape Report (postage statement based). RPW by Shape
10 reports volumes at about 77 percent of the volumes for ODIS-RPW. The
11 divergence in parcel volume reported by ODIS-RPW and those reported in RPW
12 by Shape since 1999 has been consistent with the rise in the Standard Regular
13 parcel unit costs, thus showing a clear link.

14 To eliminate this inconsistency, we shift about 23 percent of the Standard
15 Regular parcels costs to those for Standard Regular flats. As a result of this
16 adjustment Standard Regular parcels unit costs are reduced from 77.8 cents per
17 piece to 59.6 cents, while Standard Regular flat unit costs are increased from 14.3
18 to 15.1 cents per piece, as shown in Attachment 13.

19 In this testimony, unlike my testimony in prior cases, I do not divide non-
20 carrier route presort letters and cards processing costs for First-Class and
21 Standard into automation and non-automation categories. In prior testimony, this
22 division was done consistent with the “1999 IOCS method for dividing tallies
23 between non-automation and automation letters” utilized by the PRC in Docket No.

1 R2000-1.³² This division was based on IOCS information on piece markings (such
2 as whether or not the letter/card has “Automation” or “Auto” in the indicia or
3 address label), or if the piece has a mailer applied 11-digit barcode. As pointed
4 out by witness Abdirahman, USPS-T-22, the mail piece characteristics observable
5 by IOCS data collectors such as indicia, markings, presence or absence of a
6 barcode – do not allow an adequate determination of whether a piece was
7 automation rate or not. As a result, accurate costs for automation rate and non-
8 automation rate letters can not be provided as previously done.

9 In past testimony, the processing costs by shape of First-Class single piece
10 letters have been divided by meter and non-metered for use in rate design. As
11 discussed by witnesses Abdirahman, USPS-T-22, and Taufique, USPS-T-32, this
12 split was no longer needed.

13
14
³² See PRC Op., Docket No. R2000-1, Vol. I, at 242, [5095]. Also see USPS LR-K-10.

1 **V. SUMMARY**

2 This testimony has described the methodology, rationale and calculations
3 for:

- 4 1. volume variable equipment and facility-related costs for base year and
5 test year,
- 6
- 7 2. piggyback factors, and
- 8
- 9 3. mail processing (labor and indirect) unit costs by shape and cost pool .
- 10

11 Much of my testimony focuses on equipment and facility-related costs. In general
12 my work in these areas follows past practice and has been accepted by the Postal
13 Rate Commission (PRC) as noted above. The current treatment of equipment and
14 facility-related costs follows my testimony in Docket No. R90-1.³³ Since that
15 Docket, the treatment of these costs has been enhanced through further
16 refinement of the equipment and facility categories.³⁴ The 25 equipment
17 categories and 63 facility space categories, enabled by the FY 1999 Facility Space
18 Usage Study, provide a strong basis for relating equipment and facility-related
19 costs to subclass. These refinements of equipment and facility-related costs,
20 along with the development of mail processing labor cost pools, have allowed

³³ The Commission did not explicitly address the cost pools that I proposed in Docket No. R90-1. However, their development of equipment and facility-related costs appeared to have utilized my proposed cost pools. In addition, the Commission's endorsement of the new operation-specific piggyback factors at III-1, [3001], and their modifications to these in Appendix M of the Decision make explicit use of the equipment and facility-related costs with my proposed cost pools. See PRC Op., Docket No. R90-1, Volumes 1 and 2.

³⁴ The number of equipment categories in Docket No. R90-1 was 12, as shown in Appendix M, page 6. The number in this Docket is 25; see Attachment 1. The number of facility related categories, in mail processing alone, was 9 as shown at Appendix M, page 18. The current treatment divides mail processing space up into 48 categories, paralleling the mail processing labor cost pools.

- 1 significant improvement in the development of piggyback factors and costs by
- 2 shape as well.

1 **VI. PROPOSED CHANGES RELATIVE TO PRC METHODOLOGY**

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

8 The comparison required by this exercise cannot be equated
9 with sponsoring the preexisting methodology. It merely
10 identifies and gives context to the proposed change, serving
11 as a benchmark so that the impact can be assessed....

12 [W]itnesses submitting testimony under Rule 53(c) sponsor
13 the proposed methodological changes, not the preexisting
14 methodology. That they may be compelled to reference the
15 preexisting methodology does not mean that they are
16 sponsoring it.

17 Order No. 1380 (August 7, 2003) at 7. Therefore, although I may be compelled to
18 refer to the PRC methodologies and versions corresponding to the Postal Service
19 proposals which are the subject of my testimony, my testimony does not sponsor
20 those PRC materials.

21 The proposed changes relative to the PRC methodology are as follows:

- 22 1. Different Facility Space Categories – the PRC version has 69 categories vs.
23 the 63 in my testimony (see Attachments 5 and 6). This affects the

1 distribution of base year and test year facility-related costs due to different
2 mail processing labor cost pool definitions. These parallel those of witness
3 Van-Ty-Smith, USPS-T-11, “proposed change” on mail processing labor
4 cost pools and are a direct result of having facility categories parallel the
5 mail processing labor cost pools. , See LR-L-54, part I.

6 2. Differences in piggyback factors due to the differences between USPS and
7 PRC base year and test year versions. See USPS LR-L-52 vs. USPS LR-L-
8 98.

9 3. Differences in cost by shape due to differences between USPS and PRC
10 base year and test year versions. See USPS LR-L-53 vs. USPS LR-L-99.

11 The cost for First-Class single piece metered letters is no longer provided in
12 USPS LR-L-53, but it is available in USPS LR-L-99, as discussed by
13 witness Taufique, USPS-T-32.

14 Most all of these differences stem from the differences on mail processing labor
15 cost variabilities and distribution, as discussed by witnesses Bozzo, USPS-T-12,
16 and witness Van-Ty-Smith, USPS-T-11, in their discussions of “Proposed Changes
17 Relative to PRC Methodology.”

18

19

20

21

List of Attachments

1. Maintenance Labor, And Parts And Supplies For Mail Processing and Other Equipment By Category For FY 2005
2. Mail Processing and Other Equipment Depreciation By Category For FY 2005
3. Mail Processing and Other Equipment Depreciation By Category For FY 2008
4. Distribution Keys for Mail Processing and Other Equipment Costs for Capital, Maintenance, and Supplies
5. FY 2005 Facility Space and Rents By Category
6. FY 2008 Facility Space and Rents By Category
7. Variability and Distribution Keys for Facility Categories
8. Test Year Piggyback Factors by Major Function
9. Test Year Piggyback Factors for Final Adjustments
10. Test Year Mail Processing Cost Pool Piggyback Factors
11. Additional Piggyback Factors and Other Costs
12. Calculation of Test Year Caller Service Costs and Division Into Space Provision, Space Support and Other
13. Standard Regular Flat-Parcel Cost Adjustment for Costs by Shape
14. Test Year Mail Processing Unit Costs by Shape

**MAINTENANCE LABOR, AND PARTS AND SUPPLIES FOR
MAIL PROCESSING AND OTHER EQUIPMENT BY CATEGORY _1/**

ATTACHMENT 1

Fiscal Year 2005

Equip. Group	--- Equipment Description ---	Maintenance Labor Costs (CS 11)	Parts & Supplies Costs (CS 16)
1	OCRs	87,003,476	7,088,107
2	MPBCSs	42,986,361	3,102,645
3	DBCSs	389,961,395	49,508,042
4	CSBCSs	10,531,053	9,335,099
5	MERLIN	6,874,929	3,408,429
6	FSMs	123,661,917	15,487,829
0	RBCS: WORKROOM	24,218,943	2,716,945
0	RBCS: REMOTE ENCODING CENTERS	9,913,885	342,705
7	RBCS TOTAL	34,132,828	3,059,650
8	CFS	22,557,759	2,549,732
9	EDGE, FACE, & CANCEL - LETTERS	143,041,376	78,755,745
10	EDGE, FACE, & CANCEL - FLATS	3,367,216	172,240
11	CULLING	6,992,751	264,798
12	SSMs	18,339,777	991,513
13	SPBS/APPS	62,982,910	9,550,838
14	PSMs	49,255,477	8,492,797
15	DISPATCH SCANNING	17,592,950	2,540,840
16	STRAPPING, SLEEVING, UNSLEEVING_2/	16,795,789	1,098,136
18	GENERAL AND LOGISTICS: BMC	47,573,605	1,829,332
19	GENERAL AND LOGISTICS: NON-BMC	67,777,013	4,870,258
20	MAIL TRANSPORTATION EQUIPMENT	5,972,735	160,478,783
21	POWERED TRANSPORT EQUIPMENT	51,283,734	4,058,528
22	LOW COST TRAY SORTER/ROBOTIC CONTAINER SYSTEMS	11,735,405	1,179,887
23	PARS	1,315,932	535,277
24	POS ONE	89,018	57,694,723
	TOTAL FROM ABOVE	1,221,825,406	426,053,227
	OTHER EQUIPMENT	214,654,568	192,462,695
	TOTAL EQUIPMENT	1,436,479,974	618,515,922

_1/ REFER TO USPS LR-L-54, PAGE II-8. THE CRA INPUT REFLECTING THESE COSTS IS THE PERCENTAGE OF COST BY CATEGORY, SEE USPS LR-L-54, PAGE II-11.

_2/ CATEGORY 17 IS TRAY TRANSPORT AND STAGING, WHICH HAS BEEN APPORTIONED TO THE CATEGORIES OF OCR, MPBCS, DBCS AND FSM.

MAIL PROCESSING AND OTHER EQUIPMENT DEPRECIATION
 BY CATEGORY _1/
 Fiscal Year 2005

ATTACHMENT 2

Equip. Group	--- Equipment Description ---	Depreciation Costs (CS 20.1)
1	OCRs	16,560,988
2	MPBCSs	6,165,474
3	DBCSs	175,235,887
4	CSBCSs	34,863,713
5	MERLIN	16,209,438
6	FSMs	155,072,382
0	RBCS: WORKROOM	115,003,272
0	RBCS: REMOTE ENCODING CENTERS	-
7	RBCS TOTAL	115,003,272
8	CFS	3,065,153
9	EDGE, FACE, & CANCEL - LETTERS	19,876,977
10	EDGE, FACE, & CANCEL - FLATS	373,488
11	CULLING	3,151,393
12	SSMs	2,141,879
13	SPBS/APPS	36,723,790
14	PSMs	20,490,870
15	DISPATCH SCANNING	12,118,205
16	STRAPPING, SLEEVING, UNSLEEVING_2/	2,758,656
18	GENERAL AND LOGISTICS: BMC	68,076,817
19	GENERAL AND LOGISTICS: NON-BMC	48,426,866
20	MAIL TRANSPORTATION EQUIPMENT	-
21	POWERED TRANSPORT EQUIPMENT	7,934,051
22	LOW COST TRAY SORTER/ROBOTIC CONTAINER SYSTEMS	27,552,121
23	PARS	17,540,153
24	POS ONE	111,486,959
	TOTAL FROM ABOVE	900,828,531
	OTHER EQUIPMENT DEPRECIATION	281,060,904
	TOTAL EQUIPMENT	1,181,889,435

_1/ SEE USPS LR-L-54, PAGE IV-4. THE CRA INPUT REFLECTING THESE COSTS IS THE PERCENTAGE OF COST BY CATEGORY, SEE USPS LR-L-54, PAGE IV-9.

_2/ CATEGORY 17 IS TRAY TRANSPORT AND STAGING, WHICH HAS BEEN APPORTIONED TO THE CATEGORIES OF OCR, MPBCS, DBCS AND FSM.

MAIL PROCESSING AND OTHER EQUIPMENT DEPRECIATION
BY CATEGORY _1/

ATTACHMENT 3

Fiscal Year 2008

Equip. Group	--- Equipment Description ---	Depreciation Costs (CS 20.1)
1	OCRs	54,965,577
2	MPBCSs	4,932,421
3	DBCSs	104,923,767
4	CSBCSs	211,847
5	MERLIN	16,289,705
6	FSMs	216,016,187
	RBCS: WORKROOM	24,160,821
	RBCS: REMOTE ENCODING CENTERS	0
7	RBCS TOTAL	24,160,821
8	CFS/PARS FOR LETTERS	79,803,183
9	EDGE, FACE, & CANCEL - LETTERS	20,794,556
10	EDGE, FACE, & CANCEL - FLATS	316,346
11	CULLING	4,443,614
12	SSMs	2,213,726
13	SPBS/APPS	62,921,643
14	PSMs	22,070,808
15	DISPATCH SCANNING	11,118,844
16	STRAPPING, SLEEVING, UNSLEEVING_2/	10,405,266
18	GENERAL AND LOGISTICS: BMC	54,289,417
19	GENERAL AND LOGISTICS: NON-BMC	44,957,807
20	MAIL TRANSPORTATION EQUIPMENT	0
21	POWERED TRANSPORT EQUIPMENT	9,045,914
22	LOW COST TRAY SORTER/ROBOTIC CONTAINER SYSTEMS	49,191,310
23	CFS/PARS FOR FLATS	10,834,802
24	POS ONE	30,909,817
25	IMD SCANNERS	54,376,379
	TOTAL FROM ABOVE	889,193,757
	OTHER EQUIPMENT DEPRECIATION	623,268,875
	TOTAL EQUIPMENT DEPRICIATION*	1,512,462,632

_1/ SEE USPS LR-L-54, PAGE IV-12. THE CRA INPUT REFLECTING THESE COSTS IS THE PERCENTAGE OF COST BY CATEGORY, SEE USPS LR-L-54, PAGE IV-16.

_2/ CATEGORY 17 IS TRAY TRANSPORT AND STAGING SYSTEMS, & IS APPORTIONED TO OCRs, MPBCSs, DBCSs & FSMs.

*Minus Specific Fixed Depreciation

DISTRIBUTION KEYS FOR MAIL PROCESSING AND OTHER EQUIPMENT
COSTS FOR CAPITAL, MAINTENANCE, AND SUPPLIES

FY 2005

<u>LINE NO.</u>	<u>EQUIPMENT CATEGORY</u>	<u>DISTRIBUTION KEY</u> _1/
1	OPTICAL CHARACTER READERS (OCRs)	IOCS TALLIES FOR OCR OPERATION
2	MAIL PROCESSING BARCODE SORTERS (MPBCSs)	IOCS TALLIES FOR MPBCS OPERATION
3	DELIVERY BARCODE SORTERS (DBCSs)	IOCS TALLIES FOR DBCS OPERATION
4	CARRIER SEQUENCE BARCODE SORTERS (CSBCSs)	IOCS TALLIES FOR CSBCS OPERATION
5	MERLIN	COST POOL LDC 79 - MAILING REQ' & BUS. MAIL ENTRY
6	FLAT SORTING MACHINE (FSMs)	IOCS TALLIES FOR FSM OPERATION
7	REMOTE BARCODING SYSTEM	IOCS TALLIES FOR MPBCS, DBCS OPERATION, IN OSS MODE
8	COMPUTER FORWARDING SYSTEM	IOCS TALLIES FOR CFS OR MARKUP OPERATION
9	EDGER/FACER/CANCELER - LETTERS	IOCS TALLIES FOR LETTER FACER/CANCELER OPERATION
10	EDGER/FACER/CANCELER - FLATS	IOCS TALLIES FOR FLAT FACER/CANCELER OPERATION
11	CULLING	IOCS TALLIES FOR CULLING OPERATION
12	SACK SORTING MACHINE (SSMs)	IOCS TALLIES FOR SSM OPERATION
13	SPBS/APPS	IOCS TALLIES FOR SPBS/APPS OPERATION
14	PARCEL SORTING MACHINE (PSM) /NON-MACHINABLE OUTSIDE MACHINE (NMO)	IOCS TALLIES FOR PSM AND NMO OPERATION
15	DISPATCH SCANNING	IOCS TALLIES FOR AAA & SYWB OPERATIONS
16	STRAPPING, SLEEVING, UNSLEEVING	IOCS TALLIES FOR STRAPPING OPERATION
17	TRAY TRANSPORT AND STAGING SYSTEMS	N/A (APORTIONED TO OCR, MPBCS, DBCS AND FSM CATEGORIES)
18	GENERAL AND LOGISTICS, BMC	ALL BMC MAIL PROCESSING LABOR
19	GENERAL AND LOGISTICS, NON-BMC	ALL NON-BMC MAIL PROCESSING LABOR
20	MAIL TRANSPORTATION EQUIPMENT	ALL MAIL PROCESSING LABOR
21	POWERED TRANSPORT EQUIPMENT	IOCS TALLIES FOR FORKLIFTS, TOW MOTORS, ETC.
22	LOW COST TRAY SORTER/ROBOTIC CONTAINER SYSTEMS	COST POOL MECHANIZED TRAY SORTING
23	PARS	IOCS TALLIES FOR CFS OR MARKUP OPERATION
24	POS ONE	WINDOW SERVICE LABOR COSTS

_1/ SEE USPS LR-L-54, PAGE IV-8.

DISTRIBUTION KEYS FOR MAIL PROCESSING AND OTHER EQUIPMENT
COSTS FOR CAPITAL, MAINTENANCE, AND SUPPLIES

FY 2008

<u>LINE NO.</u>	<u>EQUIPMENT CATEGORY</u>	<u>DISTRIBUTION KEY</u> _1/
1	OPTICAL CHARACTER READERS (OCRs)	IOCS TALLIES FOR OCR OPERATION
2	MAIL PROCESSING BARCODE SORTERS (MPBCSs)	IOCS TALLIES FOR MPBCS OPERATION
3	DELIVERY BARCODE SORTERS (DBCSs)	IOCS TALLIES FOR DBCS OPERATION
4	CARRIER SEQUENCE BARCODE SORTERS (CSBCSs)	IOCS TALLIES FOR CSBCS OPERATION
5	MERLIN	COST POOL LDC 79 - MAILING REQ' & BUS. MAIL ENTRY
6	FLAT SORTING MACHINE (FSMs)	IOCS TALLIES FOR FSM OPERATION
7	REMOTE BARCODING SYSTEM	IOCS TALLIES FOR MPBCS, DBCS OPERATION, IN OSS MODE
8	CFS/PARS FOR LETTERS	LDC 49 - CFS, COMPONENT 938 -- LETTERS ONLY
9	EDGER/FACER/CANCELER - LETTERS	IOCS TALLIES FOR LETTER FACER/CANCELER OPERATION
10	EDGER/FACER/CANCELER - FLATS	IOCS TALLIES FOR FLAT FACER/CANCELER OPERATION
11	CULLING	IOCS TALLIES FOR CULLING OPERATION
12	SACK SORTING MACHINE (SSMs)	IOCS TALLIES FOR SSM OPERATION
13	SPBS/APPS	IOCS TALLIES FOR SPBS/APPS OPERATION
14	PARCEL SORTING MACHINE (PSM) /NON-MACHINABLE OUTSIDE MACHINE (NMO)	IOCS TALLIES FOR PSM AND NMO OPERATION
15	DISPATCH SCANNING	IOCS TALLIES FOR AAA & SYWB OPERATIONS
16	STRAPPING, SLEEVING, UNSLEEVING	IOCS TALLIES FOR STRAPPING OPERATION
17	TRAY TRANSPORT AND STAGING SYSTEMS	N/A (APORTIONED TO OCR, MPBCS, DBCS AND FSM CATEGORIES)
18	GENERAL AND LOGISTICS, BMC	ALL BMC MAIL PROCESSING LABOR
19	GENERAL AND LOGISTICS, NON-BMC	ALL NON-BMC MAIL PROCESSING LABOR
20	MAIL TRANSPORTATION EQUIPMENT	ALL MAIL PROCESSING LABOR
21	POWERED TRANSPORT EQUIPMENT	IOCS TALLIES FOR FORKLIFTS, TOW MOTORS, ETC.
22	LOW COST TRAY SORTER/ROBOTIC CONTAINER SYSTEMS	COST POOL MECHANIZED TRAY SORTING
23	CFS/PARS FOR FLATS	LDC 49 - CFS, COMPONENT 938 -- FLATS ONLY
24	POS ONE	WINDOW SERVICE LABOR COSTS
25	IMD SCANNERS	ALL CARRIER LABOR, P.O. BOXES

_1/ SEE USPS LR-L-54, PAGE IV-8.

FY 2005 FACILITY SPACE AND RENTS BY CATEGORY

	(1) SQUARE FEET	(2) RENTAL VALUE (\$ 000)	(3) RENTS PER SQ.FT. (\$)	
Space Distribution Keys				
1	Mail Processing, Delivery BCS, Carrier Sequence BCS	10,856,854	107,722	9.92
2	OCRs (including BCS on OCRs)	2,214,585	21,922	9.90
3	FSM 1000	1,768,465	17,373	9.82
4	AFMS 100	3,388,558	33,557	9.90
5	Mechanical Sort - Sack Outside	1,146,450	11,382	9.93
6	Mechanized Parcels	122,063	1,208	9.90
7	APPS/SPBS - Non-Priority & Priority	5,952,939	59,140	9.93
8	Manual Flats	609,015	5,993	9.84
9	Manual Letters	1,500,990	14,852	9.89
10	Manual Parcels	948,164	9,428	9.94
11	Manual Priority	2,420,088	24,322	10.05
12	LDC 15 - RBCS	745,349	10,237	13.73
13	Scanning	1,362,983	13,895	10.19
14	Bulk Presort	260,660	2,585	9.92
15	Cancellation & Mail Preparation - Metered	3,602,826	35,649	9.89
16	Manual Sort - Sack Outside	599,843	5,933	9.89
17	Opening Unit - Preferred Mail	2,005,186	19,900	9.92
18	Opening Unit - BBM	1,011,128	10,002	9.89
19	Platform	13,661,055	113,624	8.32
20	Pouching Operations	460,178	4,562	9.91
21	Business Reply / Postage Due	195,839	1,937	9.89
22	Damaged Parcel Rewrap	141,265	1,405	9.95
23	Empty Equipment	3,273,245	32,389	9.89
24	Express Mail	538,212	5,359	9.96
25	Mail Processing Support/Miscellaneous Activity	655,932	6,507	9.92
26	Registry	559,729	5,557	9.93
27	International / ISCs	1,749,551	17,484	9.99
28	LDC 49 - Computerized Forwarding System	1,604,825	16,497	10.28
29	LDC 79 - Mailing Reqs. & Bus. Mail Entry	888,611	9,195	10.35
30	BMC - Platform	2,555,477	24,620	9.63
31	BMC - Allied Labor & All Other Mail Processing	2,085,743	20,884	10.01
32	BMC - Parcel Sorting Machine	3,430,879	34,367	10.02
33	BMC - Sack Sorting Machine	906,639	9,083	10.02
34	BMC - APPS/SPBS & Irregular Parcels (IPP & 115)	666,982	6,678	10.01
35	BMC - Non-Machinable Outside (NMO)	274,379	2,748	10.02
36	Non-MODS - Allied	31,647,618	293,511	9.27
37	Non-MODS - Automated/Mechanized	3,782,822	42,456	11.22
38	Non-MODS - Express Mail	445,041	4,955	11.13
39	Non-MODS - Manual Flat	3,448,735	37,468	10.86
40	Non-MODS - Manual Letter	3,545,288	38,774	10.94
41	Non-MODS - Manual Parcel	6,417,932	69,586	10.84
42	Non-MODS - Registry	492,135	5,869	11.92
43	Non-MODS - Miscellaneous	2,568,321	28,813	11.22
44	Window Service	18,362,835	209,377	11.40
45	Self-Service Postal Center	2,508,788	28,707	11.44
46	Post Office Boxes / Caller Service	26,882,947	313,084	11.65
47	Claims & Inquiry	458,963	5,117	11.15
48	City Carrier	26,295,145	322,327	12.26
49	Rural Carrier	8,787,102	96,043	10.93
50	DDU Accountables Cage	609,448	7,243	11.88
51	Office Space	26,593,977	287,157	10.80
52	Mail Processing Equipment Maintenance	4,808,988	50,438	10.49
53	Other Equipment Maintenance	2,191,263	24,072	10.99
54	Employee Facilities	23,550,911	260,610	11.07
55	VMF	6,731,566	82,216	12.21
56	CVS	9,232,063	37,767	4.09
57	Vacant & Tenant	8,110,852	77,621	9.57
58	HQ, HQ-Field Related, and Area Offices	5,966,998	112,181	18.80
59	Mail Transportation Equipment Centers	1,059,954	10,676	10.07
60	Storage Facilities	5,218,404	52,560	10.07
61	Mechanized Tray Sorter	1,393,344	13,798	9.90
62	Dispatch Unit	1,042,071	10,322	9.90
63	Flats Preparation	1,030,302	10,195	9.90
	307,348,498	3,250,938	10.58	

SOURCE: USPS LR-L-54, PART I

FY 2008 FACILITY SPACE AND RENTS BY CATEGORY

	(1) <u>SQUARE FEET</u>	(2) <u>RENTAL VALUE</u> (\$ 000)	(3) <u>RENTS PER SQ.FT.</u> (\$)	
Space Distribution Keys				
1	Mail Processing, Delivery BCS, Carrier Sequence BCS	10,216,931	111,040	10.87
2	OCRs (including BCS on OCRs)	1,999,350	21,679	10.84
3	FSM 1000	1,768,465	19,030	10.76
4	AFMS 100	3,388,558	36,757	10.85
5	Mechanical Sort - Sack Outside	1,157,031	12,582	10.87
6	Mechanized Parcels	123,189	1,335	10.84
7	SPBS - Non-Priority & Priority	8,427,357	91,705	10.88
8	Manual Flats	585,872	6,315	10.78
9	Manual Letters	1,419,534	15,385	10.84
10	Manual Parcels	956,915	10,423	10.89
11	Manual Priority	2,442,425	26,887	11.01
12	LDC 15 - RBCS	507,512	7,635	15.04
13	Air Contract Data Collection Systems/SWYB	1,375,563	15,361	11.17
14	Bulk Presort	263,066	2,858	10.86
15	Cancellation & Mail Preparation - Metered	3,636,078	39,409	10.84
16	Manual Sort - Sack Outside	605,379	6,558	10.83
17	Opening Unit - Preferred Mail	2,023,693	21,998	10.87
18	Opening Unit - BBM	1,020,460	11,057	10.83
19	Platform	13,787,139	125,607	9.11
20	Pouching Operations	464,426	5,044	10.86
21	Business Reply / Postage Due	197,646	2,141	10.83
22	Damaged Parcel Rewrap	142,569	1,553	10.89
23	Empty Equipment	3,303,456	35,805	10.84
24	Express Mail	543,179	5,924	10.91
25	Mail Processing Support/Miscellaneous Activity	661,986	7,194	10.87
26	Registry	564,895	6,143	10.87
27	International / ISCs	1,749,551	19,151	10.95
28	LDC 49 - Computerized Forwarding System	1,874,151	21,103	11.26
29	LDC 79 - Mailing Reqs. & Bus. Mail Entry	896,812	10,165	11.33
30	BMC - Platform	2,579,063	27,217	10.55
31	BMC - Allied Labor & All Other Mail Processing	2,104,993	23,087	10.97
32	BMC - Parcel Sorting Machine	3,462,544	37,992	10.97
33	BMC - Sack Sorting Machine	915,007	10,041	10.97
34	BMC - SPBS & Irregular Parcels (IPP & 115)	790,362	8,668	10.97
35	BMC - Non-Machinable Outside (NMO)	276,911	3,038	10.97
36	Non-MODS - Allied	31,939,708	324,467	10.16
37	Non-MODS - Automated/Mechanized	3,782,822	46,504	12.29
38	Non-MODS - Express Mail	449,149	5,477	12.20
39	Non-MODS - Manual Flat	3,480,565	41,420	11.90
40	Non-MODS - Manual Letter	3,578,009	42,864	11.98
41	Non-MODS - Manual Parcel	6,477,166	76,925	11.88
42	Non-MODS - Registry	496,677	6,487	13.06
43	Non-MODS - Miscellaneous	2,592,025	31,852	12.29
44	Window Service	18,532,314	231,460	12.49
45	Self-Service Postal Center	2,531,943	31,735	12.53
46	Post Office Boxes / Caller Service	27,131,061	346,105	12.76
47	Claims & Inquiry	463,199	5,657	12.21
48	City Carrier	26,537,834	356,323	13.43
49	Rural Carrier	8,868,202	106,173	11.97
50	DDU Accountables Cage	615,073	8,007	13.02
51	Office Space	26,839,424	317,443	11.83
52	Mail Processing Equipment Maintenance	4,853,372	55,758	11.49
53	Other Equipment Maintenance	2,211,487	26,611	12.03
54	Employee Facilities	23,768,273	288,096	12.12
55	VMF	6,793,694	90,887	13.38
56	CVS	9,317,270	41,750	4.48
57	Vacant & Tenant	8,185,711	85,807	10.48
58	HQ, HQ-Field Related, and Area Offices	6,022,070	124,013	20.59
59	Mail Transportation Equipment Centers	1,069,737	11,802	11.03
60	Storage Facilities	5,266,567	58,104	11.03
61	Mechanized Tray Sorter	2,082,833	22,593	10.85
62	Dispatch Unit	1,051,689	11,410	10.85
63	Flats Preparation	1,039,811	11,271	10.84
	312,209,751	3,614,889	11.58	

SOURCE: USPS LR-L-54, PART I

VARIABILITY AND DISTRIBUTION KEYS FOR FACILITY CATEGORIES

Component Description	Comp.	Distribution Key	Variability
Space Distribution Keys			
1 Mail Processing, Delivery BCS, Carrier Sequence BCS	901	Labor Cost Pool	80%
2 OCRs (including BCS on OCRs)	903	Labor Cost Pool	80%
3 FSM 1000	905	Labor Cost Pool	80%
4 AFMS 100	906	Labor Cost Pool	80%
5 Mechanical Sort - Sack Outside	908	Labor Cost Pool	70%
6 Mechanized Parcels	909	Labor Cost Pool	70%
7 APPS/SPBS - Non-Priority & Priority	910	Labor Cost Pool	70%
8 Manual Flats	911	Labor Cost Pool	80%
9 Manual Letters	912	Labor Cost Pool	80%
10 Manual Parcels	913	Labor Cost Pool	70%
11 Manual Priority	914	Labor Cost Pool	100%
12 LDC 15 - RBCS	915	Labor Cost Pool	80%
13 Scanning	916	Labor Cost Pool	80%
14 Bulk Presort	917	Labor Cost Pool	80%
15 Cancellation & Mail Preparation - Metered	918	Labor Cost Pool	80%
16 Manual Sort - Sack Outside	919	Labor Cost Pool	70%
17 Opening Unit - Preferred Mail	920	Labor Cost Pool	70%
18 Opening Unit - BBM	921	Labor Cost Pool	70%
19 Platform	922	Labor Cost Pool	100%
20 Pouching Operations	923	Labor Cost Pool	80%
21 Business Reply / Postage Due	924	Labor Cost Pool	80%
22 Damaged Parcel Rewrap	925	Labor Cost Pool	80%
23 Empty Equipment	926	Labor Cost Pool	80%
24 Express Mail	928	Labor Cost Pool	100%
25 Mail Processing Support/Miscellaneous Activity	929	Labor Cost Pool	80%
26 Registry	930	Labor Cost Pool	100%
27 International / ISCs	931	Labor Cost Pool	100%
28 LDC 49 - Computerized Forwarding System	938	Labor Cost Pool	80%
29 LDC 79 - Mailing Reqs. & Bus. Mail Entry	939	Labor Cost Pool	80%
30 BMC - Platform	940	Labor Cost Pool	100%
31 BMC - Allied Labor & All Other Mail Processing	941	Labor Cost Pool	80%
32 BMC - Parcel Sorting Machine	942	Labor Cost Pool	70%
33 BMC - Sack Sorting Machine	943	Labor Cost Pool	70%
34 BMC - APPS/SPBS & Irregular Parcels (IPP & 115)	944	Labor Cost Pool	70%
35 BMC - Non-Machinable Outside (NMO)	945	Labor Cost Pool	70%
36 Non-MODS - Allied	946	Labor Cost Pool	80%
37 Non-MODS - Automated/Mechanized	947	Labor Cost Pool	80%
38 Non-MODS - Express Mail	948	Labor Cost Pool	100%
39 Non-MODS - Manual Flat	949	Labor Cost Pool	80%
40 Non-MODS - Manual Letter	950	Labor Cost Pool	80%
41 Non-MODS - Manual Parcel	951	Labor Cost Pool	70%
42 Non-MODS - Registry	952	Labor Cost Pool	100%
43 Non-MODS - Miscellaneous	953	Labor Cost Pool	80%
44 Window Service	954	Window Service Labor--Comp. 40	same as D.K.
45 Self-Service Postal Center	955	Institutional	0%
46 Post Office Boxes / Caller Service	956	All to Post Office Boxes/Caller Ser.	100%
47 Claims & Inquiry	957	Claims & Inquiry Labor -- Comp. 66	same as D.K.
48 City Carrier	958	City Carrier Labor--CS 6 & 7	same as D.K.
49 Rural Carrier	959	Rural Carrier Labor --Comp. 72	same as D.K.
50 DDU Accountables Cage	960	IOCS Tallies for Miscellaneous Op., Checking In/Out Acct.	same as combined city & rural carrier
51 Office Space	961	NON-HQ OFFICE LABOR*	same as D.K.
52 Mail Processing Equipment Maintenance	962	Processing Equip. Maintenance Labor -- Comp. 1258	same as D.K.
53 Other Equipment Maintenance	963	Institutional	0%
54 Employee Facilities	964	All Labor Costs	same as D.K.
55 VMF	965	VMF Labor -- Comp. 90	same as D.K.
56 CVS	966	Institutional	0%
57 Vacant & Tenant	967	Institutional	0%
58 HQ, HQ-Field Related, and Area Offices	968	Institutional	0%
59 Mail Transportation Equipment Centers	969	All Mail Proc. Labor --Comp. 35	same as D.K.
60 Storage Facilities	970	Institutional	0%
61 Mechanized Tray Sorter	971	Labor Cost Pool	80%
62 Dispatch Unit	973	Labor Cost Pool	80%
63 Flats Preparation	974	Labor Cost Pool	80%

*CRA Components: Postmasters, H.L. Supv. & Clks (Other Admin, T&A, Data Coll, Gen. Off., QC)

**TEST YEAR PIGGYBACK FACTORS BY MAJOR FUNCTION
TY2008BR - USPS VERSION**

Line No.	Class, Subclass, or Special Service Cost Segment Column Number	Mail Processing 3.1 (1)	Window Service 3.3 (2)	City Delivery 6 & 7 (3)	Vehicle Service Drivers 8 (4)	Rural Delivery 10 (5)	Postmasters 1 (6)
1	FIRST-CLASS MAIL						
2	SINGLE PIECE LETTERS	1.577	1.392	1.265	1.482	1.188	1.223
3	PRESORT LETTERS	1.568	1.392	1.263	1.482	1.188	1.223
4	TOTAL LETTERS	1.575	1.392	1.264	1.482	1.188	1.223
5	SINGLE PIECE CARDS	1.501	1.392	1.263	1.482	1.188	1.223
6	PRESORT CARDS	1.574	1.392	1.265	1.482	1.188	1.223
7	TOTAL CARDS	1.522	1.392	1.263	1.482	1.188	1.223
8	TOTAL FIRST	1.572	1.392	1.264	1.482	1.188	1.223
9	PRIORITY MAIL	1.504	1.392	1.294	1.482	1.187	1.223
10	EXPRESS MAIL	1.374	1.392	1.307	1.482	1.187	1.223
11	MAILGRAMS	1.000	1.000	1.000	1.000	1.000	1.000
12	PERIODICALS:						
13	WITHIN COUNTY	1.489	1.392	1.261	1.482	1.187	1.223
14	OUTSIDE COUNTY	1.631	1.392	1.252	1.482	1.187	1.223
15	TOTAL PERIODICALS	1.627	1.392	1.253	1.482	1.187	1.223
16	STANDARD MAIL:						-
17	ENHANCED CARR RTE	1.583	1.392	1.260	1.482	1.187	1.223
18	REGULAR	1.589	1.392	1.260	1.482	1.187	1.223
19	TOTAL STANDARD MAIL	1.588	1.392	1.260	1.482	1.187	1.223
20	PACKAGE SERVICES:						-
21	PARCEL POST	1.576	1.392	1.294	1.482	1.187	1.223
22	BOUND PRINTED MATTER	1.659	1.392	1.305	1.482	1.187	1.223
23	MEDIA MAIL	1.657	1.392	1.294	1.482	1.187	1.223
24	TOTAL PACKAGE SERVICES	1.614	1.392	1.298	1.482	1.187	1.223
25	U.S. POSTAL SERVICE	1.560	1.392	1.248	1.482	1.210	-
26	FREE MAIL	1.641	1.392	1.259	1.482	1.187	1.000
27	INTERNATIONAL MAIL	1.514	1.392	1.284	1.482	1.187	1.223
28	TOTAL ALL MAIL	1.573	1.392	1.264	1.482	1.187	1.223
29	SPECIAL SERVICES:						
30	REGISTRY	1.384	1.392	1.283	1.000	1.187	1.219
31	CERTIFIED	1.374	1.392	1.267	1.000	1.187	1.223
32	INSURANCE	1.312	1.392	1.267	1.000	1.187	1.222
33	COD	1.338	1.392	1.283	1.000	1.187	1.215
34	MONEY ORDERS	1.000	1.392	1.000	1.000	1.187	1.222
35	STAMPED CARDS	1.000	1.000	1.000	1.000	1.000	1.175
36	STAMPED ENVELOPES	1.000	1.392	1.000	1.000	1.000	1.216
37	SPECIAL HANDLING	1.352	1.392	1.099	1.000	1.000	1.226
38	POST OFFICE BOX	1.436	1.392	1.000	1.000	1.000	1.223
39	OTHER	1.393	1.392	1.272	1.000	1.187	1.223
40	TOTAL SPECIAL SERVICES	1.385	1.392	1.269	1.000	1.187	1.223
41	TOTAL VOLUME VARIABLE	1.570	1.392	1.264	1.482	1.187	1.223

SOURCE: USPS LR-L-52, PART II

TEST YEAR PIGGYBACK FACTORS FOR FINAL ADJUSTMENTS
TY2008BR - USPS VERSION

Line No.	Class, Subclass, or Special Service Cost Segment Column Number	Mail Processing 3.1 (1)	Window Service 3.3 (2)	City Delivery 6 & 7 (3)	Vehicle Service Drivers 8 (4)	Rural Delivery 10 (5)
1	FIRST-CLASS MAIL					
2	SINGLE PIECE LETTERS	1.231	1.134	1.116	1.153	1.048
3	PRESORT LETTERS	1.232	1.134	1.115	1.153	1.048
4	TOTAL LETTERS	1.231	1.134	1.116	1.153	1.048
5	SINGLE PIECE CARDS	1.212	1.134	1.115	1.153	1.048
6	PRESORT CARDS	1.234	1.134	1.116	1.153	1.048
7	TOTAL CARDS	1.218	1.134	1.115	1.153	1.048
8	TOTAL FIRST	1.231	1.134	1.116	1.153	1.048
9	PRIORITY MAIL	1.158	1.134	1.126	1.153	1.048
10	EXPRESS MAIL	1.117	1.134	1.131	1.153	1.048
11	MAILGRAMS	1.000	1.000	1.000	1.000	1.000
12	PERIODICALS:					
13	WITHIN COUNTY	1.145	1.134	1.114	1.153	1.048
14	OUTSIDE COUNTY	1.230	1.134	1.111	1.153	1.048
15	TOTAL PERIODICALS	1.228	1.134	1.111	1.153	1.048
16	STANDARD MAIL:					
17	ENHANCED CARR RTE	1.187	1.134	1.113	1.153	1.048
18	REGULAR	1.224	1.134	1.114	1.153	1.048
19	TOTAL STANDARD MAIL	1.219	1.134	1.114	1.153	1.048
20	PACKAGE SERVICES:					
21	PARCEL POST	1.185	1.134	1.126	1.153	1.048
22	BOUND PRINTED MATTER	1.233	1.134	1.130	1.153	1.048
23	MEDIA MAIL	1.230	1.134	1.126	1.153	1.048
24	TOTAL PACKAGE SERVICES	1.207	1.134	1.128	1.153	1.048
25	U.S. POSTAL SERVICE	1.200	1.134	1.111	1.153	1.060
26	FREE MAIL	1.228	1.134	1.114	1.153	1.048
27	INTERNATIONAL MAIL	1.185	1.134	1.123	1.153	1.048
28	TOTAL ALL MAIL	1.217	1.134	1.115	1.153	1.048
29	SPECIAL SERVICES:					
30	REGISTRY	1.112	1.134	1.122	1.000	1.048
31	CERTIFIED	1.117	1.134	1.116	1.000	1.048
32	INSURANCE	1.118	1.134	1.116	1.000	1.048
33	COD	1.121	1.134	1.121	1.000	1.048
34	MONEY ORDERS	1.000	1.134	1.000	1.000	1.048
35	STAMPED CARDS	1.000	1.000	1.000	1.000	1.000
36	STAMPED ENVELOPES	1.000	1.134	1.000	1.000	1.000
37	SPECIAL HANDLING	1.124	1.134	1.003	1.000	1.000
38	POST OFFICE BOX	1.107	1.134	1.000	1.000	1.000
39	OTHER	1.170	1.134	1.117	1.000	1.048
40	TOTAL SPECIAL SERVICES	1.144	1.134	1.116	1.000	1.048
41	TOTAL VOLUME VARIABLE	1.216	1.134	1.115	1.153	1.048

SOURCE: USPS LR-L-52, PART II

**TEST YEAR MAIL PROCESSING
COST POOL PIGGYBACK FACTORS**

COST POOL	PIGGYBACK FACTOR	COST POOL	PIGGYBACK FACTOR
MPBCS / DBCS	1.751	Air Contract DCS and Incoming/SWYB	1.904
OCR	2.003	Business Reply / Postage Due	1.332
AFSM 100 (w/o VCS OR FLATS REC)	2.140	Express Mail	1.349
FSM 1000	1.850	Mailgram	1.243
Mechanized Parcels	1.587	Registry	1.396
SPBS - Non Priority	1.785	Damaged Parcel Rewrap	1.326
SPBS - Priority	1.789	Empty Equipment	2.990
Mechanical Sort - Sack Outside	2.466	International	1.431
Mechanical Tray Sorter	1.544	LDC 49 - Computerized Forwarding Syst.	2.023
Manual Flats	1.286	LDC 79 - Mailing Req' & Bus. Mail Entry	1.461
Manual Letters	1.270	Miscellaneous/Support	1.264
Manual Parcels	1.464	BMC: Non-Machinable Outside (NMO)	1.579
Manual Priority	1.460	BMC: Allied Labor & all other Mail Processing	1.608
LDC 15 - RBCS	1.747	BMC: Platform	1.649
Cancellation	2.504	BMC: Parcel Sorting Machine	2.544
Dispatch	1.638	BMC: SPBS	1.920
Flats Preparation	1.301	BMC: Sack Sorting Machine	1.988
Mail Preparation - metered	1.524	Post Office, Station & Branch Allied	2.210
Opening Unit - BBM	1.329	Post Office, Station & Branch Automated/Mechanized	2.092
Opening Unit - Preferred Mail	1.322	Post Office, Station & Branch Express Mail	1.356
Opening - Manual transport	1.261	Post Office, Station & Branch Manual Flat	1.318
Platform	1.473	Post Office, Station & Branch Manual Letter	1.300
Pouching Operations	1.332	Post Office, Station & Branch Manual Parcel	1.455
Presort	1.387	Post Office, Station & Branch Miscellaneous	1.305
Manual Sort - Sack Outside	1.349	Post Office, Station & Branch Registry	1.393

Source: USPS LR-L-52, Part III.

**TEST YEAR MAIL PROCESSING
COST POOL PIGGYBACK FACTORS**

Supplementary Cost Pool Piggyback Factors for BCS, RBCS, PSM, OCR, APPS AND SPBS

COST CATEGORIES	PIGGYBACK FACTOR
PRIMARY PSM	1.756
SECONDARY PSM	2.464
DBCS	1.744
CSBCS	1.681
CIOSS	1.461
MPBCS	1.869
RBCS: LMLM	2.899
REC -- TOTAL (LETTER, FLAT, PARCEL, PARS)	1.370
OCR w/RCR & IPSS, BCS-OSS (OTHER WORKROOM)	2.213
SPBS	1.589
APPS (w/o REC COSTS)	2.199
APPS (W/REC COST AS INDIRECT)	2.625

Source: USPS LR-L-52, Part III.

Additional Piggyback Factors and Other Costs

Test Year Window Service Piggyback Factor:	
All subclasses & Spec. Ser. Except P.O. Box	1.392
All subclasses & Spec. Ser. Except P.O. Box, excluding space related	1.198
Source: USPS LR-L-52, Part II.	

Test Year City Carrier Piggyback Factor, Using Total Special Services Costs:	
Office	1.241
Street	1.283
Total	1.269
Source: USPS LR-L-52, Part II.	

Test Year Cost per Square Foot:	
Rent	\$ 9.64
Facility-Support	\$ 8.91
Total	\$ 18.54
Source: USPS LR-L-52, Part III.	

ATTACHMENT 12

Calculation of Test Year Caller Service Costs and Division Into Space Provision, Space Support and Other

	Labor Cost	Total	Space Provision	Space Support	Other
Accounting Costs	1,558				
Piggyback Factor		1.392	0.074	0.063	1.255
Totals		2,169	115	99	1,956
Window Retrieval	7,366				
Piggyback Factor		1.392	0.074	0.063	1.255
Totals		10,252	542	466	9,244
Mail Processing Platform Retrieval	1,325				
Piggyback Factor		1.473	0.094	0.108	1.271
Totals		1,952	125	143	1,684
Storage Costs Facility-Related Costs		14,721	7,650	7,071	-
Total		29,093	8,432	7,778	12,884

SOURCE: USPS LR-L-52, PART IV

STANDARD REGULAR FLATS-PARCEL COST ADJUSTMENT FOR COSTS BY SHAPE

PART I: CALCULATION OF RPW/RPW-ODIS RATIO FOR STANDARD REGULAR PARCELS

ORIGIN-DESTINATION INFORMATION SYSTEM - REVENUE PIECES & WEIGHT
STANDARD MAIL DESTINATING VOLUME BY SHAPE, FY2005
Volumes in 000s

ODIS		Letters & Cards	Flats	IPPS/Parcels	Total
STANDARD MAIL	<i>ECR-RT</i>	6,867,690	19,690,868	49,228	26,607,786
All	<i>REGULAR</i>	52,739,909	15,201,963	817,802	68,759,674
	<i>ALL</i>	59,607,600	34,892,831	867,030	95,367,461

ODIS		Letters & Cards	Flats	IPPS/Parcels	Total		
Distribution Key %	<i>ECR-RT</i>	25.8%	74.0%	0.2%	1		1
	<i>REGULAR</i>	76.7%	22.1%	1.2%	1		1
	<i>ALL</i>						

RPW Volumes with ODIS Shape Shares

RPW Adjusted		Letters & Cards	Flats	IPPS/Parcels	Total
STANDARD MAIL	<i>ECR-RT</i>	9,039,834	25,918,785	64,798	35,023,418
	<i>REGULAR</i>	50,560,811	14,573,851	784,012	65,918,674
All	<i>ALL</i>	59,600,645	40,492,636	848,810	100,942,091
				100,942,091	

RPW Volumes by Shape

RPW		Letters & Cards	Flats	IPPS/Parcels	Total
STANDARD MAIL	<i>ECR-RT</i>	9,040,800	25,981,881	737	35,023,418
	<i>REGULAR</i>	51,289,509	14,028,861	600,304	65,918,674
All	<i>ALL</i>	60,330,308	40,010,742	601,041	100,942,091
					100,942,091

RPW/RPW-ODIS	<i>REGULAR</i>			0.766	
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PART II: CALCULATION OF ADJUSTMENT

				Unit Costs With Final Reconciliation Factor	
Unadjusted Costs				Unadjusted Unit Costs	
Std. Reg. Unit Costs	n/a	14.47	78.72	14.31	77.84
Total Reg. Costs		2,030,089	472,534		
Split of Parcel Costs to Flats & Parcels		110,723	361,810		
Adjusted Costs				Adjusted Unit Costs	
Total Reg. Costs		2,140,813	361,810		
Std. Reg. Unit Costs		15.26	60.27	15.09	59.60
Adjustment Ratios		1.055	0.766	1.055	0.766

SOURCE: USPS LR-L-53, PART III

TEST YEAR MAIL PROCESSING UNIT COSTS BY SHAPE
(CENTS/PIECE)

Subclass/CRA Row	Letters/Cds.	Flats	Parcels/IPPs	Subclass/ CRA Row Average
First Class Letters Single Piece	12.02	42.65	102.49	15.56
First Class Letters Presort (Carrier Route included)	4.59	27.15	303.81	5.06
First Class Cards Single Piece	10.46	-	-	10.46
First Class Cards Presort (Carrier Route included)	3.14	-	-	3.14
IN COUNTY	1.74	4.27	304.70	4.09
OUT COUNTY	11.41	13.69	2,610.44	14.20
Periodicals Total	7.65	12.99	2,553.33	13.39
STANDARD ENH.CARRIER ROUTE	2.48	1.94	2,450.04	2.13
STANDARD REGULAR	4.06	15.09	59.60	6.91
PARCEL POST	-	698.52	125.92	130.58
BOUND PRINTED MATTER	-	23.71	62.28	44.50
MEDIA MAIL	-	103.45	111.67	110.38

SOURCE: USPS LR-L-53, PAGE I-1