USPS-T-26

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

| POSTAL RATE AND FEE CHANGES, 1997 |

Docket No. R97-1

DIRECT TESTIMONY
OF
PAUL G. SECKAR
ON BEHALF OF
UNITED STATES POSTAL SERVICE

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USPS-T-26J: PRESORT COMPOSITION

DIRECT TESTIMONY OF PAUL G. SECKAR

AUTOBIOGRAPHICAL SKETCH

My name is Paul G. Seckar. I am a Principal Consultant with Price Waterhouse's Office of Government Services in Rosslyn. My business address is 1616 North Fort Myer Drive, Arlington, VA 22209-3195. I have held this position with Price Waterhouse since July of 1995. Prior to that, I was a Senior Consultant within the Office of Government Services, dating back to the initiation of my employment with Price Waterhouse in July of 1993.

My work at Price Waterhouse has been devoted to serving the United States Postal Service, and I am a member of Price Waterhouse's Center for Postal Consulting. My areas of study have been cost estimation, statistical and other special studies, and other pertinent financial and economical studies. I presented testimony in Docket No. MC96-2 in the area of Periodicals mail processing costs.

Prior to joining Price Waterhouse, LLP, I was employed by the Naval Center for Cost Analysis in Arlington, VA. My primary responsibility was developing cost estimates of Naval Weapon Systems.

I hold a Master's of Science Degree in Statistical Science from George Mason University. I completed my Bachelor's of Science Degree at the Pennsylvania State University, majoring in mathematics, with a minor in statistics.

1 **I.   PURPOSE OF TESTIMONY**

2

3   The purpose of this testimony is to develop volume variable mail processing

4   costs for each rate category of flats within First-Class Mail, Periodicals Mail, and

5   Standard Mail (A). In the case of Periodicals and Standard Mail (A), both Regular

6   and Nonprofit subclasses are studied. The results of this testimony support the work

7   of witnesses Fronk, Taufique, Kaneer, and Moeller, all of whom are responsible for

8   developing rates.

9   The Postal Service rewards mailers who perform the presorting and

10   barcoding worksharing activities through the use of discounts. The volume

11   variable mail processing costs developed in this testimony will be used, along

12   with the results of other testimony, as inputs for determining the flats mail rates

13   and worksharing discounts.

1 **II. SCOPE OF TESTIMONY**

2

3   This testimony develops volume variable mail processing costs for the

4 following rate categories of flats mail.

5   First-Class:

6   - automation basic presort   - nonautomation presort

7   - automation 3/5-digit presort

8   Periodicals, Regular and Nonprofit Subclasses:

9   - automation basic presort   - nonautomation 3-digit presort

10   - automation 5-digit presort   - nonautomation 5-digit presort

11   - automation 3-digit presort   - carrier route presort

12   - nonautomation basic presort

13   Standard Mail (A), Regular and Nonprofit Subclasses:

14   - automation basic presort   - nonautomation basic presort

15   - automation 3/5-digit presort   - nonautomation 3/5-digit presort

16 Note, each of these rate categories is defined by a combination of the presorting and

17 barcoding worksharing activities.[1] Further, mail processing costs of flats mail for

18 subclasses not listed above are outside the scope of this testimony.

19   The remainder of this testimony is devoted to: a summary of results, a

20 discussion of the cost development methodology, a discussion of refinements to the

21 most recent analyses of flats mail processing costs, and a set of exhibits containing

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[1]   Barcoded mail is also referred to as automation mail, while nonbarcoded mail is
referred to as nonautomation mail. The terms barcoded and automation, as well as
nonbarcoded and nonautomation, are used interchangeably throughout this testimony.

1   model summary pages.[2]

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[2]   The most recent flats analyses were present in Docket No. MC96-2, USPS-T-6.

1   **III.   SUMMARY OF RESULTS**

2

3   In the case of Periodicals and Standard Mail (A), two sets of results are

4   provided to pricing witnesses. The first set contains costs such that differences

5   between categories reflect differences in worksharing, as well as inherent mail

6   characteristic differences. These costs are referred to as actual mail makeup costs,

7   and are developed using the actual makeup of flats. The second set contains costs

8   that lead to differences between categories that primarily reflect the cost impact of

9   mailer-applied barcodes. These costs are referred to as constant mail makeup costs,

10   and differ from the actual mail makeup costs only for automation categories as a

11   result of using the nonautomation entry composition for the automation models.

12   These two approaches are discussed in detail in Section IV(A).

13   Tables III-1 through III-5 summarize the results of this testimony as provided to

14   the pricing witnesses. Exhibits USPS-T-26A through USPS-T-26I explain how the

15   results presented in the tables below were derived. The derivation of First-Class

16   results contained in Table III-1 is available in Exhibit USPS-T-26A. The derivation of

17   Periodicals Regular results contained in Table III-2 is available in Exhibits USPS-T-

18   26B and USPS-T-26F. The derivation of Periodicals Nonprofit results contained in

19   Table III-3 is available in Exhibits USPS-T-26C and USPS-T-26G. The derivation of

20   Standard Mail (A) Regular results contained in Table III-4 is available in Exhibits

21   USPS-T-26D and USPS-T-26H. The derivation of Standard Mail (A) Nonprofit results

22   contained in Table III-5 is available in Exhibits USPS-T-26E and USPS-T-26I. The

23   source of numbers that permit derivation of the final results are provided in LR-H-

24   134.

TABLE III-1

FIRST-CLASS FLATS

UNIT VOLUME VARIABLE MAIL PROCESSING COSTS

Rate Category	Cents
automation basic presort	26.3818
automation 3/5-digit presort	12.9917
nonautomation presort	25.3783

TABLE III-2

PERIODICALS REGULAR FLATS

UNIT VOLUME VARIABLE MAIL PROCESSING COSTS

Approach	Rate Category	Cents
Actual Mail Makeup		
	automation basic presort	20.6688
	automation 3-digit presort	15.1620
	automation 5-digit presort	9.2883
	nonautomation basic presort	20.5209
	nonautomation 3-digit presort	14.4160
	nonautomation 5-digit presort	10.3994
	carrier route presort	4.9472
Constant Mail Makeup		
	automation basic presort	16.2040
	automation 3-digit presort	12.7670
	automation 5-digit presort	8.8670
	nonautomation basic presort	20.5209
	nonautomation 3-digit presort	14.4160
	nonautomation 5-digit presort	10.3994
	carrier route presort	4.9472

TABLE III-3

PERIODICALS NONPROFIT FLATS

UNIT VOLUME VARIABLE MAIL PROCESSING COSTS

Approach	Rate Category	Cents
Actual Mail Makeup		
	automation basic presort	13.1577
	automation 3-digit presort	9.5633
	automation 5-digit presort	5.7728
	nonautomation basic presort	13.7075
	nonautomation 3-digit presort	7.7976
	nonautomation 5-digit presort	6.4084
	carrier route presort	2.8033
Constant Mail Makeup		
	automation basic presort	10.0825
	automation 3-digit presort	6.8101
	automation 5-digit presort	5.1965
	nonautomation basic presort	13.7075
	nonautomation 3-digit presort	7.7976
	nonautomation 5-digit presort	6.4084
	carrier route presort	2.8033

TABLE III-4

STANDARD MAIL (A) REGULAR FLATS

UNIT VOLUME VARIABLE MAIL PROCESSING COSTS

Approach	Rate Category	Cents
Actual Mail Makeup		
	automation basic presort	16.3387
	automation 3/5-digit presort	9.2361
	nonautomation basic presort	19.1565
	nonautomation 3/5-digit presort	11.4181
Constant Mail Makeup		
	automation basic presort	14.2202
	automation 3/5-digit presort	8.6665
	nonautomation basic presort	19.1565
	nonautomation 3/5-digit presort	11.2172

TABLE III-5

STANDARD MAIL (A) NONPROFIT FLATS

UNIT VOLUME VARIABLE MAIL PROCESSING COSTS

Approach	Rate Category	Cents
Actual Mail Makeup		
	automation basic presort	15.5337
	automation 3/5-digit presort	9.4846
	nonautomation basic presort	18.6549
	nonautomation 3/5-digit presort	9.0584
Constant Mail Makeup		
	automation basic presort	13.9147
	automation 3/5-digit presort	7.3914
	nonautomation basic presort	18.6549
	nonautomation 3/5-digit presort	9.0584

1 IV. COST DEVELOPMENT

2

3 A. OVERVIEW OF METHODOLOGY

4

5   This section presents an overview of the methodology, beginning with a

6 general discussion in Section IV(A)(1). Section IV(A)(2) discusses the application of

7 the methodology to the development of costs based upon the actual mail makeup of

8 flats. Section IV(A)(3) discusses the application of the methodology to the

9 development of Periodicals and Standard Mail (A) costs based upon a constant mail

10 makeup. This latter application is used to illustrate the effect that mailer-applied

11 barcodes has on mail processing costs.

12

13   1) GENERAL DISCUSSION

14

15   The general methodology employed in this testimony is based upon that used

16 in witness Brattli's testimony, USPS-T-6 in Docket No. MC96-2. Rate category unit

17 volume variable mail processing costs are developed through the use of two models

18 and CRA subclass costs. The models correspond to the major components of mail

19 processing costs, which are piece distribution costs and bundle sorting costs. These

20 costs are used to de-average the CRA subclass costs. All other volume variable mail

21 processing costs are obtained from the de-averaged benchmark costs. In Docket

22 Nos. MC96-2 and MC95-1, the other costs beyond mail processing and bundle

23 sorting were obtained through the use of a "non-model cost factor." This testimony

24 makes use of a similar, although refined, adjustment.

1   Piece distribution costs for each of the rate categories of flats listed in Section

2   II are developed through the use of mail flow models that estimate the number of

3   piece handlings a flat receives at each operation, as well as the cost. The operations

4   are as follows.

5   - outgoing primary,

6   - outgoing secondary,

7   - SCF,

8   - incoming primary, and

9   - incoming secondary

10 Bundle sorting unit costs for each of the rate categories of flats listed in Section II are

11 developed through the use of a model which estimates the number of handlings or

12 opening units that flats bundles receive or pass through, according to the presort

13 makeup of the bundles.

14 All other volume variable mail processing costs are obtained through the

15 manipulation of benchmark costs and a combination of piece distribution and bundle

16 sorting costs.[3] Benchmark costs are shape and subclass specific, and contain all

17 CRA test year volume variable mail processing costs. These costs are inputs to this

18 testimony and are detailed in LR-H-106.

19 The rate category-specific piece distribution and bundle sorting costs are

20 weighted together to form a weighted modeled cost of the flats subclass. Thus, the

21 weighted modeled cost represents a subset of the costs contained in its

22 corresponding benchmark. The weighted modeled cost is applied to the worksharing

23 related portion of the benchmark costs to develop an adjustment factor. The rate

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[3]   The combination of the piece distribution and bundle sorting costs is referred to as
the modeled cost.

1   category modeled costs are then each multiplied by the adjustment factor, and the

2   non-worksharing related portion of the benchmark cost is added to each product.

3   The result is a set of rate category costs that reflect the test year CRA level.

4   In summary, piece distribution and bundle sorting costs are developed using

5   wage rates, productivities, and other inputs in a manner essentially independent of

6   mail volume. The combination of piece distribution and bundle sorting costs are used

7   to de-average the mail processing CRA-level benchmarks to produce CRA-level rate

8   category costs.

9

10   2)   ACTUAL MAIL MAKEUP

11

12   The costs that result from this testimony are used by pricing witnesses to

13   construct rates and differences between rate categories, which are then used to

14   generate rate discounts. This section discusses the application of the cost

15   development methodology to the construction of costs that reflect the actual mail

16   makeup of flats.[4] This application is identical to that employed by witness Brattli in

17   Docket Nos. MC96-2 and MC95-1. The models and cost summary sheets that are

18   used to generate these costs are contained in LR-H-134, Sections 1 through 7.

19   The defining elements of this application are the use of the mail entry

20   composition in the piece distribution models and the composition of mail across

21   container presort levels in the bundle sorting model. The mail entry composition

22   reflects the mix of mail across all presort levels as it enters piece distribution. In

23   effect, the mail entry composition indicates the amount of mail that begins piece

---

[4]   This application is performed for all flats mail classes.

1   distribution at each sort level. The bundle sorting composition across container

2   presort levels reflects the amount of mail within each container presort type, and is

3   used to weight together presort-specific container costs.

4   Automated and nonautomated flats have different mail makeup. In developing

5   "actual mail makeup" costs, each unique mail composition is used to construct actual

6   mail entry costs for the associated type of mail. For example, the Periodicals

7   automation mail entry and container compositions are used in the automation piece

8   distribution models, and the nonautomation mail entry and container compositions

9   are used in the nonautomation piece distribution models.

10

11   3)   CONSTANT MAIL MAKEUP

12

13   The ratemaking process examines the differences between the automation

14   and the nonautomation costs to provide insight into what the automation discounts

15   should be for the different presort levels. However, the cost differences based on the

16   actual mail makeup reflect not only the difference in the automation worksharing

17   activity between the two types of mail, but also two more general characteristics that

18   are associated with the different types of mail that comprise each rate category.

19   These are the differences in the eligibility requirements between automation and

20   nonautomation rates and the differences in density makeup between automation and

21   nonautomation mail.

22   A constant mail entry approach that isolates the effect of mailer-applied

23   barcodes mitigates these latter two differences.[5] The defining elements of this

---

[5]   This approach is employed only for the Periodicals and Standard Mail (A) classes.

1   approach are the uses of the mail composition input data. Specifically, this approach

2   uses Periodicals nonautomation mail entry composition data for both nonautomation

3   and automation Periodicals rate category models, and the Standard Mail (A)

4   machinable mail entry composition data for both the machinable and automation

5   Standard Mail (A) rate category models.

6   For example, LR-H-134, Section 2, page 10, shows that 8.99 percent of basic

7   rate nonbarcoded mail enters at the mixed ADC level, while 82.43 percent of

8   barcoded basic rate mail enters at the mixed ADC level. Each of these percentages

9   is developed from mail characteristics data for nonbarcoded and barcoded mail,

10   respectively. As shown in LR-H-134, Section 8, page 10, the constant mail makeup

11   approach has the same amount of mail entering at the mixed ADC level in barcoded

12   and nonbarcoded scenarios, the 8.99 percent that is developed from the

13   nonbarcoded mail characteristic data. Through the use of the nonbarcoded

14   percentage in both nonbarcoded and barcoded models, the effect of the mailer-

15   applied barcode is reflected in the cost difference without being confounded by

16   inherent mail characteristics.

17   Further, the Periodicals nonautomation bundle sorting costs are adopted for

18   the automation categories, and the Standard Mail (A) machinable bundle sorting

19   costs are adopted for the automation rate categories. Use of these costs for the

20   automation rate categories serves to standardize the composition of mail across

21   container presort levels in the bundle sorting model.

22   The mail processing costs beyond piece distribution and bundle sorting are

23   generated using the CRA adjustment factors that result from the actual mail entry

24   approach. Use of the same factors as in the actual mail makeup approach adjusts

25 · the constant mail entry costs to the appropriate test year CRA level for each rate

1   category, allowing the differences between the categories to focus primarily on the

2   effect of the mailer-applied barcode.

3

4   **B.   DEVELOPMENT OF PIECE DISTRIBUTION COSTS**

5

6   This section of testimony discusses the general construct and methodology

7   used to develop piece distribution costs. Piece distribution costs are those incurred

8   in the mail processing operation by sorting mail pieces into piece distribution

9   separations, such as in manual casing of flats or FSM-881 sorts.

10

11   **1)   MODEL CONSTRUCT**

12

13   Piece distribution costs are developed for each of the non-carrier route rate

14   categories listed in Section II. The nonautomation rate categories are disaggregated

15   into machinable and nonmachinable categories for modeling purposes.

16   Presort categories correspond to the presort level to which mail is sorted by

17   mailers before deposit into the mail stream. Acceptable levels of presort for flats mail

18   are basic, 3-digit, and 5-digit; or 3/5-digit. [6] Separate 3-digit and 5-digit presort levels

19   are being proposed for Periodicals Regular and Nonprofit mail as part of this docket.

20   The combined 3/5-digit presort level remains for First-Class Mail and Standard Mail

21   (A) flats. A summary of allowable presort compositions is provided in Exhibit USPS-

22   T-26J

---

[6]   These are the broad categories of presort. Presort levels specific to mail classes
are detailed in Tables IV-1 through IV-3.

1   The First-Class 3/5-digit rate models account for the flow of First-Class 3/5-

2   digit rate flats through only two operations -- the incoming primary or the incoming

3   secondary. Three-digit packages within the 3/5-digit presort rate category flow to the

4   incoming secondary operation after starting piece distribution in the incoming primary

5   operation, while 5-digit packages within the 3/5-digit presort rate category begin

6   piece distribution in the incoming secondary operation.

7   The Periodicals 3-digit rate models are similar to the First-Class 3/5-digit rate

8   models in that they account for the flow of flats to either of only two operations -- the

9   incoming primary or the incoming secondary. Specifically, 3-digit packages flow to

10   the incoming secondary operation after starting at the incoming primary operation,

11   while 5-digit packages begin distribution at the incoming secondary operation.

12   The Periodicals 5-digit rate models are some of the least complex presented in

13   this testimony, since all 5-digit rate mail begins piece distribution in the incoming

14   secondary operation.

15   For all basic rate flats mail, the operations included in the models are the

16   outgoing primary, the outgoing secondary, the ADC, the SCF, the incoming primary

17   (IP), and the incoming secondary (IS) distribution operations. Basic mail includes

18   mixed ADC and ADC bundles of flats. Mail in mixed ADC bundles begin piece

19   distribution in the outgoing primary operation and downflow to all other operations

20   based on the downflow densities shown in LR-H-134, Section 1.2, page 10. Flats in

21   ADC bundles begin piece distribution in the ADC operation and downflow according

22   to the same set of downflow densities.

1   2)   MODEL METHODOLOGY

2

3   As in Docket Nos. MC96-2 and MC95-1, flow models and cost summary

4   sheets are used to develop piece distribution costs; the methodology used in this

5   testimony is similar. Differences between the current and past flats mail processing

6   analyses occur as a result of changes to the rate category makeup and the changing

7   complexion of the flats mail processing environment. A detailed discussion of these

8   changes is presented in Section V.

9   Each flow model consists of a theorized flow depicting 10,000 pieces of flats

10   mail belonging to a specific rate category and processing category through a series

11   of piece distribution operations. The number of handlings, or sorts, is computed for

12   each operation. These computations make use of a number of inputs: acceptance

13   rates, coverage factors, downflow densities, and a profile of the mail composition as

14   it enters piece distribution.

15   Each cost summary sheet calculates the volume variable piece distribution

16   cost corresponding to a flow model. This calculation makes use of a number of

17   inputs: the test year wage rate, operation-specific piggyback factors, the premium

18   pay factor, downflow densities, and the number of handlings from the flow model. For

19   each operation in which piece distribution occurs, the total direct and indirect per-

20   piece cost is developed. First, the direct cost, excluding premium pay, is calculated

21   through the application of the test year wage rate to the operation-specific

22   productivity. The operation-specific piggyback factor and the premium pay factor are

23   then used to reflect the total direct and indirect cost associated with each operation.

24   The number of handlings that are computed for each operation in the flow model is

25   then applied to the operation-specific total direct and indirect per-piece costs to

1   arrive at a weighted modeled piece distribution cost for each operation that is simply

2   summed over all operations.

3

4   C.   DEVELOPMENT OF NON-CARRIER ROUTE BUNDLE SORTING AND
5   OPENING UNIT COSTS

6

7   This section of testimony details the bundle sorting methodology for non-

8   carrier route flats mail. The methodology is identical to that used in USPS-T-4 of

9   Docket No. MC96-2.

10

11   1)   MODEL CONSTRUCT

12

13   Flats mail may be prepared for mailing in bundles over a range of package

14   and container presort levels in accordance with the requirements set forth in the

15   Domestic Mail Manual (DMM). Non-carrier route presort packages and sacks may

16   be prepared as: mixed ADC, ADC, or 3/5-digit (or alternatively 3-digit, and 5-digit in

17   the case of Periodicals).

18   Like the piece distribution models, the bundle sorting models develop costs for

19   the barcoding and presorting levels, thus disaggregating the rate category level.

20   Accordingly, bundle sorting costs are developed separately for the three mail

21   categories: automation, machinable, and nonmachinable.

1   2)   MODEL METHODOLOGY

2

3   The bundle sorts and opening unit costs that a package incurs during mail

4   processing are modeled as a function of the container presort. For example, bundles

5   mailed in a mixed ADC sack that is opened and dumped in an origin processing

6   plant receive more handlings in the process of being sorted to finer container

7   separations than do bundles in a 3-digit sack. Three-digit sacks are not opened until

8   they reach the destination SCF, and the packages need only be sorted to containers

9   for transfer to incoming primary or incoming secondary operations, or for dispatch to

10   delivery units.

11   Bundle sorts and opening unit cost treatment are obtained using the

12   estimation methodology employed most recently by witnesses Brattli and Seckar in

13   Docket No. MC96-2. All estimates of the number of bundle sorts/opening units are

14   adopted from the analysis in Docket MC-96-2, and their derivation is explained in the

15   following three paragraphs.

16   Bundles in mixed ADC containers receive one bundle sort to destination ADCs

17   at the origin facility or origin ADC. There the container is opened and the bundles

18   inside are placed in new containers to the destination ADC. These bundles receive a

19   second sort to destination SCFs at the destination ADC, after the ADC sacks made

20   up at origin postal facilities are opened and worked. A third sort is made at the

21   destination SCF after the destination SCF or 3-digit sacks made up at destination

22   ADCs are opened. In addition, all 5-digit bundles (whether prepared directly by the

23   mailer or by the Postal Service after one or more piece distribution operations) are

24   estimated to have a 50.8 percent probability of requiring bundle sorting and/or

25   opening unit preparation prior to going to the incoming secondary operation. See

1   USPS-T-4, page 21, Docket No. MC96-2. Therefore, in total, a bundle in a mixed

2   ADC container receives/passes through approximately 3.508 bundle sorts/opening

3   units.

4   It follows that bundles in ADC containers undergo one fewer sortation/opening

5   unit than bundles in mixed ADC containers. That is, they receive one at the

6   destination ADC where they are initially opened and re-containerized to destination

7   SCFs; one at the destination SCF; and 0.508 prior to the incoming secondary

8   operation. In total, each package in an ADC container receives/passes through

9   2.508 bundle sorts/opening units

10   Likewise, bundles in 3-digit containers receive/pass through a total of 1.508

11 bundle sorts/opening units, one less than bundles in ADC containers. They incur

12 one in the opening unit at the destination SCF and 0.508 prior to the incoming

13 secondary operation. Finally, bundles in 5-digit containers receive/pass through a

14 total of 0.508 bundle sorts/opening units.

15   Through the use of a productivity, piggyback factors, and premium pay factors,

16 volume variable per piece bundle sorting and opening unit costs are calculated for

17 each container presort level within each rate category. These costs are then applied

18 to the number of bundle sorts received by packages within a given container level,

19 resulting in a per-piece cost. These costs are then weighted together over all

20 container levels within a rate category according to the distribution of mail volume

21 within each of the container presort types. These weighted bundle sorting/opening

22 unit costs are the final output of the bundle sorting and opening unit cost model.

1   D.   DEVELOPMENT OF CARRIER ROUTE COSTS

2

3   Sections IV(C)(1) and IV(C)(2) detail the methodology for estimating the piece

4   distribution and bundle sorting costs of non-carrier route flats mail. This section

5   focuses on the estimation of volume variable mail processing costs for carrier route

6   flats mail.

7   Carrier route categories of flats mail exist only in the Periodicals and Standard

8   Mail (A) classes. The Standard Mail (A) carrier route mail processing costs are

9   developed entirely through use of the benchmark model, as detailed in LR-H-106.

10   The benchmark costs for Periodicals contain the costs associated with both the non-

11   carrier route and carrier route categories. This is true for both the Regular and

12   Nonprofit subclasses of Periodicals. Hence, two benchmark costs exist for

13   Periodicals mail, one for the Regular subclass and one for the Nonprofit subclass,

14   each of which contains both carrier route and non-carrier route rate category costs.

15

16   1)   MODEL CONSTRUCT

17

18   Periodicals carrier route flats are prepared by mailers in a fashion similar to

19   non-carrier route flats. For the purposes of this model, two levels of container presort

20   are examined within carrier route mail, carrier route presort and non-carrier route

21   presort.[7] The only permissible package presort is carrier route. Mailers obtain the

22   carrier route rate when: 1) carrier route packages are placed in carrier route sacks,

---

[7]   For the purposes of this analysis, non-carrier route presort is defined as carrier
route packages in 5-digit carrier routes presort sacks and on non-carrier route presort
pallets.

1 or 2) carrier route packages are placed in carrier routes sacks or on presort pallets

2 with non-carrier route flats.

3

4   2)   MODEL METHODOLOGY

5

6   Carrier route presort flats do not incur piece distribution handlings along with

7 non-carrier route mail, but do receive handlings in opening unit and bundle

8 distribution operations. As shown in the flow model contained in LR-H-134 on page

9 34 in each of Sections 2 and 3, carrier route packages in carrier route presort sacks[8]

10 incur only an opening unit handling at the delivery unit. Packages in containers with

11 multiple routes, including both carrier routes and non-carrier route presort sacks,

12 incur both opening unit and bundle distribution handlings.

13   This testimony develops volume variable mail processing costs for carrier

14 route presort mail using the same methodology used in Docket No. MC96-2. The

15 carrier route rate category flow model depicts a theorized flow of 10,000 pieces of

16 carrier route flats. Periodicals mail characteristics data are used to calculate the

17 portions of carrier route presort flats that enter the mail stream in carrier route

18 containers and non-carrier route containers.

19   Per-piece direct and indirect costs are developed for each operation for which

20 carrier route mail is modeled. These costs are then weighted together to reflect the

21 mail mix across the container types. These calculations conform to the algorithm

22 used in the non-carrier route piece distribution cost summary sheets through the use

---

[8]   Carrier route presort sacks are those containing packages or only a single carrier route or box section.

1   of inputs specific to carrier route mail and the operations modeled.

2

3   E.   DEVELOPMENT OF TOTAL CRA-LEVEL MAIL PROCESSING COSTS

4

5   In Docket Nos. MC96-2 and MC95-1, the mail processing cost analyses of

6   Periodicals flats did not rely upon CRA benchmarks to provide the costs of other mail

7   processing activities.[9] This testimony refines the Periodicals methodology to include

8   other or "non-modeled" mail processing costs in the development of costs that are

9   input to ratemaking. This refinement to the Periodicals methodology establishes a

10   consistent treatment of worksharing costs among the classes of flats mail. These

11   costs are calculated as the final step in developing CRA-level rate category costs.

12   This final step pulls together all the costs discussed throughout Sections IV(B)

13   through IV(D), and adjusts them to reflect the full test year CRA level of costs.

14   Modeled costs for each rate category, containing piece distribution and bundle

15   sorting costs, must first be constructed by weighting together model results for those

16   rate categories that require more than one model. An example exists in the

17   nonautomation basic presort rate category which is comprised of a machinable basic

18   presort rate model and a nonmachinable basic presort rate model. Mail

19   characteristics data are used to develop the weighting factors that are used to

20   combine the model costs in such instances.

21   The rate category-specific unit bundle sorting costs are then added to the

22   piece distribution rate category unit costs. These combined costs, modeled costs,

23   are then weighted together across the rate categories that comprise the

---

[9]   In the context of this testimony, other mail processing costs are defined as those costs other than piece distribution, and bundle sorting and opening unit costs.

1 benchmarks. Test year before rate volumes are used to weight the categories to the

2 benchmark levels, which correspond to the flats subclass levels.

3   For example, the Periodicals Regular subclass is represented by one

4 benchmark cost. Therefore, the modeled cost for all of the Periodicals Regular rate

5 categories listed in Table III-2 must be weighted together to be consistent with the

6 benchmark.

7   To reconcile the rate category weighted modeled costs to the CRA level, the

8 benchmark costs are used. The benchmark costs can be disaggregated through the

9 use of cost pools into two types of costs, fixed and proportional. This disaggregation

10 is possible as a result of the current mail processing distribution methodology that is

11 based upon groupings of MODS operations into cost pools. As shown in LR-H-106,

12 benchmark costs result from summing the subclass costs by shape associated with

13 each MODS cost pool. [10]

14   Each MODS cost pool that comprises the Periodicals Regular subclass

15 benchmark can be designated as either fixed or proportional based upon the

16 operations that comprise it. By summing the two categories of cost pools a fixed

17 benchmark cost and a proportional benchmark cost result. [11]

18   The proportional benchmark cost is divided by the weighted modeled cost to

19 form a proportional adjustment factor to the CRA level. Each rate category weighted

20 modeled cost is then multiplied by the proportional CRA adjustment factor. This

21 calculation allocates all worksharing related volume variable mail processing costs,

---

[10] Benchmark costs input to this testimony reflect volume variable mail processing costs.

[11] Fixed cost pools are those that are non-worksharing related. Proportional cost pools are those that are primarily worksharing related.

1   except for those from piece distribution and bundle sorting, to the rate category in

2   the proper proportions. These are the costs that will be affected by mailers

3   performing more or less worksharing.

4   The fixed element of the benchmark cost is added to each of the rate category

5   costs. These costs are added because they are fixed and will not be affected by

6   worksharing levels; thus each rate category is allocated the same level of non-

7   worksharing costs.

8   The result of these last few calculations is disaggregated CRA-level costs

9   associated with each rate category. It is these costs that are provided as inputs to

10   the ratemaking process.

11

12   F.   MODEL INPUTS

13

14   This section discusses the inputs used in the models described above. All

15   input data discussed in this section are summarized in the 'Input Information'

16   subsections of LR-H-134.[12]

17

18   1)   MAIL ENTRY COMPOSITION

19

20   The flats mail entry composition data used in the flow models are developed

21   from mail characteristics data. The mail characteristics data are summarized in LR-

---

[12] The Input Information sections of LR-H-134 are: 1.2, 2.2, 3.2, 4.2, 5.2, 6.1, 8.2, 9.2, 10.2, and 11.2.

1   H-134,[13] and are documented in detail in LR-H-105.

2   The mail characteristics data, and subsequently the mail entry composition

3   data, differ by class. This is a result of the First-Class data and the Standard Mail (A)

4   data existing for all three mail types: automation, machinable, and nonmachinable.

5   The Periodicals data, however exist only for the automation and nonautomation mail

6   types.

7

8   2)   COVERAGE FACTORS

9

10   The flow models for the processing of all flats mail provide for the fact that

11   some origin or destination areas are served by processing plants which are not

12   equipped with certain flat sorting machines. In these plants, machinable and

13   barcoded non-carrier route flats, which would ordinarily be processed on FSMs in

14   outgoing and incoming piece distribution operations, will instead be directed to

15   manual operations.

16   To account for the lack of total FSM coverage in the flow models, this

17   testimony uses the coverage factor methodology employed in the most recent

18   analyses of flats mail processing costs as documented in Docket MC96-2. LR-H-128

19   documents the generation of all coverage factors for non-carrier route flats mail.

20   This methodology defines a coverage factor for a given class of mail as the

21   ratio of the ODIS flats volume for that mail class, originating or destinating in 3-digit

22   ZIP Code areas served by plants equipped with the particular FSMs, to the ODIS

23   flats volume for the same mail class originating or destinating in all 3-digit areas.

---

[13]   The summaries are provided in subsections 1.5, 2.5, 3.5, 4.5, 5.5, 8.5, 9.5, 10.5,
and 11.5.

1   Coverage factors are also used to reflect the percentage of automation and

2   machinable flats mail processed manually through the incoming secondary

3   distribution operation at plants with FSMs. This is consistent with the operational

4   policy that 5-digit zones with ten or more delivery routes are to be processed on FSM

5   equipment.

6   This testimony uses the same general methodology as was used in Docket

7   No. MC96-2 to calculate incoming secondary coverage factors by mail class.

8   However, the current analysis produces Periodicals-specific coverage factors, unlike

9   past Periodicals analyses that relied upon third-class coverage factors as proxies.

10   Further, the current methodology develops incoming secondary coverage factors for

11   barcoded and machinable flats combined, whereas the previous methodology made

12   use of separate factors. A single factor is used because little precision is lost by

13   collapsing them and the models are thus, slightly simplified.[14] The class-specific

14   ratios of flats volumes destinating in 5-digit zones with ten or more delivery routes

15   within those 3-digit ZIP Code areas served by FSM-equipped plants, to the flats

16   volumes destinating in all 5-digit zones within this same universe of 3-digit areas, is

17   calculated through the use of ODIS data.

18

19   3)   MAIL FLOW DENSITIES

20

21   The estimates of mail flow proportions, or densities, from upstream to

22   downstream operations of flats mail are another input required by the flow models.

23   This testimony makes use of the results of USPS LR-MCR-3 from Docket No. MC95-

---

[14]   As is shown in Docket No. MC96-2, USPS-T-4B, the IS coverage factors for machinable and barcoded flats are 74.93 percent and 74.90 percent, respectively.

1   1 to provide densities for the FSM-BCR and the FSM-881 operations. It is assumed

2   that the downflow densities for the FSM-OCR are the same as the those for the

3   FSM-BCR when processing automation mail, and the same as the FSM-881 when

4   processing machinable mail. It is further assumed that the downflow densities for the

5   FSM-1000 are the same as those for the FSM-881. The manual downflow densities

6   used in this testimony are the same as those used in Docket No. MC96-2, USPS-T-4

7   and USPS-T-6.

8

9   4)   OPERATION-SPECIFIC ACCEPTANCE RATES

10

11   As mentioned in Section IV(B)(2), the number of handlings calculated at each

12   operation within the flow models is a function of acceptance rates. Small proportions

13   of flats being processed in FSM operations are mechanically rejected and directed to

14   either FSM-1000 or manual distribution operations. For this reason, data were

15   required on acceptance rates for each FSM operation were necessary to this

16   testimony.

17   The acceptance rates for the FSM-BCR and FSM-881 operations are

18   documented in LR-H-113. The acceptance rates for the FSM-1000 operation are

19   assumed to be the same as those for the FSM-881. The nonmachinable acceptance

20   rates for the FSM-OCR are based on the minimum specifications that the machine

21   must meet upon deployment to the field. The machinable acceptance rates for the

22   FSM-OCR are assumed to be the same as those for the FSM-BCR since both the

23   OCR and the BCR are components of the FSM-881.

1   5)   MAIL PROCESSING PRODUCTIVITIES

2

3   In past analyses of mail processing costs, as filed in Docket Nos. MC96-2 and

4   MC95-1, standard productivities were calculated for an operation by dividing the

5   annual number of pieces processed through an operation by the annual number of

6   workhours associated with the operation. These productivities were used to generate

7   100 percent volume variable mail processing costs. In this docket, the Postal Service

8   presents empirical data that mail processing costs are less than 100 percent volume

9   variable.

10   In order for the ratemaking process to reflect this level of variability, the extent

11   to which operations vary with volume must be reflected in the cost analyses that

12   provide inputs to ratemaking. Through the use of volume variabilities, standard

13   productivities developed as they have been in past analyses are modified in this

14   docket to reflect less than 100 percent volume variability of mail processing

15   operations. The standard productivities are divided by the volume variabilities to yield

16   volume variable productivities, which are used in the flow models.

17   In the past, the standard productivities used for FSM operations were derived

18   from operation-specific MODS codes. For example, the FSM-881 manual keying

19   outgoing primary productivity was derived from MODS code 141, while the outgoing

20   primary FSM-BCR scanning productivity was derived from MODS code 961.

21   Although these operations are often run at the same time, sharing loading and

22   sweeping labor, the flow models treat these operations as separate. To accurately

23   treat the operations as separate, the productivities should reflect the FSM-881

24   keying operation strictly in a manual keying environment, and the FSM-BCR

25   scanning operation strictly in a scanning environment. In such environments, the

1   operations would not be run together.

2   To reflect the manual keying environment, FY93 MODS data were used to

3   develop the FSM-881 productivities. FY93 was chosen because there were relatively

4   few barcoded flats at that point in time, allowing for the vast majority of FSM

5   operations to be run in a pure keying mode.

6   The FSM-BCR productivity is based on the following. From the engineering

7   test results presented by witness Pham, USPS-T-2, Docket No. MC91-1, a ratio of

8   the FSM-BCR productivity to the FSM-881 productivity can be calculated. The ratio,

9   1.53, shows the FSM-BCR productivity to be about 53 percent higher than the FSM-

10   881 productivity. When this factor is applied to the FY93 FSM-881 productivity

11   aggregated across all sort levels, the result is about 1150. This figure is adjusted

12   downward to 1100 to be conservative, and is used in the models.

13   The manual piece distribution productivities are developed using FY96 MODS

14   data, and are documented in LR-H-113. The FSM-1000 standard productivity results

15   from an engineering field test of the FSM-1000. The results of this test are

16   summarized in LR-H-169. In accordance with USPS Engineering budget plans, the

17   standard productivity for the FSM-OCR is assumed to be the same as the FSM-

18   BCR.

19   The standard productivities used in the carrier route model and the bundle

20   sorting models remain unchanged from those used in the most recent analyses of

21   flats mail processing costs. See USPS-T-4 and USPS-T-6, Docket No. MC96-2; and

22   USPS-T-11 and USPS-T-13, Docket No. MC95-1.

1   6)   OTHER INPUT DATA

2

3   The models also incorporate other data inputs in order to calculate volume

4   variable mail processing unit costs. These include:

5   -   clerk/mailhandler labor rates

6   -   mail processing piggyback factors

7   -   premium pay factors

8   -   an estimate of the extent to which the FSM-1000 will be deployed in the

9   test year

10   The source of the test year clerk/mailhandler labor rate used in the models is LR-H-

11   146. Mail processing piggyback factors and premium pay factors are documented in

12   LR-H-77, and the FSM-1000 coverage factors are documented in LR-H-128.

1 **V.   COST DEVELOPMENT REFINEMENTS**

2

3   The general methodology employed in this testimony is very similar to that

4 employed in Docket Nos. MC96-2 and MC95-1. However, the methodologies are not

5 identical. As a result it is necessary to discuss the major changes, which include:

6   -   The planned deployment of flats equipment in the test year

7   -   The model refinements that result from deployment of test year

8   equipment

9

10 A.   PLANNED TEST YEAR EQUIPMENT DEPLOYMENT

11

12   As detailed by witness Moden (USPS-T-4), the flats processing environment is

13 becoming increasingly more mechanized and automated. Thus, the Postal Service's

14 planned deployment of flats equipment in this docket's test year is somewhat

15 different than what was planned in prior dockets' test years. The current test year

16 plans do not call for the deployment of the high-speed flats feeder. As a result, the

17 models in this testimony do not include the high-speed flats feeder.

18   The current test year plan does call for a new component, an OCR, to be

19 retrofitted onto all FSM-881s. The OCR will allow for the sortation of nonautomation

20 mail pieces without having to key information; however, it will not spray barcodes.

21 The OCR-equipped FSM is included in this analysis. The extent to which it is

22 deployed in the test year is accounted for through the use of coverage factors as

23 discussed in Section IV(E)(2).

1 B.   MODEL REFINEMENTS RESULTING FROM PLANNED TEST YEAR
2   EQUIPMENT DEPLOYMENT

3

4   The entire set of flats operations planned to be active in the test year consists

5 of the FSM-881, the FSM-BCR, the FSM-1000, and the FSM-OCR. As a result, the

6 flow models in this testimony are more complex than their predecessors.

7   In Docket Nos. MC96-2 and MC95-1, the FSM-1000 and the manual

8 operations were displayed within the same nodes.[15] This was feasible by assuming

9 the FSM-1000 downflow densities were the same as the manual densities and that

10 the FSM-1000 had an acceptance rate of 100 percent. These assumptions simplified

11 FSM-1000 operations to the point that the number of FSM-1000 handlings could

12 easily be calculated within the cost summary sheets from the shared node in the flow

13 model.

14   This testimony makes use of separate nodes for the two operations because

15 the FSM-1000 downflow densities are no longer assumed to be the same as manual

16 operations, but rather to be the same as FSM-881 operations. The number of

17 breakouts made during manual distribution is relatively small compared to the

18 number an FSM-1000 can make. In fact, the number of breakouts made by the FSM-

19 1000 is similar to the FSM-881. Hence, the FSM-881 downflow densities serve as

20 suitable proxies for the FSM-1000 downflow densities. Separate FSM-1000 nodes

21 also make it easier to handle acceptance rates that are less than 100 percent.

22   Because the OCR is assumed to have the same downflow densities as the

23 FSM-BCR for automation mail and the FSM-881 for machinable mail, the FSM-OCR

---

[15]   This is because the FSM-1000, like manual operations, processes mail from the
nonmachinable mail stream.

1   operation can easily be handled within the same node as the FSM-BCR or the FSM-

2   881.

3   The flow models reflect an average test year deployment for the FSM-1000

4   and the FSM-OCR operations. It is estimated that the test year average deployment

5   of FSM-1000s to the field will be approximately 65 percent of the planned 340. It is

6   further estimated that the OCR will be deployed to approximately 40 percent of the

7   FSM-881s currently in the field.

LIST OF EXHIBITS

USPS-T-26A: FIRST-CLASS FLATS

USPS-T-26B: PERIODICALS REGULAR RATE FLATS

USPS-T-26C: PERIODICALS NONPROFIT FLATS

USPS-T-26D: STANDARD MAIL (A) REGULAR RATE FLATS

USPS-T-26E: STANDARD MAIL (A) NONPROFIT FLATS

USPS-T-26F: PERIODICALS REGULAR RATE FLATS, CONSTANT
MAIL ENTRY

USPS-T-26G: PERIODICALS NONPROFIT FLATS, CONSTANT MAIL
ENTRY

USPS-T-26H: STANDARD MAIL (A) REGULAR RATE FLATS,
CONSTANT MAIL ENTRY

USPS-T-26I: STANDARD MAIL (A) NONPROFIT FLATS, CONSTANT
MAIL ENTRY

USPS-T-26J: PRESORT COMPOSITION

EXHIBIT A: FIRST-CLASS FLATS

This exhibit reproduces the results from LR-H-134, Section 1, which provides the complete model.

MAIL PROCESSING COST ESTIMATES

First-Class Flats

	(1) Mailflow Processing Cost	(2) Weight	(3) Weighted Cost	(4) CRA Adjustment Factor	(5) Fixed CRA Costs, Add On	(6) Total Volume Variable Cost
Automation, Basic Presort	12.2797	100.00%	12.2797	1.9683	2.2123	26.3818
Automation, 3/5-Digit Presort	5.4766	100.00%	5.4766	1.9683	2.2123	12.9917
Nonautomation, Presort						
Nonmachinable	12.2260	77.28%	9.4477			
Machinable	10.2184	22.72%	2.3221			
		100.00%	11.7698	1.9683	2.2123	25.3783

(1) From page 4
(2) Weights based on volumes from page 6
(3) Equals Column (1) multiplied by Column (2)
(4) From page 3
(5) From page 3
(6) Equals Column (3) multiplied by Column (4) added to Column (5)

CRA ADJUSTMENT FACTOR

First-Class Flats

	(1) Modeled Cost	*(2)* Weight	*(3)* Weighted Cost
Automation, Basic Presort	12.2797	7.72%	0.9481
Automation, 3/5-Digit Presort	5.4766	37.03%	2.0281
Nonautomation, Presort			
Nonmachinable	12.2260	42.69%	5.2196
Machinable	10.2184	12.55%	1.2829
		100.00%	9.4787

Proportional Benchmark Cost	18.6565	*(4)*
Modeled Cost	9.4787	*(5)*
Proportional CRA Adjustment Factor	1.9683	*(6)*
Fixed CRA Costs	2.2123	*(4)*

(1) From page 4

(2) From page 6

(3) Equals Column (1) multiplied by Column (2)

(4) From page 5

(5) Weighted average from above

(6) Equals (4) divided by (5)

MODEL COSTS

First-Class Flats

	(1)	(2)	(3)
	Unit Modeled Cost	Bundle Sort Cost	Total Modeled Cost
Automation, Basic Presort	9.5986	2.6811	12.2797
Automation, 3/5-Digit Presort	4.1378	1.3388	5.4766
Nonautomation, Presort			
Nonmachinable	10.8448	1.3813	12.2260
Machinable	8.8371	1.3813	10.2184

(1)   From flow model summary sheets
(2)   From the Bundle Sorting model
(3)   Equals Column (1) plus Column (2)

Mail Processing CRA Costs Calculations *(from USPS LR-H-106)*

Location	Cost Pool	1C PRST NCarr-Rt	Proportional	Fixed	Proportional	Fixed
mods	bcs/	0.0015	X		0.0015	
mods	express	0.0014	X		0.0014	
mods	fsm/	7.2705	X		7.2705	
mods	lsm/	0.0072	X		0.0072	
mods	manf	2.8913	X		2.8913	
mods	manl	0.3712	X		0.3712	
mods	manp	0.0640	X		0.0640	
mods	mecparc	0.0014	X		0.0014	
mods	ocr/	0.0006	X		0.0006	
mods	priority	0.0002	X		0.0002	
mods	spbs Oth	0.1432	X		0.1432	
mods	spbsPrio	0.1029	X		0.1029	
mods	BusReply	0.0001	X		0.0001	
mods	INTL	0.0000	X		0.0000	
mods	LD15	0.0000	X		0.0000	
mods	LD41	0.0000	X		0.0000	
mods	LD42	0.0001	X		0.0001	
mods	LD43	0.8088	X		0.8088	
mods	LD44	0.1113	X		0.1113	
mods	LD48 Exp	0.0000	X		0.0000	
mods	LD48 Oth	0.0246	X		0.0246	
mods	LD48_SSv	0.0192	X		0.0192	
mods	LD49	0.8080	X		0.8080	
mods	LD79	0.1872	X		0.1872	
mods	MAILGRAM	0.0000	X		0.0000	
mods	Registry	0.0006	X		0.0006	
mods	REWRAP	0.0049	X		0.0049	
mods	1Bulk pr	0.0291	X		0.0291	
mods	1CancMPP	0.4800	X		0.4800	
mods	1EEQMT	0.0620	X		0.0620	
mods	1MISC	0.1817	X		0.1817	
mods	1OPbulk	0.6947	X		0.6947	
mods	1OPpref	1.0162	X		1.0162	
mods	1Platfrm	1.3665		X		1.3665
mods	1POUCHNG	0.4953	X		0.4953	
mods	1SackS_h	0.1719		X		0.1719
mods	1SackS_m	0.3639		X		0.3639
mods	1SCAN	0.0558	X		0.0558	
mods	1SUPPORT	0.2077	X		0.2077	
BMCs	nmo	0.0000		X		0.0000
BMCs	psm	0.0000		X		0.0000
BMCs	spb	0.0000		X		0.0000
BMCs	ssm	0.0000		X		0.0000
BMCs	Othr	0.0000		X		0.0000
BMCs	Pla	0.0000		X		0.0000
Non Mods		2.9236	89.40%	10.60%	2.6137	0.3099
Total		20.8688			18.6565	2.2123

VOLUMES

First-Class Flats

	(1)	(2)	(3)	(4)	(5)
	Automation		Nonautomation Presort		
	3/5-Digit	Basic	Machinable	Nonmachinable	Total
Presort	233,523,000	48,688,000	79,168,946	269,215,054	630,595,000
	37.03%	7.72%	12.55%	42.69%	100.00%

(1) From Flats Volumes.

(2) From Flats Volumes.

(3) From Flats Volumes, weighted by the proportion of Nonautomation pieces that are Machinable

(4) From Flats Volumes, weighted by the proportion of Nonautomation pieces that are Nonmachinable

(5) Equals the sum of Columns (1) through (4).

EXHIBIT B: PERIODICALS REGULAR RATE FLATS

This exhibit reproduces the results from LR-H-134, Section 2,
which provides the complete model.

FLAT MAIL PROCESSING COST ESTIMATES

Periodicals Regular Rate Flats

	(1) Mailflow Processing Cost	(2) CRA Adjustment Factor	(3) Fixed CRA Costs, Add- On	(4) Total Volume Variable Cost
Automation, Basic Presort	14.0289	1.2687	2.8700	**20.6688**
Automation, 3-Digit Presort	9.6885	1.2687	2.8700	**15.1620**
Automation, 5-Digit Presort	5.0589	1.2687	2.8700	**9.2883**
Nonautomation, Basic Presort	13.9123	1.2687	2.8700	**20.5209**
Nonautomation, 3-Digit Presort	9.1005	1.2687	2.8700	**14.4160**
Nonautomation, 5-Digit Presort	5.9346	1.2687	2.8700	**10.3994**
Carrier Route	1.6372	1.2687	2.8700	**4.9472**

(1)   From page 4
(2)   From page 3
(3)   From page 3
(4)   Equals Column (1) multiplied by Column (2) plus Column (3)

CRA ADJUSTMENT FACTOR

Periodicals Regular Rate Flats

	(1) Modeled Flat Processing Cost	(2) Weight	(3) Weighted Average
Basic Non-Barcoded	13.9123	13.52%	1.8816
3-Digit Non-Barcoded	9.1005	6.26%	0.5699
5-Digit Non-Barcoded	5.9346	16.19%	0.9606
Basic Barcoded	14.0289	5.51%	0.7731
3-Digit Barcoded	9.6885	5.26%	0.5095
5-Digit Barcoded	5.0589	15.53%	0.7857
Carrier Route	1.6372	37.73%	0.6177
		100.00%	6.0980

Proportional Benchmark Cost	7.7367	(4)
Modeled Cost	6.0980	(5)
Proportional CRA Adjustment Factor	1.2687	(6)
Fixed Costs	2.8700	(4)

(1)   From page 4
(2)   From page 7
(3)   Equals Column (1) times Column (2)
(4)   From page 6
(5)   Weighted Average of Column (3) above
(6)   Equals (4) divided by (5)

WEIGHTED MODEL COSTS

Periodicals Regular Rate Flats

	(1) Total Modeled Cost	(2) Weight	(3) Weighted Cost
Nonautomation, Basic Presort			
Nonachinable, Basic Presort	15.8822	25.00%	3.9706
Machinable, Basic Presort	13.2557	75.00%	9.9418
			13.9123
Nonautomation, 3-Digit Presort			
Nonmachinable, 3-Digit Presort	10.5044	25.00%	2.6261
Machinable, 3-Digit Presort	8.6325	75.00%	6.4744
			9.1005
Nonautomation, 5-Digit Presort			
Nonmachinable, 5-Digit Presort	6.3889	25.00%	1.5972
Machinable, 5-Digit Presort	5.7832	75.00%	4.3374
			5.9346
Automation, Basic Presort	14.0289	100.00%	**14.0289**
Automation, 3-Digit Presort	9.6885	100.00%	**9.6885**
Automation, 5-Digit Presort	5.0589	100.00%	**5.0589**
Carrier Route	1.6372	100.00%	**1.6372**

(1)   From page 5

(2)   Column (2) equals a ratio of the specific volume
to the total volume of the presort category
Volumes from page 7

(3)   Equals Column (1) multiplied by Column (2)

MODEL COSTS

Periodicals Regular Rate Flats

	(1) Unit Modeled Cost	(2) Bundle Sort Cost	(3) Total Modeled Cost
Basic Presort Rate Category			
Nonmachinable	13.7967	2.0856	15.8822
Machinable	11.1701	2.0856	13.2557
Barcoded	11.4533	2.5756	14.0289
Three-Digit Presort Rate Category			
Nonmachinable	9.2793	1.2252	10.5044
Machinable	7.4073	1.2252	8.6325
Barcoded	8.1633	1.5252	9.6885
Five-Digit Presort Rate Category			
Nonmachinable	5.4059	0.9831	6.3889
Machinable	4.8001	0.9831	5.7832
Barcoded	3.7437	1.3152	5.0589
Carrier Route Presort Rate Category	1.6372	-	1.6372

(1) From Flow Model summary sheets
(2) From Bundle Sorting Model
(3) Equals Column (1) plus Column (2)

Periodicals Mail Processing CRA Costs Calculations *(from USPS LR-H-106)*

Location	Cost Pool	2C Regular	Proportional	Fixed	Proportional	Fixed
mods	bcs/	0.0082	X		0.0082	
mods	express	0.0004	X		0.0004	
mods	fsm/	1.0446	X		1.0446	
mods	lsm/	0.0024	X		0.0024	
mods	manf	1.2902	X		1.2902	
mods	manl	0.1573	X		0.1573	
mods	manp	0.0176	X		0.0176	
mods	mecparc	0.0144	X		0.0144	
mods	ocr/	0.0005	X		0.0005	
mods	priorty	0.0111	X		0.0111	
mods	spbs Oth	0.1517	X		0.1517	
mods	spbsPrio	0.0230	X		0.0230	
mods	BusReply	0.0004	X		0.0004	
mods	INTL	0.0261	X		0.0261	
mods	LD15	0.0595	X		0.0595	
mods	LD41	0.0026	X		0.0026	
mods	LD42	0.0017	X		0.0017	
mods	LD43	0.4654	X		0.4654	
mods	LD44	0.0713	X		0.0713	
mods	LD48 Exp	0.0002	X		0.0002	
mods	LD48 Oth	0.0148	X		0.0148	
mods	LD48_SSv	0.0040	X		0.0040	
mods	LD49	0.4867	X		0.4867	
mods	LD79	0.0298	X		0.0298	
mods	MAILGRAM	0.0000	X		0.0000	
mods	Registry	0.0011	X		0.0011	
mods	REWRAP	0.0057	X		0.0057	
mods	1Bulk pr	0.0076	X		0.0076	
mods	1CancMPP	0.0465	X		0.0465	
mods	1EEQMT	0.0591	X		0.0591	
mods	1MISC	0.0832	X		0.0832	
mods	1OPbulk	0.2766	X		0.2766	
mods	1OPpref	1.1760	X		1.1760	
mods	1Platfrm	1.3681		X		1.3681
mods	1POUCHNG	0.4451	X		0.4451	
mods	1SackS_h	0.3277		X		0.3277
mods	1SackS_m	0.2086		X		0.2086
mods	1SCAN	0.0260	X		0.0260	
mods	1SUPPORT	0.0945	X		0.0945	
BMCs	nmo	0.0095		X		0.0095
BMCs	psm	0.0030		X		0.0030
BMCs	spb	0.0299	X		0.0299	
BMCs	ssm	0.1803		X		0.1803
BMCs	Othr	0.1018		X		0.1018
BMCs	Pla	0.1713		X		0.1713
Non Mods		2.1009	76.22%	23.78%	1.6014	0.4995
Total		**10.6067**			**7.7367**	**2.8700**

VOLUMES

Periodicals Regular Rate Flats

	(1) Barcoded	(2) Machinable	(3) Nonmachinable	(4) Carrier Route	(5) Total
Basic	359,139,092 5.51%	661,009,956 10.14%	220,336,652 3.38%	-	1,240,485,700 19.04%
3-Digit	342,669,589 5.26%	306,067,634 4.70%	102,022,545 1.57%	-	750,759,768 11.52%
5-Digit	1,012,091,994 15.53%	791,115,553 12.14%	263,705,184 4.05%	-	2,066,912,731 31.72%
Carrier Route				2,458,556,802 37.73%	2,458,556,802 37.73%
Total	1,713,900,675 26.30%	1,758,193,142 26.98%	586,064,381 8.99%	2,458,556,802 37.73%	6,516,715,000 100.00%

	(6) Barcoded Flats	(7) Non-Barcoded Flats	(8) Carrier Route	(9) Total
Basic Presort	359,139,092 5.51%	881,346,608 13.52%	-	1,240,485,700 19.04%
3-Digit Presort	342,669,589 5.26%	408,090,178 6.26%	-	750,759,768 11.52%
5-Digit Presort	1,012,091,994 15.53%	1,054,820,737 16.19%	-	2,066,912,731 31.72%
Carrier Route			2,458,556,802 37.73%	2,458,556,802 37.73%
Total	1,713,900,675 26.30%	2,344,257,523 35.97%	2,458,556,802 37.73%	6,516,715,000 100.00%

(1) From Column (6)
(2) 75% of Column (7); (75% of Periodicals Non-Barcoded mail is machinable; Refer to USPS LR-H-105)
(3) 25% of Column (7); (25% of Periodicals Non-Barcoded mail is nonmachinable; Refer toUSPS LR-H-105)
(4) From Column (8)
(5) Sum of Columns (1) through (4)
(6) From Flats Volumes
(7) From Flats Volumes
(8) From Flats Volumes
(9) Sum of Columns (6) through (8)

EXHIBIT C: PERIODICALS NONPROFIT FLATS

This exhibit reproduces the results from LR-H-134, Section 3,
which provides the complete model.

FLAT MAIL PROCESSING COST ESTIMATES

Periodicals Nonprofit Flats

	(1)	(2)	(3)	(4)
	Mailflow Processing Cost	CRA Adjustment Factor	Fixed CRA Costs, Add-On	Total Volume Variable Cost
Automation, Basic Presort	13.9807	0 8268	1.5982	**13.1577**
Automation, 3-Digit Presort	9.6334	0.8268	1.5982	**9.5633**
Automation, 5-Digit Presort	5.0489	0.8268	1.5982	**5.7728**
Nonautomation, Basic Presort	14.6456	0.8268	1.5982	**13.7075**
Nonautomation, 3-Digit Presort	7 4979	0.8268	1.5982	**7.7976**
Nonautomation, 5-Digit Presort	5.8177	0.8268	1.5982	**6.4084**
Carrier Route	1.4575	0.8268	1.5982	**2.8033**

(1)   From page 4
(2)   From page 3
(3)   From page 3
(4)   Equals Column (1) multiplied by Column (2) plus Column (3)

CRA ADJUSTMENT FACTOR

Periodicals Nonprofit Flats

	(1)	(2)	(3)
	Modeled Flat Processing Cost	Weight	Weighted Average
Basic Non-Barcoded	14.6456	11.24%	1.6461
3-Digit Non-Barcoded	7.4979	4.42%	0.3315
5-Digit Non-Barcoded	5.8177	13.47%	0.7838
Basic Barcoded	13.9807	4.15%	0.5795
3-Digit Barcoded	9.6334	3.40%	0.3273
5-Digit Barcoded	5.0489	13.81%	0.6972
Carrier Route	1.4575	49.52%	0.7217
		100.00%	5.0871

Proportional Benchmark Cost	4.2061	(4)
Modeled Cost	5.0871	(5)
Proportional CRA Adjustment Factor	0.8268	(6)
Fixed Costs	1.5982	(4)

(1) From page 4
(2) From page 7
(3) Equals Column (1) times Column (2)
(4) From page 6
(5) Weighted Average of Column (3) above
(6) Equals (4) divided by (5)

WEIGHTED MODEL COSTS

Periodicals Nonprofit Flats

	(1) Total Modeled Cost	(2) Weight	(3) Weighted Cost
Nonautomation, Basic Presort			**14.6456**
Nonmachinable, Basic Presort	15.4940	67.00%	10.3810
Machinable, Basic Presort	12.9231	33.00%	4.2646
Nonautomation, 3-Digit Presort			**7.4979**
Nonmachinable, 3-Digit Presort	8.2672	67.00%	5.5390
Machinable, 3-Digit Presort	5.9359	33.00%	1.9589
Nonautomation, 5-Digit Presort			**5.8177**
Nonmachinable, 5-Digit Presort	6.0179	67.00%	4.0320
Machinable, 5-Digit Presort	5.4111	33.00%	1.7857
Automation, Basic Presort	13.9807	100.00%	**13.9807**
Automation, 3-Digit Presort	9.6334	100.00%	**9.6334**
Automation, 5-Digit Presort	5.0489	100.00%	**5.0489**
Carrier Route	1.4575	100.00%	**1.4575**

(1)   From page 5
(2)   Column (2) equals a ratio of the specific volume
        to the total volume of the presort category
        Volumes from page 7
(3)   Equals Column (1) multiplied by Column (2)

MODEL COSTS

Periodicals Nonprofit Flats

	(1) Unit Modeled Cost	(2) Bundle Sort Cost	(3) Total Modeled Cost
Basic Presort Rate Category			
Nonmachinable	13.4414	2.0526	15.4940
Machinable	10.8705	2.0526	12.9231
Barcoded	11.4078	2.5728	13.9807
Three-Digit Presort Rate Category			
Nonmachinable	7.0926	1.1745	8.2672
Machinable	4.7614	1.1745	5.9359
Barcoded	8.1276	1.5058	9.6334
Five-Digit Presort Rate Category			
Nonmachinable	5.4196	0.5983	6.0179
Machinable	4.8128	0.5983	5.4111
Barcoded	3.7537	1.2952	5.0489
Carrier Route Presort Rate Category	1.4575	-	1.4575

1) *From Flow Model summary sheets*

2) *From Bundle Sorting Model*

3) *Equals Column (1) plus Column (2)*

Periodicals Nonprofit Mail Processing CRA Costs Calculations *(from LR-H-106)*

Location	Cost Pool	2C Non Prof	Proportional	Fixed	Proportional	Fixed
mods	bcs/	0.0038	X		0.0038	
mods	express	0.0003	X		0.0003	
mods	fsm/	0.6702	X		0.6702	
mods	lsm/	0.0014	X		0.0014	
mods	manf	0.6154	X		0.6154	
mods	manl	0.0575	X		0.0575	
mods	manp	0.0117	X		0.0117	
mods	mecparc	0.0153	X		0.0153	
mods	ocr/	0.0097	X		0.0097	
mods	priority	0.0005	X		0.0005	
mods	spbs Oth	0.1248	X		0.1248	
mods	spbsPrio	0.0112	X		0.0112	
mods	BusReply	0.0001	X		0.0001	
mods	INTL	0.0069	X		0.0069	
mods	LD15	0.0000	X		0.0000	
mods	LD41	0.0000	X		0.0000	
mods	LD42	0.0001	X		0.0001	
mods	LD43	0.2406	X		0.2406	
mods	LD44	0.0293	X		0.0293	
mods	LD48 Exp	0.0000	X		0.0000	
mods	LD48 Oth	0.0096	X		0.0096	
mods	LD48_SSv	0.0021	X		0.0021	
mods	LD49	0.4073	X		0.4073	
mods	LD79	0.0584	X		0.0584	
mods	MAILGRAM	0.0000	X		0.0000	
mods	Registry	0.0001	X		0.0001	
mods	REWRAP	0.0006	X		0.0006	
mods	1Bulk pr	0.0012	X		0.0012	
mods	1CancMPP	0.0138	X		0.0138	
mods	1EEQMT	0.0291	X		0.0291	
mods	1MISC	0.0534	X		0.0534	
mods	1OPbulk	0.0844	X		0.0844	
mods	1OPpref	0.6115	X		0.6115	
mods	1Platfrm	0.6098		X		0.6098
mods	1POUCHNG	0.2840	X		0.2840	
mods	1SackS_h	0.2203		X		0.2203
mods	1SackS_m	0.2452		X		0.2452
mods	1SCAN	0.0013	X		0.0013	
mods	1SUPPORT	0.0470	X		0.0470	
BMCs	nmo	0.0001		X		0.0001
BMCs	psm	0.0000		X		0.0000
BMCs	spb	0.0417	X		0.0417	
BMCs	ssm	0.0759		X		0.0759
BMCs	Othr	0.0767		X		0.0767
BMCs	Pla	0.1296		X		0.1296
Non Mods		1.0023	75.99%	24 01%	0.7616	0.2407
Total		**5.8043**			**4.2061**	**1.5982**

VOLUMES

Periodicals Nonprofit Flats

	(1) Barcoded Flats	(2) Non-Barcoded Flats	(3) Carrier Route	(4) Total
Basic Presort	82,354,370 **4.15%**	223,305,689 **11.24%**		305,660,059 **15.39%**
3-Digit Presort	67,491,446 **3.40%**	87,834,084 **4.42%**		155,325,531 **7.82%**
5-Digit Presort	274,343,646 **13.81%**	267,665,874 **13.47%**		542,009,520 **27.28%**
Carrier Route			983,732,891 **49.52%**	983,732,891 **49.52%**
Total	424,189,462 **21.35%**	578,805,647 **29.13%**	983,732,891 **49.52%**	1,986,728,000 **50.48%**

	(5) Barcoded	(6) Machinable	(7) Nonmachinable	(8) Carrier Route	(9) Total
Basic	82,354,370 **26.94%**	73,690,877 **24.11%**	149,614,812 **48.95%**		305,660,059 **100.00%**
3-Digit	67,491,446 **43.45%**	28,985,248 **18.66%**	58,848,836 **37.89%**		155,325,531 **100.00%**
5-Digit	274,343,646 **50.62%**	88,329,738 **16.30%**	179,336,135 **33.09%**		542,009,520 **100.00%**
Carrier Route				983,732,891 **49.52%**	983,732,890 94 **49.52%**
Total	424,189,462	191,005,863	387,799,783	983,732,891	1,986,728,000

(1) *From Flats Volumes*
(2) *From Flats Volumes*
(3) *From Flats Volumes*
(4) *Sum of Columns (1) through (3)*
(5) *From Column (1)*
(6) *33% of Column (2); (33% of Periodicals Non-Barcoded mail is machinable; Refer to LR-H-105)*
(7) *67% of Column (2); (67% of Periodicals Non-Barcoded mail is nonmachinable; Refer to LR-H-105)*
(8) *From Column (3)*
(9) *Sum of Columns (1) through (4)*

EXHIBIT D: STANDARD MAIL (A) REGULAR RATE FLATS

This exhibit reproduces the results from LR-H-134, Section 4,
which provides the complete model.

MAIL PROCESSING COST ESTIMATES

Standard Mail (A) Regular Rate Flats

	(1) Mailflow Processing Cost	*(2)* CRA Adjustment Factor	*(3)* Fixed CRA Costs, Add on	*(4)* Total Volume Variable Cost
Nonautomation, Basic Presort	14.1727	1.2288	1.7408	19.1565
Nonautomation, 3/5-Digit Presort	7.8753	1.2288	1.7408	11.4181
Automation, Basic Presort	11.8797	1.2288	1.7408	16.3387
Automation, 3/5-Digit Presort	6.0996	1.2288	1.7408	9.2361

(1) *From page 4*
(2) *From page 3*
(3) *From page 3*
(4) *Equals Column (1) multiplied by Column (2) plus Column (3)*

CRA ADJUSTMENT FACTOR

Standard Mail (A) Regular Rate Flats

	(1) Modeled Cost	(2) Weight	(3) Weighted Cost
Nonautomation, Basic Presort	14.1727	8.48%	1.2025
Nonautomation, 3/5-Digit Presort	7.8753	14.38%	1.1322
Automation, Basic Presort	11.8797	1.87%	0.2224
Automation, 3/5-Digit Presort	6.0996	75.27%	4.5910
		100.00%	7.1481

Proportional Benchmark Cost	8.7836	(4)
Modeled Cost	7.1481	(5)
Proportional CRA Adjustment Factor	1.2288	(6)
Fixed CRA Costs	1.7408	(4)

(1)   From page 4
(2)   From page 7
(3)   Equals Column (1) multiplied by Column (2)
(4)   From page 6
(5)   Weighted average from above
(6)   Equals (4) divided by (5)

WEIGHTED MODEL COSTS

Standard Mail (A) Regular Rate Flats

	(1)	(2)	(3)
	Total Cost	Weight	Weighted Cost
Nonautomation, Basic Presort			**14.1727**
Nonmachinable, Basic Presort	14.9486	63.54%	9.4976
Machinable, Basic Presort	12.8209	36.46%	4.6751
Nonautomation, 3/5-Digit Presort			**7.8753**
Nonmachinable, 3-Digit Presort	13.2323	49.54%	6.5558
Machinable, 3-Digit Presort	10.9338	50.46%	5.5168
Nonautomation, 3-Digit Presort			12.0726
Nonmachinable, 5-Digit Presort	6.4965	42.48%	2.7597
Machinable, 5-Digit Presort	5.5109	57.52%	3.1698
Nonautomation, 5-Digit Presort			5.9295
Automation, Basic Presort	11.8797	100.00%	**11.8797**
Automation, 3/5-Digit Presort			**6.0996**
3-Digit Presort	9.0484	30.43%	2.7539
5-Digit Presort	4.8095	69.57%	3.3457

(1)   *From page 5*
(2)   *From page 7*
(3)   *Equals Column (1) multiplied by Column (2)*

MODEL COSTS

Standard Mail (A) Regular Rate Flats

	(1) Unit Modeled Cost	(2) Bundle Sort Cost	(3) Total Modeled Cost
Automation, Basic Presort	10.0043	1.8754	11.8797
Automation, 3-Digit Presort	7.8913	1.1571	9.0484
Automation, 5-Digit Presort	3.6525	1.1571	4.8095
Nonautomation, Basic Presort			
Nonmachinable	13.2528	1.6958	14.9486
Machinable	11.0805	1.7405	12.8209
Nonautomation, 3-Digit Presort			
Nonmachinable	12.2333	0.9990	13.2323
Machinable	10.0689	0.8649	10.9338
Nonautomation, 5-Digit Presort			
Nonmachinable	5.4975	0.9990	6.4965
Machinable	4.6459	0.8649	5.5109

(1)   From flow model summary sheets
(2)   From the Bundle Sorting Model
(3)   Equals Column (1) plus Column (2)

Mail Processing CRA Costs Calculations *(from USPS LR-H-106)*

Location	Cost Pool	STD RR Other	Proportional	Fixed	Proportional	Fixed
mods	bcs/	0.0363	X		0.0363	
mods	express	0.0005	X		0.0005	
mods	fsm/	2.7644	X		2.7644	
mods	ism/	0.0040	X		0.0040	
mods	manf	1.1659	X		1.1659	
mods	manl	0.1437	X		0.1437	
mods	manp	0.0209	X		0.0209	
mods	mecparc	0.0047	X		0.0047	
mods	ocr/	0.0058	X		0.0058	
mods	priority	0.0026	X		0.0026	
mods	spbs Oth	0.2807	X		0.2807	
mods	spbsPrio	0.0117	X		0.0117	
mods	BusReply	0.0018	X		0.0018	
mods	INTL	0.0115	X		0.0115	
mods	LD15	0.0000	X		0.0000	
mods	LD41	0.0012	X		0.0012	
mods	LD42	0.0080	X		0.0080	
mods	LD43	0.4218	X		0.4218	
mods	LD44	0.0794	X		0.0794	
mods	LD48 Exp	0.0002	X		0.0002	
mods	LD48 Oth	0.0143	X		0.0143	
mods	LD48_SSv	0.0053	X		0.0053	
mods	LD49	0.0843	X		0.0843	
mods	LD79	0.1187	X		0.1187	
mods	MAILGRAM	0.0000	X		0.0000	
mods	Registry	0.0004	X		0.0004	
mods	REWRAP	0.0037	X		0.0037	
mods	1Bulk pr	0.0031	X		0.0031	
mods	1CancMPP	0.0160	X		0.0160	
mods	1EEQMT	0.0589	X		0.0589	
mods	1MISC	0.0828	X		0.0828	
mods	1OPbulk	0.6072	X		0.6072	
mods	1OPpref	0.3613	X		0.3613	
mods	1Platfrm	0.7141		X		0.7141
mods	1POUCHNG	0.2905	X		0.2905	
mods	1SackS_h	0.1296		X		0.1296
mods	1SackS_m	0.0620		X		0.0620
mods	1SCAN	0.0094	X		0.0094	
mods	1SUPPORT	0.0923	X		0.0923	
BMCs	nmo	0.0122		X		0.0122
BMCs	psm	0.0532		X		0.0532
BMCs	spb	0.1478	X		0.1478	
BMCs	ssm	0.0960		X		0.0960
BMCs	Othr	0.2431		X		0.2431
BMCs	Pla	0.1713		X		0.1713
Non Mods		2.1818	88.11%	11.89%	1.9224	0.2593
Total		**10.5245**			**8.7836**	**1.7408**

VOLUMES

Standard Mail (A) Regular Rate Flats

	(1) Automation	*(2)* Machinable	*(3)* Nonmachinable	*(4)* Total
Basic	231,300,000 1.87%	382,252,307 3.09%	666,020,693 5.39%	1,279,573,000 10.36%
3/5 Presort				
3-Digit Packages	2,830,255,635 22.91%	283,886,428 2.30%	278,755,458 2.26%	3,392,897,521 27.46%
5-Digit Packages	6,469,124,365 52.36%	698,097,905 5.65%	515,564,210 4.17%	7,682,786,479 62.18%
Total	9,530,680,000 77.14%	1,364,236,640 11.04%	1,460,340,360 11.82%	12,355,257,000 100.00%

	(5) Automation	*(6)* Nonautomation	*(7)* Total
Basic Presort	231,300,000 1.87%	1,048,273,000 8.48%	1,279,573,000 10.36%
3/5 Presort			
3-Digit Packages	2,830,255,635 22.91%	562,641,886 4.55%	3,392,897,521 27.46%
5-Digit Packages	6,469,124,365 52.36%	1,213,662,114 9.82%	7,682,786,479 62.18%
Total	9,530,680,000 77.14%	2,824,577,000 22.86%	12,355,257,000 100.00%

	(8) Automation	*(9)* Nonautomation	*(10)* Total
Basic Presort	231,300,000 1.87%	1,048,273,000 8.48%	1,279,573,000 10.36%
3/5-Digit Presort	9,299,380,000 75.27%	1,776,304,000 14.38%	11,075,684,000 89.64%
Total	9,530,680,000 77.14%	2,824,577,000 22.86%	12,355,257,000 100.00%

(1) From Column (5).

(2) Equals Column (6) weighted by the proportion of Nonautomation pieces that are machinable.

(3) Equals Column (6) weighted by the proportion of Nonautomation pieces that are nonmachinable.

(4) Equals the sum of Columns (1) through (3).

(5) From Flats Volumes

(6) From Flats Volumes

(7) Equals Column (5) plus Column (6).

(8) From Column (5). 3/5-Digit Presort is the sum of 3-Digit Presort Packages and 5-Digit Presort Packages from Column (5).

(9) From Column (6). 3/5-Digit Presort is the sum of 3-Digit Presort Packages and 5-Digit Presort Packages from Column (6).

(10) Equals Column (8) plus Column (9).

EXHIBIT E: STANDARD MAIL (A) NONPROFIT FLATS

This exhibit reproduces the results from LR-H-134, Section 5,
which provides the complete model.

MAIL PROCESSING COST ESTIMATES

	(1) Mailflow Processing Cost	(2) CRA Adjustment Factor	(3) Fixed CRA Costs, Add on	(4) Total Volume Variable Cost
Nonautomation, Basic Presort	14.71	1.1341	1.9769	18.6549
Nonautomation, 3/5-Digit Presort	6.24	1.1341	1.9769	9.0584
Automation, Basic Presort	11.95	1.1341	1.9769	15.5337
Automation, 3/5-Digit Presort	6.62	1.1341	1.9769	9.4846

(1)   From page 4

(2)   From page 3

(3)   From page 3

(4)   Equals Column (1) multiplied by Column (2) plus Column (3)

CRA ADJUSTMENT FACTOR

Standard Mail (A) Nonprofit Flats

	(1)		(2)	(3)
	Modeled Cost		Weight	Weighted Cost
Nonautomation, Basic Presort	14.7058		24.45%	3.5963
Nonautomation, 3/5-Digit Presort	6.2441		25.73%	1.6065
Automation, Basic Presort	11.9537		3.57%	0.4263
Automation, 3/5-Digit Presort	6.6199		46.25%	3.0617
			100.00%	8.6908
Proportional Benchmark Cost	9.8564	(4)		
Modeled Cost	8.6908	(5)		
Proportional CRA Adjustment Factor	1.1341	(6)		
Fixed CRA Costs	1.9769	(4)		

(1) From page 4
(2) From page 7
(3) Equals Column (1) multiplied by Column (2)
(4) From page 6
(5) Weighted average from above
(6) Equals (4) divided by (5)

WEIGHTED MODEL COSTS

Standard Mail (A) Nonprofit Flats

	(1) Total Cost	*(2)* Weight	*(3)* Weighted Cost
Nonautomation, Basic Presort			**14.7058**
Nonmachinable, Basic Presort	21.7917	16.24%	3.5383
Machinable, Basic Presort	13.3323	83.76%	11.1675
Nonautomation, 3/5-Digit Presort			**6.2441**
Nonmachinable, 3-Digit Presort	13.2723	25.42%	3.3744
Machinable, 3-Digit Presort	10.8681	74.58%	8.1049
Nonautomation, 3-Digit Presort			11.479327
Nonmachinable, 5-Digit Presort	6.5487	7.92%	0.5189
Machinable, 5-Digit Presort	5.4846	92.08%	5.0500
Nonautomation, 5-Digit Presort			5.568893
Automation, Basic Presort	11.9537	100.00%	**11.9537**
Automation, 3/5-Digit Presort			**6.6199**
3-Digit Presort	9.1130	40.13%	3.6573
5-Digit Presort	4.9487	59.87%	2.9626

(1)   From page 5
(2)   From page 7
(3)   Equals Column (1) multiplied by Column (2)

MODEL COSTS

Standard Mail (A) Nonprofit Flats

	(1) Unit Modeled Cost	(2) Bundle Sort Cost	(3) Total Modeled Cost
Automation, Basic Presort	9.5974	2.3563	11.9537
Automation, 3-Digit Presort	7.7743	1.3387	9.1130
Automation, 5-Digit Presort	3.6100	1.3387	4.9487
Nonautomation, Basic Presort			
Machinable	11.0342	2.2981	13.3323
Nonmachinable	19.2359	2.5559	21.7917
Nonautomation, 3-Digit Presort			
Machinable	10.0976	0.7704	10.8681
Nonmachinable	12.3429	0.9295	13.2723
Nonautomation, 5-Digit Presort			
Machinable	4.7141	0.7704	5.4846
Nonmachinable	5.6193	0.9295	6.5487

(1) From flow model summary sheets

(2) From the Bundle Sorting model

(3) Equals Column (1) plus Column (2)

Mail Processing CRA Costs Calculations *(from USPS LR-H-106)*

Location	Cost Pool	STD NP Other	Proportional	Fixed	Proportional	Fixed
mods	bcs/	0.0112	X		0.0112	
mods	express	0.0009	X		0.0009	
mods	fsm/	3.0081	X		3.0081	
mods	lsm/	0.0024	X		0.0024	
mods	manf	1.6380	X		1.6380	
mods	manl	0.2090	X		0.2090	
mods	manp	0.0004	X		0.0004	
mods	mecparc	0.0017	X		0.0017	
mods	ocr/	0.0128	X		0.0128	
mods	priority	0.0136	X		0.0136	
mods	spbs Oth	0.2439	X		0.2439	
mods	spbsPrio	0.0062	X		0.0062	
mods	BusReply	0.0004	X		0.0004	
mods	INTL	0.0039	X		0.0039	
mods	LD15	0.0000	X		0.0000	
mods	LD41	0.0000	X		0.0000	
mods	LD42	0.0072	X		0.0072	
mods	LD43	0.6133	X		0.6133	
mods	LD44	0.0302	X		0.0302	
mods	LD48 Exp	0.0004	X		0.0004	
mods	LD48 Oth	0.0182	X		0.0182	
mods	LD48_SSv	0.0003	X		0.0003	
mods	LD49	0.0686	X		0.0686	
mods	LD79	0.1152	X		0.1152	
mods	MAILGRAM	0.0000	X		0.0000	
mods	Registry	0.0002	X		0.0002	
mods	REWRAP	0.0017	X		0.0017	
mods	1Bulk pr	0.0018	X		0.0018	
mods	1CancMPP	0.0125	X		0.0125	
mods	1EEQMT	0.0562	X		0.0562	
mods	1MISC	0.1019	X		0.1019	
mods	1OPbulk	0.7262	X		0.7262	
mods	1OPpref	0.6310	X		0.6310	
mods	1Platfrm	0.7938		X		0.7938
mods	1POUCHNG	0.1910	X		0.1910	
mods	1SackS_h	0.1943		X		0.1943
mods	1SackS_m	0.1642		X		0.1642
mods	1SCAN	0.0039	X		0.0039	
mods	1SUPPORT	0.1117	X		0.1117	
BMCs	nmo	0.0115		X		0.0115
BMCs	psm	0.0760		X		0.0760
BMCs	spb	0.1458	X		0.1458	
BMCs	ssm	0.0871		X		0.0871
BMCs	Othr	0.1958		X		0.1958
BMCs	Pla	0.1801		X		0.1801
Non Mods		2.1408	87.19%	12.81%	1.8666	0.2742
Total		11.8332			9.8564	1.9769

VOLUMES

Standard Mail (A) Nonprofit Flats

	(1)	(2)	(3)	(4)
	Automation	Machinable	Nonmachinable	Total
Basic	58,600,000	336,609,362	65,248,638	460,458,000
	12.73%	73.10%	14.17%	100.00%
3/5 Presort				
3-Digit Packages	305,021,810	36,020,446	12,280,140	353,322,396
	86.33%	10.19%	3.48%	100.00%
5-Digit Packages	454,998,190	344,826,422	29,671,992	829,496,604
	54.85%	41.57%	3.58%	100.00%
Total	818,620,000	717,456,229	107,200,771	1,643,277,000

	(5)	(6)	(7)
	Automation	Nonautomation	Total
Basic	58,600,000	401,858,000	460,458,000
	3.57%	24.45%	28.02%
3/5 Presort			
3-Digit Packages	305,021,810	48,300,586	353,322,396
	18.56%	2.94%	21.50%
5-Digit Packages	454,998,190	374,498,414	829,496,604
	27.69%	22.79%	50.48%
Total	818,620,000	824,657,000	1,643,277,000
	49.82%	50.18%	100.00%

	(8)	(9)	(10)
	Automation	Nonautomation	Total
Basic	58,600,000	401,858,000	460,458,000
	3.57%	24.45%	28.02%
3/5-Digit	760,020,000	422,799,000	1,182,819,000
	46.25%	25.73%	71.98%
Total	818,620,000	824,657,000	1,643,277,000
	49.82%	50.18%	100.00%

(1) From Column (5).

(2) Equals Column (6) weighted by the proportion of Nonautomation pieces that are Machinable.

(3) Equals Column (6) weighted by the proportion of Nonautomation pieces that are Nonmachinable.

(4) Equals the sum of Columns (1) through (3).

(5) From Flats Volumes.

(6) From Flats Volumes.

(7) Equals Column (5) plus Column (6).

(8) From Column (5). 3/5-Digit Presort is the sum of 3-Digit Presort Packages and 5-Digit Presort Packages from Column (5).

(9) From Column (6). 3/5-Digit Presort is the sum of 3-Digit Presort Packages and 5-Digit Presort Packages from Column (6).

(10) Equals Column (8) plus Column (9).

EXHIBIT F: PERIODICALS REGULAR RATE FLATS, CONSTANT MAIL ENTRY

This exhibit reproduces the results from LR-H-134, Section 8,
which provides the complete model.

MAIL PROCESSING COST ESTIMATES

Periodicals Regular Rate Flats, Constant Mail Entry

	(1) Mailflow Processing Cost	(2) CRA Adjustment Factor	(3) Fixed CRA Costs, Add-On	(4) Total Volume Variable Cost
Automation, Basic Presort	10.5098	1.2687	2.8700	**16.2040**
Automation, 3-Digit Presort	7.8007	1.2687	2.8700	**12.7670**
Automation, 5-Digit Presort	4.7268	1.2687	2.8700	**8.8670**
Nonautomation, Basic Presort	13.9123	1.2687	2.8700	**20.5209**
Nonautomation, 3-Digit Presort	9.1005	1.2687	2.8700	**14.4160**
Nonautomation, 5-Digit Presort	5.9346	1.2687	2.8700	**10.3994**
Carrier Route	1.6372	1.2687	2.8700	**4.9472**

(1)   From page 4
(2)   From page 3
(3)   From page 3
(4)   Equals Column (1) multiplied by Column (2) plus Column (3)

CRA ADJUSTMENT FACTORS

Periodicals Regular Rate Flats, Constant Mail Entry

Proportional CRA Adjustment Factor	1.2687	(1)
Fixed CRA Costs	2.8700	(2)

(1)   From USPS LR-H-134 Section 2, page 4
(2)   From USPS LR-H-134 Section 2, page 4

WEIGHTED MODEL COSTS

Periodicals Regular Rate Flats, Constant Mail Entry

	(1) Total Modeled Cost	(2) Weight	(3) Weighted Cost
Nonautomation, Basic Presort			
Nonmachinable, Basic Presort	15.8822	25.00%	3.9706
Machinable, Basic Presort	13.2557	75.00%	9.9418
			13.9123
Nonautomation, 3-Digit Presort			
Nonmachinable, 3-Digit Presort	10.5044	25.00%	2.6261
Machinable, 3-Digit Presort	8.6325	75.00%	6.4744
			9.1005
Nonautomation, 5-Digit Presort			
Nonmachinable, 5-Digit Presort	6.3889	25.00%	1.5972
Machinable, 5-Digit Presort	5.7832	75.00%	4.3374
			5.9346
Automation, Basic Presort	10.5098	100.00%	**10.5098**
Automation, 3-Digit Presort	7.8007	100.00%	**7.8007**
Automation, 5-Digit Presort	4.7268	100.00%	**4.7268**
Carrier Route	1.6372	100.00%	**1.6372**

(1) From page 5
(2) Column (2) equals a ratio of the specific volume to the total volume of the presort category Volumes from page 7
(3) Equals Column (1) multiplied by Column (2)

ALTERNATE WEIGHTED MODEL COSTS

Periodicals Regular Rate Flats, Constant Mail Entry

	Unit Modeled Cost	Bundle Sort Cost	Weight	Weighted Modeled Cost	Weighted Bundle Sort Cost	Total Cost
Nonautomation, Basic Presort				**11.8267**	**2.0856**	**13.9123**
Nonmachinable, Basic Presort	13.7967	2.0856	25.00%	3.4492	0.5214	
Machinable, Basic Presort	11.1701	2.0856	75.00%	8.3776	1.5642	
Nonautomation, 3-Digit Presort				**7.8753**	**1.2252**	**9.1005**
Nonmachinable, 3-Digit Presort	9.2793	1.2252	25.00%	2.3198	0.3063	
Machinable, 3-Digit Presort	7.4073	1.2252	75.00%	5.5555	0.9189	
Nonautomation, 5-Digit Presort				**4.9516**	**0.9831**	**5.9346**
Nonmachinable, 5-Digit Presort	5.4059	0.9831	25.00%	1.3515	0.2458	
Machinable, 5-Digit Presort	4.8001	0.9831	75.00%	3.6001	0.7373	
Automation, Basic Presort	8.4242	2.0856	100.00%	8.4242	2.0856	**10.5098**
Automation, 3-Digit Presort	6.5755	1.2252	100.00%	6.5755	1.2252	**7.8007**
Automation, 5-Digit Presort	3.7437	0.9831	100.00%	3.7437	0.9831	**4.7268**
Carrier Route	1.6372		100.00%	1.6372		**1.6372**

MODEL COSTS

Periodicals Regular Rate Flats, Constant Mail Entry

	(1)	(2)	(3)
	Unit Modeled Cost	Bundle Sort Cost	Total Modeled Cost
Basic Presort Rate Category			
Nonmachinable	13.7967	2.0856	15.8822
Machinable	11.1701	2.0856	13.2557
Barcoded	8.4242	2.0856	10.5098
Three-Digit Presort Rate Category			
Nonmachinable	9.2793	1.2252	10.5044
Machinable	7.4073	1.2252	8.6325
Barcoded	6.5755	1.2252	7.8007
Five-Digit Presort Rate Category			
Nonmachinable	5.4059	0.9831	6.3889
Machinable	4.8001	0.9831	5.7832
Barcoded	3.7437	0.9831	4.7268
Carrier Route Presort Rate Category	1.6372	-	1.6372

(1) From Flow Model summary sheets
(2) From Bundle Sorting Model
(3) Equals Column (1) plus Column (2)

VOLUMES

Periodicals Regular Rate Flats, Constant Mail Entry

	(1) Barcoded	*(2)* Machinable	*(3)* Nonmachinable	*(4)* Carrier Route	*(5)* Total
Basic	359,139,092 5.51%	661,009,956 10.14%	220,336,652 3.38%	-	1,240,485,700 19.04%
3-Digit	342,669,589 5.26%	306,067,634 4.70%	102,022,545 1.57%	-	750,759,768 11.52%
5-Digit	1,012,091,994 15.53%	791,115,553 12.14%	263,705,184 4.05%	-	2,066,912,731 31.72%
Carrier Route				2,458,556,802 37.73%	2,458,556,802 37.73%
Total	1,713,900,675 26.30%	1,758,193,142 26.98%	586,064,381 8.99%	2,458,556,802 37.73%	6,516,715,000 100.00%

	(6) Barcoded Flats	*(7)* Non-Barcoded Flats	*(8)* Carrier Route	*(9)* Total
Basic Presort	359,139,092 5.51%	881,346,608 13.52%	-	1,240,485,700 19.04%
3-Digit Presort	342,669,589 5.26%	408,090,178 6.26%	-	750,759,768 11.52%
5-Digit Presort	1,012,091,994 15.53%	1,054,820,737 16.19%	-	2,066,912,731 31.72%
Carrier Route			2,458,556,802 37.73%	2,458,556,802 37.73%
Total	1,713,900,675 26.30%	2,344,257,523 35.97%	2,458,556,802 37.73%	6,516,715,000 100.00%

(1) From Column (6)
(2) 75% of Column (7); (75% of Non-Barcoded mail is machinable; Refer to USPS LR-H-105)
(3) 25% of Column (7); (25% of Non-Barcoded mail is nonmachinable; Refer to USPS LR-H-105)
(4) From Column (8)
(5) Sum of Columns (1) through (4)
(6) From Flats Volumes
(7) From Flats Volumes
(8) From Flats Volumes
(9) Sum of Columns (6) through (8)

EXHIBIT G: PERIODICALS NONPROFIT FLATS, CONSTANT MAIL ENTRY

This exhibit reproduces the results from LR-H-134, Section 9,
which provides the complete model.

MAIL PROCESSING COST ESTIMATES

Periodicals Nonprofit Flats, Constant Mail Entry

	(1) Mailflow Processing Cost	(2) CRA Adjustment Factor	(3) Fixed CRA Costs, Add-On	(4) Total Volume Variable Cost
Automation, Basic Presort	10.2613	0.8268	1.5982	**10.0825**
Automation, 3-Digit Presort	6.3035	0.8268	1.5982	**6.8101**
Automation, 5-Digit Presort	4.3520	0.8268	1.5982	**5.1965**
Nonautomation, Basic Presort	14.6456	0.8268	1.5982	**13.7075**
Nonautomation, 3-Digit Presort	7.4979	0.8268	1.5982	**7.7976**
Nonautomation, 5-Digit Presort	5.8177	0.8268	1.5982	**6.4084**
Carrier Route	1.4575	0.8268	1.5982	**2.8033**

(1) From page 4
(2) From page 3
(3) From page 3
(4) Equals Column (1) multiplied by Column (2) plus Column (3)

CRA ADJUSTMENT FACTORS

Periodicals Nonprofit Flats, Constant Mail Entry

Proportional CRA Adjustment Factor	0.8268	(1)
Fixed CRA Costs	1.5982	(2)

(1)   From USPS LR-H-134 Section 3, page 4
(2)   From USPS LR-H-134 Section 3, page 4

WEIGHTED MODEL COSTS

Periodicals Nonprofit Flats, Constant Mail Entry

	(1) Total Modeled Cost	(2) Weight	(3) Weighted Cost
Nonautomation, Basic Presort			
Nonmachinable, Basic Presort	15.4940	67.00%	10.3810
Machinable, Basic Presort	12.9231	33.00%	4.2646
			14.6456
Nonautomation, 3-Digit Presort			
Nonmachinable, 3-Digit Presort	8.2672	67.00%	5.5390
Machinable, 3-Digit Presort	5.9359	33.00%	1.9589
			7.4979
Nonautomation, 5-Digit Presort			
Nonmachinable, 5-Digit Presort	6.0179	67.00%	4.0320
Machinable, 5-Digit Presort	5.4111	33.00%	1.7857
			5.8177
Automation, Basic Presort	10.2613	100.00%	**10.2613**
Automation, 3-Digit Presort	6.3035	100.00%	**6.3035**
Automation, 5-Digit Presort	4.3520	100.00%	**4.3520**
Carrier Route	1.4575	100.00%	**1.4575**

(1)   *From page 5*

(2)   *Column (2) equals a ratio of the specific volume*
      to the total volume of the presort category
      Volumes from page 7

(3)   *Equals Column (1) multiplied by Column (2)*

ALTERNATE WEIGHTED MODEL COSTS

Periodicals Nonprofit Flats, Constant Mall Entry

	Unit Modeled Cost	Bundle Sort Cost	Weight	Weighted Modeled Cost	Weighted Bundle Sort Cost	Total Cost
Nonautomation, Basic Presort				**12.5930**	**2.0526**	**14.6456**
Nonmachinable, Basic Presort	13.4414	2.0526	67.00%	9.0057	1.3752	
Machinable, Basic Presort	10.8705	2.0526	33.00%	3.5873	0.6774	
Nonautomation, 3-Digit Presort				**6.3233**	**1.1745**	**7.4979**
Nonmachinable, 3-Digit Presort	7.0926	1.1745	67.00%	4.7521	0.7869	
Machinable, 3-Digit Presort	4.7614	1.1745	33.00%	1.5713	0.3876	
Nonautomation, 5-Digit Presort				**5.2194**	**0.5983**	**5.8177**
Nonmachinable, 5-Digit Presort	5.4196	0.5983	67.00%	3.6311	0.4008	
Machinable, 5-Digit Presort	4.8128	0.5983	33.00%	1.5882	0.1974	
Automation, Basic Presort	8.2087	2.0526	100.00%	8.2087	2.0526	10.2613
Automation, 3-Digit Presort	5.1290	1.1745	100.00%	5.1290	1.1745	6.3035
Automation, 5-Digit Presort	3.7537	0.5983	100.00%	3.7537	0.5983	4.3520
Carrier Route	1.4575		100.00%	1.4575		1.4575

MODEL COSTS

Periodicals Nonprofit Flats, Constant Mail Entry

	(1) Unit Modeled Cost	(2) Bundle Sort Cost	(3) Total Modeled Cost
Basic Presort Rate Category			
Nonmachinable	13.4414	2.0526	15.4940
Machinable	10.8705	2.0526	12.9231
Barcoded	8.2087	2.0526	10.2613
Three-Digit Presort Rate Category			
Nonmachinable	7.0926	1.1745	8.2672
Machinable	4.7614	1.1745	5.9359
Barcoded	5.1290	1.1745	6.3035
Five-Digit Presort Rate Category			
Nonmachinable	5.4196	0.5983	6 0179
Machinable	4.8128	0.5983	5.4111
Barcoded	3.7537	0 5983	4.3520
Carrier Route Presort Rate Category	1 4575	-	1.4575

1) *From Flow Model summary sheets*

2) *From Bundle Sorting Model*

3) *Equals Column (1) plus Column (2)*

VOLUMES

Periodicals Nonprofit Flats, Constant Mail Entry

	(1) Barcoded Flats	(2) Non-Barcoded Flats	(3) Carrier Route	(4) Total
Basic Presort	82,354,370 **4.15%**	223,305,689 **11.24%**		305,660,059 **15.39%**
3-Digit Presort	67,491,446 **3.40%**	87,834,084 **4.42%**		155,325,531 **7.82%**
5-Digit Presort	274,343,646 **13.81%**	267,665,874 **13.47%**		542,009,520 **27.28%**
Carrier Route			983,732,891 **49.52%**	983,732,891 **49.52%**
Total	424,189,462 **21.35%**	578,805,647 **29.13%**	983,732,891 **49.52%**	1,986,728,000 **50.48%**

	(5) Barcoded	(6) Machinable	(7) Non-Machinable	(8) Carrier Route	(9) Total
Basic	82,354,370 **26.94%**	73,690,877 **24.11%**	149,614,812 **48.95%**		305,660,059 **100.00%**
3-Digit	67,491,446 **43.45%**	28,985,248 **18.66%**	58,848,836 **37.89%**		155,325,531 **100.00%**
5-Digit	274,343,646 **50.62%**	88,329,738 **16.30%**	179,336,135 **33.09%**		542,009,520 **100.00%**
Carrier Route				983,732,891 **49.52%**	983,732,890.94 **49.52%**
Total	424,189,462	191,005,863	387,799,783	983,732,891	1,986,728,000

(1) *From Flats Volumes*
(2) *From Flats Volumes*
(3) *From Flats Volumes*
(4) *Sum of Columns (1) through (3)*
(5) *From Column (1)*
(6) *33% of Column (2); (33% of Periodicals Non-Barcoded mail is machinable; Refer to USPS LR-H-105)*
(7) *67% of Column (2); (67% of Periodicals Non-Barcoded mail is monmachinable; Refer to USPS LR-H-105)*
(8) *From Column (3)*
(9) *Sum of Columns (1) through (4)*

EXHIBIT H: STANDARD MAIL (A) REGULAR RATE FLATS, CONSTANT MAIL ENTRY

This exhibit reproduces the results from LR-H-134, Section 10,
which provides the complete model.

MAIL PROCESSING COST ESTIMATES

Standard Mail (A) Regular Rate Flats, Constant Mail Entry

	(1)	(2)	(3)	(4)
	Mailflow Processing Cost	CRA Adjustment Factor	Fixed CRA Costs, Add on	Total Volume Variable Cost
Nonautomation, Basic Presort	14.1727	1.2288	1.7408	19.1565
The complete model is provided in Section 10.	7.7118	1.2288	1.7408	11.2172
Automation, Basic Presort	10.1557	1.2288	1.7408	14.2202
Automation, 3/5-Digit Presort	5.6360	1.2288	1.7408	8.6665

(1)   From page 4
(2)   From page 3
(3)   From page 3
(4)   Equals Column (1) multiplied by Column (2) plus Column (3)

CRA ADJUSTMENT FACTORS

Standard Mail (A) Regular Rate Flats, Constant Mail Entry

Proportional CRA Adjustment Factor	1.2288	*(1)*
Fixed CRA Costs	1.7408	*(2)*

(1) From USPS LR-H-134 Section 4, page 4
(2) From USPS LR-H-134 Section 4, page 4

WEIGHTED MODEL COSTS

Standard Mail (A) Regular Rate Flats, Constant Mail Entry

	(1)	(2)	(3)
	Total Cost	Weight	Weighted Cost
Nonautomation, Basic Presort			**14.1727**
Nonmachinable, Basic Presort	14.9486	63.54%	9.4976
Machinable, Basic Presort	12.8209	36.46%	4.6751
Nonautomation, 3/5-Digit Presort			**7.7118**
Nonmachinable, 3-Digit Presort	13.2323	49.54%	6.5558
Machinable, 3-Digit Presort	10.9338	50.46%	5.5168
Nonautomation, 3-Digit Presort			12.0726
Nonmachinable, 5-Digit Presort	6.4965	42.48%	2.7597
Machinable, 5-Digit Presort	5.5109	57.52%	3.1698
Nonautomation, 5-Digit Presort			5.9295
Automation, Basic Presort	10.1557	100.00%	**10.1557**
Automation, 3/5-Digit Presort			**5.6360**
3-Digit Presort	8.7562	26.39%	2.3108
5-Digit Presort	4.5174	73.61%	3.3252

(1) From page 6

(2) From page 7

(3) Equals Column (1) multiplied by Column (2)

ALTERNATE WEIGHTED MODEL COSTS

Standard Mail (A) Regular Rate Flats, Constant Mail Entry

	Unit Modeled Cost	Bundle Sort Cost	Weight	Weighted Unit Modeled Cost	Weighted Bundle Sort Cost	Total Cost
Nonautomation, Basic Presort				12.4607	1.7121	**14.1727**
Nonmachinable, Basic Presort	13.2528	1.6958	63.54%	8.4202	1.0774	
Machinable, Basic Presort	11.0805	1.7405	36.46%	4.0405	0.6347	
Nonautomation, 3/5-Digit Presort				6.7872	0.9246	**7.7118**
Nonmachinable, 3-Digit Presort	12.2333	0.9990	49.54%	6.0609	0.4949	
Machinable, 3-Digit Presort	10.0689	0.8649	50.46%	5.0804	0.4364	
Nonautomation, 3-Digit Presort				11.1412	0.9313	
Nonmachinable, 5-Digit Presort	5.4975	0.9990	42.48%	2.3353	0.4244	
Machinable, 5-Digit Presort	4.6459	0.8649	57.52%	2.6723	0.4975	
Nonautomation, 5-Digit Presort				5.0077	0.9219	
Automation, Basic Presort	8.4152	1.7405	100.00%	8.4152	1.7405	**10.1557**
Automation, 3/5-Digit Presort				4.7711	0.8649	**5.6360**
3-Digit Presort	7.8913	0.8649	26.39%	2.0825	0.2283	
5-Digit Presort	3.6525	0.8649	73.61%	2.6886	0.6367	

MODEL COSTS

Standard Mail (A) Regular Rate Flats, Constant Mail Entry

	(1)	(2)	(3)
	Unit Modeled Cost	Bundle Sort Cost	Total Modeled Cost
	8.4152	1.7405	10.1557
Automation, 3-Digit Presort	7.8913	0.8649	8.7562
Automation, 5-Digit Presort	3.6525	0.8649	4.5174
Nonautomation, Basic Presort			
Nonmachinable	13.2528	1.6958	14.9486
Machinable	11.0805	1.7405	12.8209
Nonautomation, 3-Digit Presort			
Nonmachinable	12.2333	0.9990	13.2323
Machinable	10.0689	0.8649	10.9338
Nonautomation, 5-Digit Presort			
Nonmachinable	5.4975	0.9990	6.4965
Machinable	4.6459	0.8649	5.5109

(1)   *From Flow Model summary sheets*

(2)   *From Bundle Sorting Model*

(3)   *Equals Unit Modeled Cost plus Bundle Sort Cost*

VOLUMES

Standard Mail (A) Regular Rate Flats, Constant Mail Entry

	(1) Automation	(2) Machinable	(3) Nonmachinable	(4) Total
Basic	231,300,000	382,252,307	666,020,693	1,279,573,000
The complete model is provid	1.87%	3.09%	5.39%	10.36%
3-Digit Packages	2,830,255,635	260,030,884	255,331,079	3,345,617,598
	22.91%	2.10%	2.07%	27.08%
5-Digit Packages	6,469,124,365	725,293,295	535,648,742	7,730,066,402
	52.36%	5.87%	4.34%	62.56%
Total	9,530,680,000	1,367,576,486	1,457,000,514	12,355,257,000
	77.14%	11.07%	11.79%	100.00%

	(5) Automation	(6) Nonautomation	(7) Total
Basic Presort	231,300,000	1,048,273,000	1,279,573,000
	1.87%	8.48%	10.36%
3/5 Presort			
3-Digit Packages	2,830,255,635	515,361,963	3,345,617,598
	22.91%	4.17%	27.08%
5-Digit Packages	6,469,124,365	1,260,942,037	7,730,066,402
	52.36%	10.21%	62.56%
Total	9,530,680,000	2,824,577,000	12,355,257,000
	77.14%	22.86%	100.00%

	(8) Automation	(9) Nonautomation	(10) Total
Basic Presort	231,300,000	1,048,273,000	1,279,573,000
	1.87%	8.48%	10.36%
3/5-Digit Presort	9,299,380,000	1,776,304,000	11,075,684,000
	75.27%	14.38%	89.64%
Total	9,530,680,000	2,824,577,000	12,355,257,000
	77.14%	22.86%	100.00%

(1) From Column (5).

(2) Equals Column (6) weighted by the proportion of Nonautomation pieces that are machinable.

(3) Equals Column (6) weighted by the proportion of Nonautomation pieces that are nonmachinable.

(4) Equals the sum of Columns (1) through (3).

(5) From Flats Volumes

(6) From Flats Volumes

(7) Equals Column (5) plus Column (6).

(8) From Column (5). 3/5-Digit Presort is the sum of 3-Digit Presort Packages and 5-Digit Presort Packages from Column (5).

(9) From Column (6). 3/5-Digit Presort is the sum of 3-Digit Presort Packages and 5-Digit Presort Packages from Column (6).

(10) Equals Column (8) plus Column (9).

EXHIBIT I: STANDARD MAIL (A) NONPROFIT FLATS, CONSTANT MAIL ENTRY

This exhibit reproduces the results from LR-H-134, Section 11,

which provides the complete model.

STANDARD MAIL (A) NONPROFIT FLATS, CONSTANT MAIL ENTRY

	(1) Mailflow Processing Cost	(2) CRA Adjustment Factor	(3) Fixed CRA Costs, Add on	(4) Total Volume Variable Cost
Nonautomation, Basic Presort	14.71	1.1341	1.9769	18.6549
Nonautomation, 3/5-Digit Presort	6.24	1.1341	1.9769	9.0584
Automation, Basic Presort	10.53	1.1341	1.9769	13.9147
Automation, 3/5-Digit Presort	4.77	1.1341	1.9769	7.3914

(1)   From page 4
(2)   From page 3
(3)   From page 3
(4)   Equals Column (1) multiplied by Column (2) plus Column (3)

CRA ADJUSTMENT FACTORS

Standard Mail (A) Nonprofit Flats, Constant Mail Entry

Proportional CRA Adjustment Factor	1.1341	*(1)*
Fixed CRA Costs	1.9769	*(2)*

.

(1) From USPS LR-H-134, Section 5, page 4
(2) From USPS LR-H-134, Section 5, page 4

WEIGHTED MODEL COSTS

Standard Mail (A) Nonprofit Flats, Constant Mail Entry

	(1)	(2)	(3)
	Total Cost	Weight	Weighted Cost
Nonautomation, Basic Presort			**14.7058**
Nonmachinable, Basic Presort	21.7917	16.24%	3.5383
Machinable, Basic Presort	13.3323	83.76%	11.1675
Nonautomation, 3/5-Digit Presort			**6.2441**
Nonmachinable, 3-Digit Presort	13.2723	25.42%	3.3744
Machinable, 3-Digit Presort	10.8681	74.58%	8.1049
Nonautomation, 3-Digit Presort			11.479327
Nonmachinable, 5-Digit Presort	6.5487	7.92%	0.5189
Machinable, 5-Digit Presort	5.4846	92.08%	5.0500
Nonautomation, 5-Digit Presort			5.568893
Automation, Basic Presort	10.5261	100.00%	**10.5261**
Automation, 3/5-Digit Presort			**4.7743**
3-Digit Presort	8.5447	9.46%	0.8082
5-Digit Presort	4.3804	90.54%	3.9661

(1)   From page 6
(2)   From page 7
(3)   Equals Column (1) multiplied by Column (2)

ALTERNATE WEIGHTED MODEL COSTS

Standard Mall (A) Nonprofit Flats, Constant Mall Entry

	Unit Modeled Cost	Bundle Sort Cost	Weight	Weighted Unit Modeled Cost	Weighted Bundle Sort Cost	Total Cost
Nonautomation, Basic Presort				12.3659	2.3399	14.7058
Nonmachinable, Basic Presort	19.2359	2.5559	16.24%	3 1233	0.4150	
Machinable, Basic Presort	11.0342	2.2981	83.76%	9.2426	1.9249	
Nonautomation, 3/5-Digit Presort				5.4579	0.7862	6.2441
Nonmachinable, 3-Digit Presort	12.3429	0.9295	25.42%	3.1381	0.2363	
Machinable, 3-Digit Presort	10.0976	0.7704	74.58%	7.5303	0.5746	
Nonautomation, 3-Digit Presort			.	10.6685	0.8109	
Nonmachinable, 5-Digit Presort	5.6193	0.9295	7.92%	0.4452	0.0736	
Machinable, 5-Digit Presort	4.7141	0.7704	92.08%	4.3406	0.7094	
Nonautomation, 5-Digit Presort				4.7858	0.7830	
Automation, Basic Presort	8.2281	2.2981	100.00%	8.2281	2.2981	10.5261
Automation, 3/5-Digit Presort				4.0038	0.7704	4.7743
3-Digit Presort	7.7743	0.7704	9.46%	0.7353	0.0729	
5-Digit Presort	3.6100	0.7704	90.54%	3.2685	0.6976	

MODEL COSTS

Standard Mail (A) Nonprofit Flats, Constant Mail Entry

	(1) Unit Modeled Cost	(2) Bundle Sort Cost	(3) Total Modeled Cost
Automation, Basic Presort	8.2281	2.2981	10.5261
Automation, 3-Digit Presort	7.7743	0.7704	8.5447
Automation, 5-Digit Presort	3.6100	0.7704	4.3804
Nonautomation, Basic Presort			
Machinable	11.0342	2.2981	13.3323
Nonmachinable	19.2359	2.5559	21.7917
Nonautomation, 3-Digit Presort			
Machinable	10.0976	0.7704	10.8681
Nonmachinable	12.3429	0.9295	13.2723
Nonautomation, 5-Digit Presort			
Machinable	4.7141	0.7704	5.4846
Nonmachinable	5.6193	0.9295	6.5487

(1) From flow model summary sheets
(2) From the Bundle Sorting model
(3) Equals Column (1) plus Column (2)

VOLUMES

Standard Mail (A) Nonprofit Flats, Constant Mail Entry

	(1)	(2)	(3)	(4)
	Automation	Machinable	Nonmachinable	Total
Basic	58,600,000	336,609,362	65,248,638	460,458,000
	12.73%	73.10%	14.17%	100.00%
3/5 Presort				
3-Digit Packages	305,021,810	36,020,446	12,280,140	353,322,396
	86.33%	10.19%	3.48%	100.00%
5-Digit Packages	454,998,190	344,826,422	29,671,992	829,496,604
	54.85%	41.57%	3.58%	100.00%
Total	818,620,000	717,456,229	107,200,771	1,643,277,000

	(5)	(6)	(7)
	Automation	Nonautomation	Total
Basic	58,600,000	401,858,000	460,458,000
	3.57%	24.45%	28.02%
3/5 Presort			
3-Digit Packages	305,021,810	48,300,586	353,322,396
	18.56%	2.94%	21.50%
5-Digit Packages	454,998,190	374,498,414	829,496,604
	27.69%	22.79%	50.48%
Total	818,620,000	824,657,000	1,643,277,000
	49.82%	50.18%	100.00%

	(8)	(9)	(10)
	Automation	Nonautomation	Total
Basic	58,600,000	401,858,000	460,458,000
	3.57%	24.45%	28.02%
3/5-Digit	760,020,000	422,799,000	1,182,819,000
	46.25%	25.73%	71.98%
Total	818,620,000	824,657,000	1,643,277,000
	49.82%	50.18%	100.00%

(1) *From Column (5).*
(2) *Equals Column (6) weighted by the proportion of Nonautomation pieces that are Machinable.*
(3) *Equals Column (6) weighted by the proportion of Nonautomation pieces that are Nonmachinable.*
(4) *Equals the sum of Columns (1) through (3).*
(5) *From Flats Volumes*
(6) *From Flats Volumes*
(7) *Equals Column (5) plus Column (6).*
(8) *From Column (5). 3/5-Digit Presort is the sum of 3-Digit Presort Packages and 5-Digit Presort Packages from Column (5).*
(9) *From Column (6). 3/5-Digit Presort is the sum of 3-Digit Presort Packages and 5-Digit Presort Packages from Column (6).*
(10) *Equals Column (8) plus Column (9).*

EXHIBIT J: PRESORT COMPOSITION

1   Permissible containers for presort preparation are pallets and trays for First-Class,

2   and pallets and sacks for Periodicals and Standard Mail (A). The bundles must be

3   sorted to at least the container presort level. For example, basic bundles can be

4   placed only in basic containers, while 3-digit bundles can be placed in basic or 3-digit

5   containers. Neither basic nor 3-digit bundles can be placed in 5-digit containers.

6   Tables A-1, A-2, and A-3 delineate the allowable presort combinations for the rate

7   categories within each class of mail.

TABLE A-1

SUMMARY OF ALLOWABLE MAIL PRESORT COMPOSITION OF

FIRST-CLASS FLATS MAIL

	Container Presort Level	Package Presort Level	Applicable Rates	
			In Trays	On Pallet
Automation	Basic	Mixed ADC	B	B
		ADC	B	B
		3-digit	3/5	3/5
		5-digit	3/5	3/5
	3/5-Digit	3-digit	3/5	3/5
		5-digit	3/5	3/5
Nonautomation	Basic	Mixed ADC	P	P
		ADC	P	P
		3-digit	P	P
		5-digit	P	P
B = basic rate = P = presort rate, 3/5 = 3/5-digit presort rate				

TABLE A-2

SUMMARY OF ALLOWABLE MAIL PRESORT COMPOSITION OF
PERIODICALS REGULAR AND NONPROFIT FLATS MAIL

	Container Presort Level	Package Presort Level	Applicable Rates	
			In Sack	On Pallet
Automation	Basic	Mixed ADC	B	B
		ADC	B	B
		non-unique 3-digit	3	3
		unique 3-digit	3	3
		optional city	3	3
		5-digit	5	5
	3-Digit	non-unique 3-digit	3	3
		unique 3-digit	3	3
		optional city	3	3
		5-digit	5	5
	5-Digit	5-digit	5	5
Nonautomation	Basic	Mixed ADC	B	B
		ADC	B	B
		non-unique 3-digit	B	B
		unique 3-digit	B	B
		optional city	B	B
		5-digit	B	B
	3-Digit	non-unique 3-digit	3	3
		unique 3-digit	3	3
		optional city	3	3
		5-digit	5	5
	5-Digit	5-digit	5	5

B = basic rate, 3 = 3-digit presort rate, 5 = 5-digit presort rate, CR = carrier route presort rate

TABLE A-3

SUMMARY OF ALLOWABLE MAIL PRESORT COMPOSITION OF
STANDARD (A) REGULAR AND NONPROFIT FLATS MAIL

	Container Presort Level	Package Presort Level	Applicable Rates	
			In Sack	On Pallet
Automation	Basic	Mixed ADC	B	B
		ADC	B	B
		3-digit	3/5	3/5
		5-digit	3/5	3/5
	3/5-Digit	3-digit	3/5	3/5
		5-digit	3/5	3/5
Nonautomation	Basic	Mixed ADC	B	B
		ADC	B	B
		3-digit	B	B
		5-digit	B	B
	3/5-Digit	3-digit	3/5	3/5
		5-digit	3/5	3/5
B = basic rate, 3/5 = 3/5-digit presort rate				