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

POSTAL RATE COMMISSION
OFFICE OF THE SECRETARY

POSTAL RATE AND FEE CHANGES, 1997

Docket No. R97-1

DIRECT TESTIMONY
OF
SHARON DANIEL
ON BEHALF OF
UNITED STATES POSTAL SERVICE

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- Exhibit USPS-29A: Summary of Standard (A) Regular Letter Mail Processing Costs
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- Appendix VI: Special Standard Mail Processing Cost Models

**Direct Testimony
of
Sharon Daniel**

AUTOBIOGRAPHICAL SKETCH

5 My name is Sharon Daniel. I have worked in the office of Product Cost Studies
6 at Postal Service Headquarters as an Economist and an Operations Research Analyst
7 since 1995. Prior to joining the Postal Service, I was a consultant with Price
8 Waterhouse and worked in the Center for Postal Consulting. While at Price
9 Waterhouse, I supported many of the Postal Service witnesses in Docket No. MC95-1.
10 After joining the Postal Service, I provided testimony in Docket No. MC96-2 on
11 Standard (A) Nonprofit letter mail processing costs.

12 I have spent considerable time observing mail processing in Processing and
13 Distribution Centers (P&DCs), Bulk Mail Centers (BMCs) and carrier stations. I have
14 also consulted extensively with postal headquarters and field operations and cost
15 personnel on various operational and cost matters. I earned a Bachelor of Science
16 Degree in Mathematics and a Master of Science Degree in Operations Research from
17 the College of William and Mary in 1991 and 1992, respectively.

1 I. **PURPOSE AND SCOPE OF TESTIMONY**

2 The primary purpose of this testimony is to develop test year (TY) volume
3 variable unit mail processing cost estimates for Standard (A) Regular (RR), Enhanced
4 Carrier Route (ECR), Nonprofit (NP), and Nonprofit Enhanced Carrier Route (NPECR)
5 letters; ECR and NPECR nonletters; Standard (B) Parcel Post; and Special Standard
6 Mail. The mail processing cost estimates developed in this testimony are designed to
7 capture the different costs associated with various rate categories in order to provide a
8 cost basis for worksharing discounts, such as prebarcoding and presorting. Using a
9 mail flow modeling methodology similar to that employed by Postal Service witnesses
10 Smith (USPS-T-10) and Takis (USPS-T-13) in Docket No. MC95-1, and myself (USPS-
11 T-5) in Docket No. MC96-2, this testimony develops test year (TY) volume variable unit
12 letter mail processing costs for Standard (A). Finally, using an updated and expanded
13 mail flow modeling methodology similar to that employed by Postal Service witness
14 Byrne (USPS-T-14) in Docket No. R84-1, this testimony develops TY volume variable
15 unit parcel mail processing costs for Parcel Post and Special Standard Mail.

16 The testimony itself provides a broad explanation of the methodology used to
17 develop mail processing costs. RR mail processing costs are presented in Appendix I
18 and summarized in Exhibit USPS-29A.¹ Appendix II presents RR bundle sorting costs,
19 which are used in the development of mail processing costs in Appendix I. Appendices
20 III and IV present mail processing and bundle sorting costs for NP categories, which
21 are summarized in Exhibit USPS-29B.² Appendix V describes the development of cost

¹ The RR mail processing costs presented include the following:

RR Automation Basic Letters	RR Automation 3-Digit Letters
RR Automation 5-Digit Letters	ECR Basic Automation Letters
RR Basic Presort Letters	RR 3/5 Digit Presort Letters
Automation Compatible (AC)	Automation Compatible (AC)
Machinable, Non-AC	Machinable, Non-AC
Nonmachinable	Nonmachinable

² The NP mail processing costs presented include the following:

NP Automation Basic Letters	NP Automation 3-Digit Letters
NP Automation 5-Digit Letters	NPECR Basic Automation Letters
NP Basic Presort Letters	NP 3/5 Digit Presort Letters
Automation Compatible (AC)	Automation Compatible (AC)
Machinable, Non-AC	Machinable, Non-AC
Nonmachinable	Nonmachinable

1 estimates for Parcel Post, which are summarized in Exhibit USPS-29E.³ Finally,
2 Appendix VI presents the development of Special Standard Mail mail processing costs,
3 which are summarized in Exhibit USPS-29F.⁴

4 In addition, Exhibit USPS-29C summarizes the mail processing and delivery
5 costs presented in this testimony and the testimonies of witnesses Hatfield (USPS-T-
6 25), Seckar (USPS-T-26), and Hume (USPS-T-18). These costs are used by USPS
7 pricing witnesses Moeller (USPS-T-36) and Fronk (USPS-T-32) in their development of
8 Standard (A) and First-Class Mail rates.

9 Exhibits USPS-29D and USPS-29C develop and summarize the mail processing
10 and delivery costs of a subset of existing ECR and NPECR Basic letters that are
11 projected to migrate to the RR and NP Automation 5-Digit categories.⁵ Exhibit USPS-
12 29D also crosswalks volume variable mail processing base year (BY) costs to TY costs
13 for ECR and NPECR Basic and High Density/Saturation letters and nonletters. These
14 costs are also adjusted to remove the effects of dropshipping and are summarized in
15 Exhibit USPS-29C at pages 1 and 3.

16

17 **II. STANDARD (A) REGULAR LETTER MAIL PROCESSING COSTS**

18 In developing unit mail processing cost estimates for Standard (A) letters, this
19 testimony follows a simple three step approach that:

³ The Parcel Post mail processing costs presented include the following:

Inter-BMC Machinable Parcel Post (Barcoded and Nonbarcoded)

Inter-BMC Nonmachinable Parcel Post

Intra-BMC Machinable Parcel Post (Barcoded and Nonbarcoded)

Intra-BMC Nonmachinable Parcel Post

Inter-BMC & Intra-BMC Nonmachinable (combined length plus girth between 108" and 130")

⁴ The Special Standard Mail mail processing costs presented include the following:

Nonpresort Special Standard Mail

BMC Presort Special Standard Mail

5-Digit Presort Nonmachinable Special Standard Mail

⁵ The models for the migrating ECR and NPECR Basic letters, which are developed on page 7 of Appendices I and III, reflect the costs of mail destinatig at "100% DBCS zones" and are adjusted to reflect a dropship profile like ECR Basic. Then, the average unit transportation and "other" costs are calculated and are shown in Exhibit USPS-29C, pages 2, 4 and 5. Witness Moeller (USPS-T-36) uses the sum of these costs for the migrating pieces in an after rates financial analysis.

- 1 • first develops cost models, consisting of mail flow diagrams, bundle sorting models,
2 and cost summary pages, depicting the cost of various processing operations each
3 mailstream incurs;
- 4 • then determines which of the CRA cost pools are comparable to the worksharing-
5 related operations being modeled; and
- 6 • finally, determines the ratio of modeled costs to the sum of the worksharing-related
7 cost pools, multiplies the modeled costs by this ratio, and then adds as a fixed
8 constant the sum of the cost pools not related to worksharing.

9 This three-step process generally follows the modeled approach adopted by
10 witness Takis (USPS-T-12) in Docket No. MC95-1 and presented in my testimony in
11 Docket No. MC96-2, except that additional refinements in the understanding of CRA
12 benchmark mail processing costs enable the determination of both proportional and
13 fixed CRA adjustments. Each step is discussed in further detail below.

14 A. Develop Cost Models

15 1. Mail Flow Diagrams

16 The mail flow cost models, presented in Appendix I, consist of mail flow
17 diagrams and cost summary pages. Similar to the first two classification reform cases,
18 Docket Nos. MC95-1 and MC96-2, the mail flow diagrams are used to determine the
19 processing path through sorting operations of 10,000 average pieces in a mailstream.
20 The mail flow diagrams are developed as follows.

21 The mail flow diagrams use an entry profile⁶ based on the presort levels of
22 containers and packages found in the subclass-specific Mail Characteristics Study⁷
23 (USPS LR-H-105) to determine the sort level at which pieces in the mailstream begin
24 piece distribution, namely, outgoing primary, automated area distribution center
25 (AADC)/area distribution center (ADC), SCF, incoming primary, or incoming secondary.
26 Characteristics of the mail stream, such as the presence of customer-applied barcodes,
27 automation compatibility, and machinability determine which type of operation the letter

⁶ The RR Entry Profile is found in Appendix I, page 35 and is developed in the same manner as the Entry Profile described in Appendix III of my Docket No. MC96-2 testimony (USPS-T-5).

⁷ The Mail Characteristics data are summarized and used in Appendix I, pages 36 and 37.

1 first receives, namely barcode sorter (BCS), optical character reader (OCR), or manual
2 sortation.⁸ The number of pieces entered on automation equipment, i.e., the BCS and
3 OCR, is then usually adjusted by subclass-specific coverage factors⁹ (USPS LR-H-128)
4 to reflect the fact that not all sites have automation equipment; however, because
5 Standard (A) letters in mixed-ADC and ADC packages must begin piece distribution at
6 processing facilities that are all equipped with BCSs and OCRs, Standard (A)
7 *originating* coverage factors are appropriately set at 100 percent.

8 The mail flow then uses (a) the OCR-Input Subsystem (ISS) and BCS-Output
9 Subsystem (OSS) special study accept rates (USPS LR-H-130) by automation
10 compatibility and class, (b) non-class specific FY96 MODs barcode sorter accept rates
11 (USPS LR-H-113),¹⁰ (c) non-class specific down flow densities,¹¹ and (d) destinating
12 coverage factors (USPS LR-H-128) to determine the processing path on postal
13 equipment. This process is repeated until the piece is dispatched to the delivery unit
14 for manual sequencing or is sorted to delivery point sequence (DPS) on automated
15 equipment. Witness Hatfield (USPS-T-25) describes the development of the mail flow
16 diagrams for First-Class Mail in even greater detail in his testimony.

17 2. Bundle Sorting Cost Model

18 As a result of the preparation requirements implemented in connection with
19 classification reform, presort letters presented in "non-OCR upgradable" trays, can, and
20 must, be trayed and bundled. Such letters should accordingly receive some measure
21 of bundle handling or sortation. By contrast, Automation and OCR Upgradable trays
22 can no longer be bundled, except to preserve orientation. Instead, these mailings must
23 be presented in trays containing at least 150 pieces to be eligible for Automation rates
24 or to be entered under the "OCR Upgradable" preparation option for presort letters.¹²
25 Even though mailers have the option of presenting OCR Upgradable mail in full trays

⁸ The percent of mail handled on LSMs is set to zero because nearly all of the LSMs are projected to be out of service during the TY.

⁹ Coverage factors used are found in Appendix I, pages 38 and 39.

¹⁰ All accept rates used in the RR models are found in Appendix I, page 40.

¹¹ Downflow densities (the same as found on page 83 of Appendix I of my Docket No. MC96-2 testimony (USPS-T-5)) are found in Appendix I, page 41.

¹² See DMM § M610.4.0.

1 instead of packages, according to the Mail Characteristics Study¹³ (USPS LR-H-105),
2 45 percent of RR letters found in *non-OCR* upgradable trays, which must be bundled,
3 did not fail any the physical characteristics required of OCR upgradability. For
4 purposes of this testimony, these pieces are considered to be automation compatible
5 (AC) and are treated in the same manner as AC mail in the bundle sorting models
6 presented by witness Takis' Appendix III in Docket No. MC95-1 (USPS-T-12) and my
7 Appendix II in Docket No. MC96-2 (USPS-T-5).

8 The number of sorts and bundle breaking assumptions used on pages 2 and 4 of
9 Appendix II are the same as those adopted in Docket Nos. MC95-1 and MC96-2, as is
10 the modeling methodology. Appendix II of this testimony, however, adjusts the bundle
11 sorting productivities developed in witness Degen's (USPS-T-5) Docket No. MC95-1
12 testimony to account for the volume variability of the pouching/opening unit and Small
13 Parcel and Bundle Sorter (SPBS) operations.¹⁴ The only other change is that this
14 testimony uses new Mail Characteristics Study data for pieces per package and
15 package per container percentages.¹⁵ Appendix II of my Docket No. MC96-2 testimony
16 (USPS-T-5) presents more detailed information on the development of bundle sorting
17 costs.

18 3. Cost Summaries

19 The cost summaries in Appendix I present the average unit model cost of each
20 category analyzed. The cost summary pages use a series of inputs to determine unit
21 costs of each operation at each sort level. The average clerk and mail handler TY
22 wage rate,¹⁶ which now has been deaveraged for Remote Encoding Center (REC)
23 activities and non-REC activities, is divided by the productivity¹⁷ of the operation (USPS
24 LR-H-113), in pieces per hour, to determine the average volume variable unit direct
25 labor cost for the operation. However, volume variable costs include more than just

¹³ Appendix I, page 37.

¹⁴ Variabilities are from witness Bradley's testimony (USPS-T-14).

¹⁵ Accordingly, sack models are no longer needed since letters must be presented in trays.

¹⁶ Wage Rates used in the RR models are found in Appendix I, page 42.

¹⁷ The productivities used in the RR models shown in Appendix I, page 43 are total pieces fed divided by total workhours based on FY96 MODs data. They are divided by the volume variability for those operations as calculated by witness Bradley (USPS-T-14). Witness Hatfield's testimony (USPS-T-25) provides further elaboration on this topic.

1 direct labor costs; they also include indirect costs such as supervisor time and facility
2 and equipment costs. These costs are allocated to each operation using an average
3 operation-specific piggyback factor¹⁸ (USPS LR-H-77), which is multiplied by the unit
4 direct labor costs. The direct labor costs are also scaled back by a subclass-specific
5 premium pay factor¹⁹ (USPS LR-H-77) less than one.

6 Using the inputs described above, the average model cost presented on each
7 category-specific cost summary page in Appendix I can be calculated using the
8 following steps. First, the direct labor unit cost per operation (in cents) in column [4] on
9 each cost summary page in the letter model appendices is calculated by inverting the
10 productivity, multiplying this fraction by the TY wage rate, and then multiplying this
11 product by 100 to convert dollars to cents.²⁰ Next, the direct labor costs are used to
12 calculate the premium pay adjustment in column [6]. To reflect the fact that Standard
13 Mail (A) is deferrable, one is subtracted from the premium pay factor to create a
14 negative number and thus reduce the labor cost. This figure is then multiplied by the
15 direct labor costs.²¹ Then, in column [7], indirect costs, i.e., piggybacks, are combined
16 with direct costs and the premium pay adjustment to determine the total volume
17 variable cost per operation.²²

18 The modeled cost per operation is calculated in column [8] and is the product of
19 the operation unit cost and mix of handlings divided by the 10,000 pieces fed into the
20 mailflow diagram.²³ Finally, the total modeled unit cost is calculated by weighting the
21 average of operation unit cost according to the mix of handlings found in column [1].
22 The total modeled TY volume variable unit cost is then calculated by summing column
23 [8]. The total model cost is found in a summary table found at the bottom right corner
24 of each of the summary pages. Also included in the summary table are adjustments
25 which tie the modeled costs to the CRA benchmark and create a total unit cost.

¹⁸ Piggyback factors used in the RR models are found in Appendix I, page 42.

¹⁹ Premium pay factors used in the RR models are found in Appendix I, page 42.

²⁰ The formula is column [4] = (1/column [2]) * column [3] * 100.

²¹ The formula is column [6] = (premium pay factor - 1) * column [4].

²² The formula is column [7] = (column [4] * column [5]) + column [6].

²³ The formula is column [8] = column [7] * column [1]/10,000.

1 Calculation of the total unit cost using the CRA adjustment is described in part II.B
2 below.

3 Costs for acceptance and verification, sorting delivery point sequence
4 (DPS)/Sector Segment (SS) and non-DPS/SS letters to P.O. Boxes, bundle sorting
5 costs (where applicable), and the percent of DPS letters in the mail stream are also
6 found on the cost summary pages. The cost for acceptance and verification is now
7 estimated by subclass in the TY CRA cost pool LD79.²⁴ This cost has already been
8 unitized in cents and includes all direct and indirect volume variable costs, so columns
9 [4], [5], and [6] are blank. The unit cost, in cents, is shown in column [7]. Since every
10 piece of Standard Mail (A) incurs this cost, the mix of handlings in column [1] is 10,000.
11 Column [8] is calculated as described above.

12 As in Docket Nos. MC95-1 and MC96-2, the costs of sorting letters to P.O.
13 Boxes are also included on the cost summary pages. The mix of handlings are the
14 number of pieces accepted by the second DBCS pass and the third CSBCS pass
15 multiplied by the coverage factor for percent sorted to P.O. Box.²⁵ The productivities
16 used for sorting DPS and Non-DPS letters to P.O. Boxes are the same as used in
17 Docket Nos. MC95-1 and MC96-2, except that the figures used in this testimony are
18 now adjusted for volume variability of LD44 CS/OP - P.O. Box Distribution operations.
19 The mods LD44 piggyback factor is used and the cost summary is calculated in the
20 same manner as above. For letters in non-OCR upgradable trays, the bundle sorting
21 costs that are developed in Appendix II have already been unitized in cents and include
22 all direct and indirect volume variable costs. Therefore, columns [4], [5], and [6] are
23 blank and the unit cost, in cents, is shown in column [7].

24 Where applicable, the cost summary pages also present bundle sorting costs.
25 Since the bundle sorting model calculates the average cost for all mail in non-OCR
upgradable trays, the mix of handlings (column [1]) for letters in non-OCR trays is
10,000. Column [8] is calculated as described above. Finally, the percent of DPS
letters is calculated by dividing the number of pieces shown in the mail flow diagram

²⁴ Cost pool calculations are presented in USPS LR-H-106.

²⁵ Appendix I, page 38 line 15.

1 accepted on the second pass of the DBCS and the third pass on the CSBCS by 10,000.
2 These percentages are used by Postal Service witness Hume (USPS-T-18) to calculate
3 delivery costs by rate category and are summarized on page 1 of Exhibit USPS-29A.

4 B. Analyze CRA Mail Processing Cost Pools

5 To ensure that the mail processing models reflect all costs included in cost
6 segment and component 3.1 of the CRA, this testimony adopts the use of a CRA
7 adjustment, which is functionally equivalent to the "nonmodel cost factor" employed by
8 witnesses Takis, Smith, and Brattli in Docket No. MC95-1, and by myself and witness
9 Seckar in Docket No. MC96-2. The nonmodel cost factor was simply the ratio of
10 average modeled costs to the "CRA benchmark," which was the unit mail processing
11 cost reported in cost segment and component 3.1, deaveraged by shape. This
12 approach assumed a 100 percent proportional nonmodel cost factor, thereby implicitly
13 assuming that all costs in the CRA benchmark are worksharing-related.

14 In this proceeding, the Postal Service is using a new MODs cost pool
15 methodology which allows for a more detailed understanding of the costs underlying
16 the benchmarks.²⁶ This methodology enables the benchmark to be disaggregated into
17 46 different "cost pools." The sum of these 46 cost pools is equivalent to the CRA
18 benchmarks used in Docket Nos. MC95-1 and MC96-2. The "cost pool" approach
19 enables CRA costs to be divided between worksharing-related activities and non-
20 worksharing-related activities.

21 Those costs identified as worksharing-related are applied to modeled cost
22 proportionately (proportional column); non-worksharing related costs are applied as
23 constants to modeled costs (fixed column). This testimony determines that the letter
24 cost pool activities that are in the mailflow or bundle sorting models, such as "mods
25 bcs/", "manl," "mods ocr/", "spbs Oth," etc., are worksharing-related and are related to
26 the modeled costs proportionately. By contrast, costs related to container handlings,
27 such as "mods Platfrm," "BMCs ssm," "BMCs Pla," etc., are not directly related to
28 presorting or customer barcoding, and therefore are added to the modeled costs as

²⁶ The Standard (A) Regular Rate CRA letter mail processing cost pools developed in USPS LR-H-106 are presented in Exhibit USPS-29A at page 2.

1 fixed constants instead of proportionately, thereby not affecting the cost differentials.
2 The separation of CRA letter mail processing cost pools into proportional (89 percent)
3 and fixed (11 percent) pools is shown in Exhibit USPS-29A at page 2.

4 C. Tie Models to CRA (Proportional and Fixed Adjustments)

5 On page 1 of Exhibit USPS-29A, the modeled costs developed in Appendix I are
6 tied to the CRA. Column [1] reports the modeled TY volume variable unit cost of each
7 rate category in the RR mail processing benchmark. All rate category²⁷ modeled costs
8 are weighted together using TY before rates volume percentages in column [6] to
9 determine the average RR subclass model cost shown in the bold table. The sum of
10 the proportional cost pools, described above in section II.B., is divided by the total RR
11 average modeled cost to obtain the CRA proportional adjustment. This proportional
12 adjustment, shown in column [2], is multiplied by each model unit cost, and this product
13 is then added to the sum of the fixed cost pools, column [3], to obtain the total unit cost
14 in column [4].

15

16 **III. STANDARD (A) NONPROFIT LETTER MAIL PROCESSING COSTS**

17 Standard (A) NP letters are processed in the same manner as the Standard (A)
18 RR letters described above and depicted in Appendices I and II. NP letters are subject
19 to the same preparation requirements and service standards as RR letters, but receive
20 preferential rates by law.²⁸ The development of mail processing costs for NP letters is
21 described below.

22 A. Methodology

23 Since NP letters are processed in the same manner as RR letters, the mail flow
24 diagrams, cost summary sheets, and bundle sorting models developed in Appendices
25 III and IV adopt the structure and formulae used in the RR models described above in
26 section II. The only differences between the NP and RR models is the use of NP-

²⁷ The three mailstreams for each Presort rate category are weighted together using mail characteristics data.

²⁸ See USPS Pricing witness Moeller's (USPS-T-36) testimony for more information.

1 specific data, where available. Average data are used when subclass specific data are
2 unavailable.

3 B. Inputs

4 MODs accept rates,²⁹ downflow densities,³⁰ wage rates,³¹ piggyback factors,³²
5 and productivities³³ are not class-specific and therefore are the same as used in the RR
6 models. The special study accept, reject, and upgrade rates³⁴ (USPS LR-H-130) used
7 in the models are for RR and NP combined. Separate, updated, NP-specific mail
8 characteristics data (USPS LR-H-195),³⁵ coverage factors,³⁶ premium pay factors,³⁷ and
9 test year CRA mail processing volume variable cost pools³⁸ are used as inputs to the
10 NP models. These data lead to a slightly different entry profile,³⁹ bundle sorting
11 costs,⁴⁰ premium pay adjustments, and proportional and fixed CRA adjustments. The
12 TY mail processing volume variable unit costs for NP letters are summarized in Exhibit
13 USPS-29B.

14

15 **IV. FIRST-CLASS AND STANDARD (A) UNIT COST SUMMARIES**

16 As was the case in Docket Nos. MC95-1 and MC96-2, a compilation of costs that
17 Postal Service pricing witnesses use for ratemaking purposes has been developed for
18 First-Class and Standard (A). The First-Class summary found on page 1 of Exhibit
19 USPS-29C, summarizes TY unit volume variable mail processing and delivery costs for
20 Single Piece, Presort, and Automation by shape for letters, cards, and flats and parcels
21 combined. Standard (A) RR and NP cost summaries are on pages 2 through 5 of
22 Exhibit USPS-29C.

²⁹ FY96 MODs accept rates used in the NP models are presented in Appendix III at page 40.

³⁰ Downflow densities used in the NP models are presented in Appendix III at page 41.

³¹ Wage Rates used in the NP models are found in Appendix III at page 42.

³² Piggyback factors used in the NP models are presented in Appendix III at page 42.

³³ Volume Variable productivities used in the NP models are presented in Appendix III at page 43.

³⁴ Accept Rates used in the NP models appear in Appendix III page 40.

³⁵ NP Mail Characteristic Study data is presented in Appendix III at pages 36 and 37.

³⁶ NP-specific coverage factors are presented in Appendix III at pages 38 and 39.

³⁷ NP premium pay factors are presented in Appendix III page 42.

³⁸ CRA NP letter mail processing cost pools are presented in Exhibit USPS-29B at page 2.

³⁹ The NP entry profile is developed in Appendix III at page 35.

⁴⁰ The NP bundle sorting model is developed in Appendix IV.

1 A. First-Class Unit Cost Summary

2 Single-piece and bulk metered TY unit volume variable mail processing costs by
3 shape are drawn from USPS LR-H-106. Mail processing costs for Regular Presort and
4 Automation letters and cards are estimated in Postal Service witness Hatfield's
5 testimony (USPS-T-25). Presort and Automation flat mail processing costs are
6 estimated in Postal Service witness Seckar's testimony (USPS-T-26).

7 All delivery costs are calculated by witness Hume (USPS-T-18). Single-piece
8 delivery costs are reported as an average of letters, flats and parcels. A separate
9 delivery cost is estimated for cards. The delivery cost for bulk metered letters uses
10 Presort letter delivery costs as a proxy.

11 B. Standard (A) RR and NP Automation and Presort Cost Summaries

12 The RR and NP Standard (A) cost summaries on pages 2 and 4 of Exhibit
13 USPS-29C are slightly different from the summary pages in past proceedings. The unit
14 delivery costs, developed in Postal Service witness Hume's testimony (USPS-T-18), the
15 TY unit volume variable mail processing costs for RR Automation and Presort letters
16 developed in Appendices I and II of this testimony, and the Presort flat mail processing
17 costs estimated in Postal Service witness Seckar's testimony (USPS-T-26), are
18 presented in the same manner as in prior classification reform dockets. The mail
19 processing costs for Automation flats presented on pages 2 and 4 of Exhibit USPS-
20 29C, however, are calculated by holding the entry profile constant.⁴¹

21 C. Standard (A) ECR and NPECR Cost Summaries

22 A refinement has been made in the calculation of ECR and NPECR mail
23 processing costs. Library Reference H-109 shows the mail processing cost differences
24 between walk sequenced (WS) endorsed (Saturation and High Density) and non-WS
25 endorsed ECR and NPECR (Basic) letters and nonletters. These costs have been
26 unitized and tied to the TY CRA on pages 1 and 2 of Exhibit USPS-29D. Furthermore,
27 the costs are adjusted on pages 3 and 4 of Exhibit USPS-29D to account for

⁴¹ See USPS-T-36 and USPS-T-26 for further information.

1 differences in the level of dropshipping between saturation and nonsaturation letters
2 and nonletters

3 D. Standard (A) ECR and NECR Migrating Letters Cost Summaries

4 Finally, on pages 3 and 5 of Exhibits USPS-29C, the mail processing and
5 delivery costs of a subset of existing ECR and NPECR Basic letters that are projected
6 to migrate to the RR and NP Automation 5-Digit categories are summarized. The
7 models for the migrating ECR and NPECR Basic letters, which are developed on page
8 7 of Appendices I and III, estimate the costs of ECR and NPECR Basic letters that are
9 expected to migrate to Automation 5-Digit categories. Letters expected to migrate will
10 destinate at "100% DBCS zones" and cost less than the average Automation 5-Digit
11 letter because all of the migrating Basic letters should initially receive automated
12 processing instead of manual sortation that some Automation 5-Digit letters may
13 receive. The costs of the migrating mail are then adjusted to reflect the deeper
14 dropship profile of ECR Basic letters. Then, the average unit transportation and "other"
15 costs are calculated and are presented in Exhibit USPS-29C, pages 3, 5, and 6.
16 Witness Moeller (USPS-T-36) uses the sum of these costs for the migrating pieces in
17 the after-rates financial analysis presented in his testimony.

18

19 V. PARCEL POST MAIL PROCESSING COSTS

20 A. Background

21 In Docket Nos. R87-1 and R90-1, witness Byrne presented mailflow models for
22 Parcel Post, which were originally used in Docket No. R84-1, to support the Intra-BMC
23 discount and the nonmachinable (NMO) surcharge for Inter-BMC parcels. Since
24 witness Byrne's models were developed, there have been improvements in the Parcel
25 Post transportation network, such as the elimination of transshipments. In addition,
26 technological advances have been introduced, including a Package Barcoding System
27 (PBCS); an Integrated Material Handling System, or Postal Pak network; and Direct-to-
28 Secondary induction capability. This testimony modifies the cost studies to incorporate
29 these changes and models a TY operating environment by updating mail flows,
30 productivities, conversion factors (pieces per container), wage rates, and "piggyback"

1 factors (to account for indirect costs). Furthermore, in Exhibit USPS-29E, the modeled
2 costs are tied to the CRA mail processing cost pools similar to the method described in
3 section II.C. for Standard (A) letters. This process is described in more detail below.

4 The mail flow cost models presented in Appendix V pertain to the unit volume
5 variable costs of BMC direct labor operations that relate to the sorting of machinable
6 and NMO Parcel Post. The following parcel mail characteristics generally determine
7 the handlings and costs incurred by Parcel Post at BMCs:

8

9 1) The type and fullness of containers in which parcels are contained as they
10 arrive at the BMC ("arrival profile") and as they are dispatched from the BMC
11 ("dispatch profile") determine how efficiently the parcels are loaded,
12 unloaded, and inducted into the system. The average "arrival profile" of
13 Parcel Post is documented in Library Reference H-131 and an average
14 "dispatch profile" is documented in Library Reference H-132.

15

16 2) A parcel's dimensions and weight are two of the factors that determine
17 whether it can be sorted efficiently on the Parcel Sorting Machine (PSM).
18 Nonmachinability characteristics defined in DMM § E620.2.5 include length,
19 width, and height over 34"x17"x17" and weight over 35 pounds.⁴² Parcels
20 meeting these criteria (NMOs) must be processed on less efficient
21 mechanized equipment or be sorted manually.

22

23 3) The number of pieces per container, or conversion factors, determine per-
24 piece productivities for several operations. Parcel Post conversion factors
25 are developed in Appendix V at page 17.

⁴² Other criteria defining nonmachinable parcels include: a parcel containing more than 24 ounces of liquid in glass containers, or 1 gallon or more of liquid in metal or plastic containers; an insecurely wrapped or metal-banded parcel; a can (paint, etc.), roll or tube, or wooden or metal box; a shrub or tree; a perishable, such as eggs; books, printed matter, and business forms weighing more than 25 pounds; a high-density parcel weighing more than 15 pounds and exerting more than 60 pounds per-square-foot pressure on its smallest side; and a film case weighing more than 5 pounds or with strap-type closures, except any film case the USPS authorizes to be entered as a machinable parcel under DMM § C050.

1 4) The potential mail flow paths a parcel could take depend upon whether a
2 parcel originates and destinates within the same BMC service area (Intra-
3 BMC and DBMC) or in different BMC service areas (Inter-BMC), in
4 combination with machinability, presorting, and prebarcoding.

5 The interactions of the above characteristics are incorporated in the mail flow
6 cost models presented in Appendix V and are discussed further below.

7 B. Develop Mail Flow Cost Models

8 This testimony follows the modeled approach used by witness Byrne in Docket
9 No. R84-1 to calculate the cost difference between NMOs and machinable parcels, as
10 well as Intra-BMC-related and customer-applied barcode-related savings. The models
11 in Appendix V calculate the TY unit volume variable cost per piece of operations (\$ per
12 operation) involved in processing machinable and NMO parcels using a number of
13 inputs, including Productivity Information Reporting System (PIRS) productivities from
14 Library Reference H-132, conversion factors developed in Appendix V at page 17,
15 piggyback factors from Library Reference H-77, and the clerk and mailhandler TY
16 before-rates wage rate from Library Reference H-146.

17 Each of the models is described in further detail below.

18 1. Machinable and NMO Inter-BMC Mail Flow Models

19 There are two main cost determinants that differentiate machinable and NMO
20 parcels. The first cost-determining factor is that NMOs cannot be processed upstream
21 on the more efficient PSMs to the 5-digit level. Thus, they cannot take advantage of
22 barcode scanning at BMCs at rates averaging 1290 pieces per hour.⁴³ Instead, since
23 NMOs are not yet eligible for automated 5-digit sortation, they must be processed at
24 BMCs in less efficient mechanized or manual operations. Presently, manual and
25 mechanized NMO sortation operations at BMCs sort to the 3-digit level. Consequently,
26 additional sortation of NMOs to the 5-digit level is also usually required downstream at
27 destination processing and distribution centers (P&DCs). NMOs accordingly must be
28 moved to a parcel sorting area within the P&DC, sorted to the 5-digit level, and then

⁴³ The Parcel Sorting Machine volume variable secondary productivity is used as a proxy for scanning only in the primary.

1 moved back to the outbound dock. By contrast, machinable parcels just need to be
2 conveniently crossdocked at the destination P&DC because they are sorted on
3 automation to the 5-digit level upstream at the BMC. As shown in Appendix V and
4 summarized below in Table 1, modeled NMO sort-related costs are almost 1.6 times
5 higher than total machinable parcel sort-related costs (\$0.69 versus \$0.44 per piece).

6 The second cost-driving factor that distinguishes machinable from NMO parcels
7 is average size difference. The Revenue, Pieces, and Weight (RPW) system reports
8 show the average size of a machinable parcel was 0.55 cubic feet in FY 96. NMOs are
9 generally larger and averaged 1.84 cubic feet in FY 96.⁴⁴ The number of cubic feet per
10 parcel largely dictates the containerization used and the number of pieces that fit in a
11 container. The number of cubic feet per parcel for Parcel Post on average has grown
12 since conversion factors were last calculated, from 0.538 cubic feet in FY82 to 0.733
13 cubic feet in FY96.⁴⁵ The BMC studies presented in this filing do not provide data to
14 derive average machinable and NMO Parcel Post conversion factors for inbound and
15 outbound containers. Therefore, the ratio of the growth in the average cubic feet per
16 piece of Parcel Post from 1982 to 1996 has been used to adjust the conversion factors
17 presented in Docket No. R84-1.

18 In Docket No. R84-1, the ratio of machinable parcels to NMOs in a given
19 container was approximately 2.5 to 1.0.⁴⁶ Since the average cubic feet per piece for
20 machinable and NMO parcels were not tracked separately in FY82, the rate of growth
21 for each cannot be separately determined. This testimony adjusts the conversion
22 factors presented in Docket No. R84-1 by the average growth ratio in number of cubic
23 feet per parcel. Since this adjustment is applied equally to both NMO and machinable
24 parcels, the adjusted figures do not account for any change in the relative size
25 relationship between machinable and NMO parcels since 1982. Yet there is evidence
26 suggesting that conversion factor differences between NMO and machinable parcels
27 have widened further. Cubic feet data for machinable and NMO parcels suggest this

⁴⁴ Cubic Feet and Piece data are from USPS LR-PCR-135 and are for existing NMOs only. Cubic feet per piece is calculated on page 17 of this Appendix V.

⁴⁵ These figures are drawn from FY82 and FY96 CRA estimates. See Appendix V at page 17.

⁴⁶ See Appendix V at page 17.

1 ratio has now grown to 3.4 to 1.0 in FY96.⁴⁷ Therefore, the conversion factors updated
2 from Docket No. R84-1 potentially underestimate the NMO cost difference. Thus, the cost
3 difference between machinable and NMO parcels found in Table 1 below is
4 conservative. The methodology used to compute conversion factors for containers not
5 included in the Docket No. R84-1 study, such as Postal Paks and pallets, applies the
6 FY96 machinability-specific cubic feet data, container dimensions, and an estimated
7 percent fullness of the containers.⁴⁸

The models estimate that it costs over three times as much to load and unload NMOs as it costs to load and unload machinable parcels (\$0.27 versus \$0.82). This is because fewer NMOs fit in a given container and because NMOs cannot be sacked, but must instead be unloaded and sorted individually, unless they are placed in larger containers. Although not presented in the original Docket No. R84-1 study, similar loading and unloading activities occurring at P&DCs are estimated using BMC profiles and productivities. The average unit cost estimates of modeled operations for Inter-BMC machinable and NMO parcels are shown in Table 1 below and are detailed in Appendix V. Also in Appendix V, the modeled costs of Inter-BMC and Intra-BMC NMO pieces with length plus girth between 108" and 130" are calculated. The models assume the average size of these parcels will be 8.19 cubic feet per piece as reported in witness Mayes' (USPS-T-38) workpapers (Mayes WP 1.H. page 13).

Table 1: TY Inter-BMC Processing Cost Estimates
for Machinable and Nonmachinable Parcel Post

Table 1: TY Inter-BMC Processing Cost Estimates for Machinable and Nonmachinable Parcel Post				
<u>Operation Description</u>	Machinable ¢ per Piece	NMO ¢ per Piece	Modeled Difference	Adjusted Difference
Unload	12.0	39.6	27.6	45.0
Sort-Related ⁴⁹	43.8	69.4	25.6	41.7
Load	<u>14.5</u>	<u>42.3</u>	<u>27.8</u>	<u>45.3</u>
Total	70.3	151.3	81.0	132.0

⁴⁷ NMC cubic feet per piece (1.84) divided by machinable cubic feet per piece (0.55) equals 3.4.

⁴⁸ See Appendix V at page 17.

⁴⁹ Sort-related includes costs associated with dumping containers, sack sorting and sack shake out, (*i.e.*, inducting parcels) and with tending container loaders and sack and tie operations (*i.e.*, sweeping runouts).

1 2. Machinable and NMO Intra-BMC Mail Flow Models

2 A parcel's origin and destination combination can substantially influence its mail
3 processing costs. Since Intra-BMC parcels both originate and destinate within the
4 same BMC service area, they only incur the BMC mail processing cost associated with
5 unloading, sorting and loading at a single BMC, *i.e.*, the destination BMC. On the other
6 hand, Inter-BMC parcels originate and destinate in different BMC service areas, and
7 therefore incur BMC mail processing costs associated with unloading, sorting, and
8 loading at both the origin BMC and at the destination BMC. Thus, Inter-BMC parcels
9 incur more BMC mail processing costs than Intra-BMC parcels.⁵⁰

10 It may be tempting to assume that all Inter-BMC parcels receive twice as many
11 BMC handlings as Intra-BMC parcels. A more detailed analysis of the mail flow models
12 in Appendix V shows, however, that the number of parcel sorting machine (PSM) sorts
13 incurred is not exactly two to one. Machinable Inter-BMC parcels incur fewer PSM
14 sorts on average at the origin BMC than at the destination BMC. This is because Inter-
15 BMC machinable parcels receive only one pass on the primary PSM at the origin BMC,
16 where splits are made to the other 20 BMCs and 5-digit barcodes are applied by the
17 package barcoding system. At the destination BMC, some machinable Inter-BMC
18 parcels are given the opportunity to bypass the primary PSM and go directly to the
19 secondary PSM due to Direct-to-Secondary⁵¹ (DTS) induction capability. Approximately
20 one-half of Inter-BMC parcels do not, however, bypass the primary PSM operation. As
21 a result, a portion of Inter-BMC parcels are still scanned on the primary PSM at the
22 destination BMC. About 17 percent of these machinable parcels are sorted to the 5-
23 digit level on the primary PSM due to high volume ZIP Code hold outs. The remaining
24 83 percent of Inter-BMC parcels sorted on the primary at the destination BMC are then

⁵⁰ This testimony assumes Intra-BMC and Inter-BMC parcels incur the same costs of loading, unloading, and sorting at facilities upstream and downstream of the BMC.

⁵¹ At most BMCs, there are two secondary schemes for the PSM which sort incoming mail to the 5-digit level. Parcels processed on the secondary PSM should already bear a 5-digit barcode. Because of capacity constraints and other operational limitations, not all destination parcels bearing barcodes can be inducted directly on the secondary. In order to keep the mail moving, it is assumed that only 50 percent of the parcels are inducted directly to the secondary. Of the mail inducted directly to the secondary, it is assumed that 50 percent of the parcels finalized on the secondary PSM are sorted to the 5-digit level on the appropriate scheme and that the remaining 50 percent must be directed to the other scheme. The mail not finalized on the secondary is sent back to the primary where sortation for hold-outs is conducted.

1 directed to the appropriate secondary scheme for sortation to the 5-digit level. In
 2 summary, machinable Inter-BMC parcels incur an average of 1.71 PSM sorts at the
 3 destination BMC, in addition to one sort at the origin BMC, for a total of 2.71 PSM sorts.

4 Machinable Inter-BMC parcels also incur fewer PSM sorts on average at the
 5 destination BMC than Intra-BMC parcels incur.⁵² Nonbarcoded machinable Intra-BMC
 6 parcels are not generally inducted directly to the secondary PSM. They must first be
 7 processed on the primary PSM in order to receive 5-digit barcodes so that they only
 8 need to be scanned on the secondary PSM. Since, however, 17 percent of parcels are
 9 held out on the primary PSM sort, Intra-BMC parcels receive 1.83 PSM sorts at the
 10 BMC on average. As discussed above, Inter-BMC parcels often have an opportunity to
 11 be inducted directly to the secondary, thereby incurring an average of 1.71 PSM sorts
 12 at the destination BMC.

13 In addition, the Postal Pak network⁵³ lowers loading and unloading costs
 14 between BMCs. As a result, only Inter-BMC parcel costs are reduced through use of
 15 Postal Paks. The cost comparison of loading, unloading and sorting nonbarcoded
 16 Inter-BMC and Intra-BMC machinable parcels is shown in Table 2 below.

17
 18 Table 2: TY Nonbarcoded, Machinable Processing Cost Estimates
 19 for Inter-BMC and Intra-BMC Parcel Post

<u>Operation Description</u>	<u>Inter-BMC ¢ per Piece</u>	<u>Intra-BMC ¢ per Piece</u>	<u>Modeled Difference</u>	<u>Adjusted Difference</u>
Unload	12.0	9.5	2.5	4.1
Sort-Related ⁵⁴	43.8	32.0	11.8	19.2
Load	14.5	12.2	2.3	3.7
Total	70.3	53.8	16.5	26.9

27
 52 Appendix V at 5.

53 A Postal Pak is a collapsible cardboard container designed to transport parcels between BMCs. A "Postal Pak Network" has been designed to facilitate the transportation of empty Postal Paks from a surplus facility to a deficit facility in order to balance the supply of Postal Paks within the Network. Postal Paks are used only in Inter-BMC transportation. Thus Inter-BMC machinable parcels will be efficiently loaded, unloaded, and transported in Postal Paks between BMCs.

54 Sort-related includes costs associated with dumping containers, sack sorting and sack shake out, (i.e., inducting parcels) and with tending container loaders and sack and tie operations (i.e., sweeping runouts).

As mentioned above, it costs more to load and unload NMOs than to load and unload machinable parcels. As a result, avoiding a more expensive NMO loading and unloading operation saves more than avoiding a less expensive machinable load and unload operation. Thus, since Intra-BMC parcels avoid one loading and unloading operation, Intra-BMC NMOs save more of the platform related costs than Intra-BMC machinable parcels. Furthermore, Inter-BMC NMOs receive two sorts at BMCs and Intra-BMC NMOs receive one sort at the BMC.⁵⁵ Thus, Intra-BMC NMOs avoid an entire costly manual sort as opposed to the smaller cost difference of 0.88 sorts between Inter-BMC and Intra-BMC machinable parcels. The cost comparison between Inter-BMC and Intra-BMC NMOs is shown below in Table 3.

Table 3: TY Nonmachinable Processing Cost Estimates
for Inter-BMC and Intra-BMC Parcel Post

Table 3: TY Nonmachinable Processing Cost Estimates
for Inter-BMC and Intra-BMC Parcel Post

<u>Operation Description</u>	<u>Inter-BMC ¢ per Piece</u>	<u>Intra-BMC ¢ per Piece</u>	<u>Modeled Difference</u>	<u>Adjusted Difference</u>
Unload	39.6	28.5	11.1	18.1
Sort-Related ⁵⁶	69.4	44.6	24.8	40.4
Load	<u>42.3</u>	<u>32.2</u>	<u>10.1</u>	<u>16.5</u>
Total	151.3	105.3	46.0	75.0

22 Machinable parcels represent approximately 91.3 percent of parcel post and
23 nonmachinable parcels (NMOs) represent the remaining 8.7 percent. Therefore, as
24 shown on page 1 of Exhibit USPS-29E, the weighted average cost saved by Intra-BMC
25 parcels on average is 31.1 cents.⁵⁷

3 Machinable Barcoded Mail Flow Models

Another proposed rate initiative supported in this testimony is a customer barcoding discount for Standard (B) machinable parcels bearing mailer-applied, postal-certified barcodes. Customer barcoded machinable parcels are processed on PSMs

⁵⁵ NMOs are usually only sorted to the 3-Digit level at the destination BMC. Sortation to the 5-Digit level is primarily accomplished at the destination P&DC. See mail flow diagram in Appendix V.

⁵⁶ Sort-related includes costs associated with dumping containers, sack sorting and sack shake out, (i.e., inducting parcels) and with tending container loaders and sack and tie operations (i.e., sweeping runouts).

⁵⁷ The weighted average calculation is 26.9 cents * 91.3% + 75.0 cents * 8.7% = 24.6 + 6.5 = 31.1 cents.

1 retrofitted with the Package Barcode System (PBCS), which became fully operational in
2 1993. The PBCS was designed with the capability to sort properly barcoded
3 machinable parcels at rates in excess of 2800 pieces per hour.⁵⁸ The PBCS also has
4 the ability to apply a barcoded label to match a keyed 5-digit ZIP Code. Therefore, the
5 savings generated by mailer-applied barcodes to nonpresorted machinable parcels are
6 calculated as the cost of keying a parcel once, plus ribbon and label costs, less the
7 cost of scanning a customer barcoded parcel once. This testimony compares the cost
8 of pure keying⁵⁹ and the cost of pure scanning⁶⁰ to determine savings in connection
9 with customer barcoding. The costs summarized in Exhibit USPS-29E on page 6
10 assume that once the PBCS has applied a barcode to a keyed parcel in the primary, all
11 other subsequent operations have the same costs regardless of whether the mailer or
12 the Postal Service applied the barcode. The accuracy of postal-applied (keyer)
13 barcodes versus the accuracy of mailer-applied barcodes could not be quantified at this
14 time. It seems likely, however, that list-generated mailer-applied barcodes would be
15 more accurate than keyer-generated barcodes, because the chance of human error is
16 greater in the latter circumstance. A summary of mailer-applied barcoding savings of
17 4.0 cents per piece is shown below in Table 4 and developed in more detail on page 6
18 of Exhibit USPS-29E

Table 4: Prebarcoding Cost Avoidance

<u>Operation Description</u>	<u>Modeled ¢ per Pc.</u>	<u>Adjusted ¢ per Pc.</u>	<u>Ribbon/ Label ¢</u>	=	<u>Total</u>
Nonbarcoded PPSM (Keying)	5.8	9.4	0.5		9.9
Prebarcoded PPSM (Scanning)	<u>3.6</u>	<u>5.9</u>	<u>0.0</u>		<u>5.9</u>
Difference	2.2	3.5	0.5		4.0

C. Analyze CRA Mail Processing Cost Pools

29 The mail flow models depict BMC mail processing operations and are used as a
30 proxy for loading, unloading, and sorting operations (where necessary) at upstream

⁵⁸ Docket No. MC93-1, USPS LR-SP-9.

⁵⁹ This testimony uses the average annual rate of 806 pieces per hour achieved in FY93 (before PBCS).

⁶⁰ The PSM volume variable secondary productivity is used as a proxy for scanning only in the primary.

1 and downstream facilities. These modeled operations are deemed relevant to the
2 discounts or surcharges supported by this testimony. Page 2 of Exhibit USPS-29E
3 shows how the cost pools have been categorized. The "modeled" cost pools are the
4 only cost pools in the proportional column. All other costs are in the fixed column so as
5 not to affect the cost differentials. The cost pools are summarized by facility type in
6 Table 1 on page 1 of Exhibit USPS-29E.

7 D. Tie Models to CRA (CRA Adjustment Factor and Fixed Portion)

8 As in the letter section, all rate category modeled costs are weighted together
9 using volume percentages⁶¹ to determine the average Parcel Post model cost shown in
10 Table 2 on page 1 of Exhibit USPS-29E. The sum of the proportional, or modeled, cost
11 pools, described above in section V.B., is divided by the total average modeled cost to
12 obtain the CRA proportional adjustment. This proportional adjustment is multiplied by
13 the modeled cost and then added to the sum of the fixed cost pools to obtain the total
14 unit cost. The discount/surcharge cost summary is presented in Table 4 on page 1 of
15 Exhibit USPS-29E.

16

17 **VI. SPECIAL STANDARD MAIL FLOW MODELS**

18 The Special Standard Mail flow models are very similar to the Parcel Post
19 models in methodology and inputs. The development of mail processing costs for
20 Special Standard parcels is described below.

21 A. Methodology

22 Since Special Standard Mail parcels are processed in virtually the same manner
23 as Parcel Post, the mail flow diagrams, inputs, and cost summary sheets developed in
24 Appendix VI adopt the structure used in the Parcel Post models described above in
25 section V. The only differences between the Special Standard Mail and Parcel Post
26 mailflows is the development of 5-Digit presort models and use of Special Standard

⁶¹ The mailstreams which are weighted together are Inter-BMC and Intra-BMC machinable (barcoded and nonbarcoded) and NMO, and DBMC machinable (barcoded and nonbarcoded) and NMO. They are weighted together using the percentages of barcoded parcel post found in the mailstream in USPS LR-H-131. The relative proportions of Inter-BMC, Intra-BMC, and DBMC and the percent of machinable and NMOs in each are found in USPS LR-H-135.

1 Mail-specific data, where available. Average data are used when subclass specific
2 data are unavailable.

3 B. Inputs

4 Wage rates,⁶² piggyback factors,⁶³ dispatch profile (USPS LR-H-132),⁶⁴ and
5 productivities⁶⁵ are not subclass-specific, and therefore are the same as used in the
6 Parcel Post models. Special Standard Mail-specific inputs include the arrival profiles
7 from the arrival profile special study⁶⁶ (USPS LR-H-130), cubic feet per piece data from
8 the CRA, volume proportions, and TY CRA mail processing volume variable cost
9 pools.⁶⁷ These data lead to a slightly different entry profile, conversion factors, and
10 proportional and fixed CRA adjustments. The TY mail processing volume variable unit
11 costs for Special Standard Mail parcels are summarized in Exhibit USPS-29F.

12

⁶² Wage Rates used in the Special Standard Mail models are found in Appendix VI at page 12.

⁶³ Piggyback factors used in the Special Standard Mail models are presented in Appendix VI at page 12.

⁶⁴ The dispatch profile for Special Standard Mail is found in Appendix VI at page 12.

⁶⁵ Volume Variable productivities used in the Special Standard Mail models are presented in Appendix VI at page 11.

⁶⁶ Arrival profile used in the Special Standard Mail models appear in Appendix VI at page 12.

⁶⁷ CRA Special Standard Mail parcel mail processing cost pools are presented in Exhibit USPS-29F.

USPS Witness Daniel
USPS-T-29

Exhibits USPS-29A-F

***Summary of Standard (A) Regular
Letter Mail Processing Costs***

Exhibit USPS-29A

Development and Summary of Standard Regular Mail Processing Costs

	[1] Model Unit Cost	[2] Proportional Adjustment	[3] Fixed Adjustment	[4] Total Unit Cost	[5] Percent DPS	[6] Model Weights
Automation Basic	4.2210	1.0661	0.7737	5.2736	63.05%	15.12%
Automation 3-Digit	3.7069	1.0661	0.7737	4.7255	65.06%	46.70%
Automation 5-Digit	2.4849	1.0661	0.7737	3.4227	68.48%	14.45%
Presort Basic (UPGR Trays)	5.3554	1.0661	0.7737	6.4829	60.14%	1.23%
Presort Basic (NON-OCR Trays - Upgradable)	5.7021	1.0661	0.7737	6.8526	59.71%	3.67%
Presort Basic (NON-OCR Trays - Non Upgradable)	10.0887	1.0661	0.7737	11.5289	25.33%	4.43%
Presort Basic (Weighted Average)	7.7402	1.0661	0.7737	9.0252	43.43%	9.34%
Presort 3/5 (UPGR Trays - Upgradable)	4.5355	1.0661	0.7737	5.6089	60.58%	2.54%
Presort 3/5 (NON-OCR Trays - Upgradable)	5.0115	1.0661	0.7737	6.1163	60.58%	5.37%
Presort 3/5 (NON-OCR Trays - Non Upgradable)	6.4947	1.0661	0.7737	7.6975	25.91%	6.48%
Presort 3/5 (Weighted Average)	5.5955	1.0661	0.7737	6.7389	44.97%	14.39%

RR MODEL COST WEIGHTED AVERAGE ¹	4.2564
Proportional Cost Pools (page 2)	4.5376
CRA Proportional Adjustment	1.0661
CRA Fixed Adjustment (page 2)	0.7737

Automation Basic Enhanced Carrier Route² 0.4086 48.38% 100.00%

¹ RR Model Cost Weighted Average = Column [1] * Column [6]

² Automation Basic Enhanced Carrier Route Model Cost is from Appendix I at page 9.

[1] Model Unit Cost from Cost Summary Sheet in Appendix I.

[2] Proportional Cost Pools from Exhibit USPS-29A at page 2 divided by RR Model Cost Weighted Average

[3] Fixed Cost Pools from Exhibit USPS-29A at page 2

[4] Total Unit Cost = Column [1] * Column [2] + Column [3].

[5] DPS Percent from Cost Summary Sheet in Appendix I.

[6] Model Weights are percent shares of each rate category based on TY Before Rates Volume Forecast and within the Presort Rate categories according to percentages in the Mail Characteristics Study (USPS LR-H-105).

STANDARD (A) REGULAR LETTER MAIL PROCESSING CRA COST POOLS
From USPS LR-H-106

		Total	Proportional	Fixed	Reason
mods	bcs/	0.858	0.858		In Mailflow Models
mods	express	0.001	0.001		Piece Distribution Related
mods	fsm/	0.020	0.020		Piece Distribution Related
mods	lsm/	0.032	0.032		Piece Distribution Related
mods	manf	0.028	0.028		Piece Distribution Related
mods	manl	0.885	0.885		In Mailflow Models
mods	manp	0.003	0.003		Piece Distribution Related
mods	mecparc	0.001	0.001		Piece Distribution Related
mods	ocr/	0.128	0.128		In Mailflow Models
mods	priority	0.001	0.001		Piece Distribution Related
mods	spbs Oth	0.100	0.100		In Bundle Sorting Models
mods	spbsPrio	0.002	0.002		Piece Distribution Related
mods	BusReply	0.001	0.001		Piece Distribution Related
mods	INTL	0.005	0.005		Piece Distribution Related
mods	LD15	0.287	0.287		In Mailflow Models
mods	LD41	0.015	0.015		In Mailflow Models
mods	LD42	0.001	0.001		Piece Distribution Related
mods	LD43	0.149	0.149		In Mailflow Models
mods	LD44	0.034	0.034		In Mailflow Models
mods	LD48 Exp	0.000	0.000		Piece Distribution Related
mods	LD48 Oth	0.005	0.005		Piece Distribution Related
mods	LD48_SSv	0.002	0.002		Piece Distribution Related
mods	LD49	0.022	0.022		In Mailflow Models
mods	LD79	0.184	0.184		In Mailflow Models
mods	MAILGRAM	0.000	0.000		Piece Distribution Related
mods	Registry	0.000	0.000		Piece Distribution Related
mods	REWRAP	0.011	0.011		Piece Distribution Related
mods	1Bulk pr	0.002	0.002		In Bundle Sorting Models
mods	1CancMPP	0.013	0.013		Piece Distribution Related
mods	1EEQMT	0.020	0.020		Piece Distribution Related
mods	1MISC	0.044	0.044		Piece Distribution Related
mods	1OPbulk	0.317	0.317		In Bundle Sorting Models
mods	1OPpref	0.253	0.253		Bundle Sorting Related
mods	1Platfrm	0.346		0.346	Not Worksharing Related
mods	1POUCHNG	0.223	0.223		Bundle Sorting Related
mods	1SackS_h	0.040		0.040	Not Worksharing Related
mods	1SackS_m	0.050		0.050	Not Worksharing Related
mods	1SCAN	0.002	0.002		Piece Distribution Related
mods	1SUPPORT	0.046	0.046		Piece Distribution Related
Subtotal		4.133	3.696	0.436	
BMCs	nmo	0.013		0.0133	Not Worksharing Related
BMCs	psm	0.004		0.0037	Not Worksharing Related
BMCs	spb	0.058	0.058		Bundle Sorting Related
BMCs	ssm	0.060		0.0597	Not Worksharing Related
BMCs	Othr	0.092		0.0921	Not Worksharing Related
BMCs	Pla	0.076		0.0760	Not Worksharing Related
Subtotal		0.302	0.058	0.245	
Non Mods		0.876	0.784	0.093	In proportion to mods pools
Total		5.3114	4.5376	0.7737	

***Summary of Standard (A) Nonprofit
Letter Mail Processing Costs***

Exhibit USPS-29B

Development and Summary of Standard (A) Nonprofit Mail Processing Costs

	[1] Model Unit Cost	[2] Proportional Adjustment	[3] Fixed Adjustment	[4] Total Unit Cost	[5] Percent DPS	[6] Model Weights
Automation Basic	4.2985	0.8118	0.5854	4.0747	64.08%	14.47%
Automation 3-Digit	3.7417	0.8118	0.5854	3.6227	66.22%	31.69%
Automation 5-Digit	2.5299	0.8118	0.5854	2.6390	69.70%	15.79%
Presort Basic (UPGR Trays)	5.4234	0.8118	0.5854	4.9878	61.19%	2.81%
Presort Basic (NON-OCR Trays - Upgradable)	5.6416	0.8118	0.5854	5.1650	60.80%	3.93%
Presort Basic (NON-OCR Trays - Non Upgradable)	11.2018	0.8118	0.5854	9.6785	20.68%	9.48%
Presort Basic (Weighted Average)	8.8539	0.8118	0.5854	7.7726	37.42%	16.21%
Presort 3/5 (UPGR Trays - Upgradable)	4.6952	0.8118	0.5854	4.3967	61.85%	2.50%
Presort 3/5 (NON-OCR Trays - Upgradable)	4.9493	0.8118	0.5854	4.6030	61.85%	5.66%
Presort 3/5 (NON-OCR Trays - Non Upgradable)	6.8105	0.8118	0.5854	6.1138	21.05%	13.67%
Presort 3/5 (Weighted Average)	6.0856	0.8118	0.5854	5.5254	36.30%	21.83%

NP MODEL COST WEIGHTED AVERAGE ¹	4.9715
Proportional Cost Pools <small>(page 2)</small>	4.0356
CRA Proportional Adjustment	0.8118
CRA Fixed Adjustment <small>(page 2)</small>	0.5854

Automation Basic NECR² 0.3085 52.90% 100.00%

¹ NP Model Cost Weighted Average = Column [1] * Column [6]

² Automation Basic NECR Model Cost is from Appendix III at page 9.

[1] Model Unit Cost from Cost Summary Sheets in Appendix III.

[2] Proportional Cost Pools from Exhibit USPS-29B at page 2 divided by NP Model Cost Weighted Average

[3] Fixed Cost Pools from Exhibit USPS-29B at page 2.

[4] Total Unit Cost = Column [1] * Column [2] + Column [3].

[5] DPS Percentages from Cost Summary Sheets in Appendix III.

[6] Model Weights are percent shares of each rate category based on TY Before Rates Volume Forecast and within the Presort Rate categories according to percentages in the Mail Characteristics Study (USPS LR-H-195).

STANDARD (A) NONPROFIT LETTER CRA MAIL PROCESSING COST POOLS
From USPS LR-H-106

		Total	Porportional	Fixed	Reason
mods	bcs/	0.748	0.748		In Mailflow Models
mods	express	0.002	0.002		Piece Distribution Related
mods	fsm/	0.013	0.013		Piece Distribution Related
mods	lsm/	0.041	0.041		Piece Distribution Related
mods	manf	0.015	0.015		Piece Distribution Related
mods	manl	0.996	0.996		In Mailflow Models
mods	manp	0.001	0.001		Piece Distribution Related
mods	mecparc	0.005	0.005		Piece Distribution Related
mods	ocr/	0.151	0.151		In Mailflow Models
mods	priority	0.000	0.000		Piece Distribution Related
mods	spbs Oth	0.093	0.093		In Bundle Sorting Models
mods	spbsPrio	0.001	0.001		Piece Distribution Related
mods	BusReply	0.002	0.002		Piece Distribution Related
mods	INTL	0.006	0.006		Piece Distribution Related
mods	LD15	0.156	0.156		In Mailflow Models
mods	LD41	0.009	0.009		In Mailflow Models
mods	LD42	0.000	0.000		Piece Distribution Related
mods	LD43	0.135	0.135		In Mailflow Models
mods	LD44	0.025	0.025		In Mailflow Models
mods	LD48 Exp	0.000	0.000		Piece Distribution Related
mods	LD48 Oth	0.005	0.005		Piece Distribution Related
mods	LD48_SSV	0.000	0.000		Piece Distribution Related
mods	LD49	0.015	0.015		In Mailflow Models
mods	LD79	0.266	0.266		In Mailflow Models
mods	MAILGRAM	0.000	0.000		Piece Distribution Related
mods	Registry	0.000	0.000		Piece Distribution Related
mods	REWRAP	0.000	0.000		Piece Distribution Related
mods	1Bulk pr	0.008	0.008		In Bundle Sorting Models
mods	1CancMPP	0.022	0.022		Piece Distribution Related
mods	1EEQMT	0.020	0.020		Piece Distribution Related
mods	1MISC	0.050	0.050		Piece Distribution Related
mods	1OPbulk	0.237	0.237		In Bundle Sorting Models
mods	1OPpref	0.237	0.237		Bundle Sorting Related
mods	1Platfrm	0.253		0.253	Not Worksharing Related
mods	1POUCHNG	0.106	0.106		Bundle Sorting Related
mods	1SackS_h	0.021		0.021	Not Worksharing Related
mods	1SackS_m	0.019		0.019	Not Worksharing Related
mods	1SCAN	0.001	0.001		Piece Distribution Related
mods	1SUPPORT	0.042	0.042		Piece Distribution Related
Subtotal		3.704	3.411	0.293	
BMCs	nmo	0.007		0.007	Not Worksharing Related
BMCs	psm	0.000		0.000	Not Worksharing Related
BMCs	spb	0.052		0.052	Bundle Sorting Related
BMCs	ssm	0.040		0.040	Not Worksharing Related
BMCs	Othr	0.089		0.089	Not Worksharing Related
BMCs	Pla	0.051		0.051	Not Worksharing Related
Subtotal		0.238	0.000	0.238	
Non Mods		0.679	0.625	0.054	In proportion to mods pools
Total		4.6210	4.036	0.585	

***Summary of First-Class and Standard (A) Mail
Unit Cost Estimates***

Exhibit USPS-29C

First-Class Unit Cost Estimates

	MP + D Costs	Mail Processing Costs	Delivery <u>3/</u> Costs
Letters			
Single Piece	16.7434	11.7424 <u>4/</u>	5.0010 *
Bulk Metered	13.6851	9.5391 <u>5/</u>	4.1460
Presort	11.3453	7.1993 <u>1/</u>	4.1460
Automation			
Basic	9.0298	5.3188 <u>1/</u>	3.7110
3-Digit	8.1997	4.5477 <u>1/</u>	3.6520
5-Digit	6.5995	3.0265 <u>1/</u>	3.5730
Carrier Route	6.4170	2.2910 <u>1/</u>	4.1260
Cards			
Single Piece	11.2429	6.8879 <u>1/</u>	4.3550
Presort	7.7568	4.7178 <u>1/</u>	3.0390
Automation			
Basic	6.2803	3.4693 <u>1/</u>	2.8110
3-Digit	5.7324	2.9574 <u>1/</u>	2.7750
5-Digit	4.6735	1.9475 <u>1/</u>	2.7260
Carrier Route	3.4404	0.6204 <u>1/</u>	2.8200
Flats and Parcels			
Single Piece	40.9560	35.9550 <u>4/</u>	5.0010 *
Presort	30.2723	25.3783 <u>2/</u>	4.8940
Automation			
Basic	31.2758	26.3818 <u>2/</u>	4.8940
3/5-Digit	17.8857	12.9917 <u>2/</u>	4.8940

* Letter, Flat and Parcel Delivery costs have been aggregated for Single Piece.

1/ Postal Service witness Hatfield (USPS-T-25)

2/ Postal Service witness Seckar (USPS-T-26)

3/ Postal Service witness Hume (USPS-T-18)

4/ From USPS LR-H-106.

5/ From USPS LR-H-106. However, after the completion of rate design, this number was revised to 10.5814, for a total of 14.7274. See USPS LR-H-106.

Standard Regular Unit Cost Estimates (for discounts)

	MP + D Costs	Mail Processing Costs	Delivery 4/ Costs
Letters			
Regular Presort			
Basic	12.8452	9.0252 <u>1/</u>	3.8200
3/5-Digit	10.5299	6.7389 <u>1/</u>	3.7910
Automation			
Basic	8.7366	5.2736 <u>1/</u>	3.4630
3-Digit	8.1455	4.7255 <u>1/</u>	3.4200
5-Digit	6.7847	3.4227 <u>1/</u>	3.3620
Enhanced Carrier Route			
Auto Basic	6.2687	2.9117 <u>2/</u>	3.3570
Basic	6.8745	2.5065 <u>2/</u>	4.3680
High Density	4.7640	1.0040 <u>2/</u>	3.7600
Saturation	3.8560	1.0040 <u>2/</u>	2.8520
Flats or Nonletters			
Regular Presort			
Basic	26.1585	19.1565 <u>3/</u>	7.0020
3/5-Digit	18.2192	11.2172 <u>3/</u>	7.0020
Automation			
Basic	20.4392	14.2202 <u>3/</u>	6.2190
3/5-Digit	14.8855	8.6665 <u>3/</u>	6.2190
Enhanced Carrier Route			
Basic	10.3844	4.5354 <u>2/</u>	5.8490
High Density	7.5692	2.4132 <u>2/</u>	5.1560
Saturation	5.9082	2.4132 <u>2/</u>	3.4950

1/ USPS-T-29 (Exhibit USPS-29A)

2/ USPS-T-29 (Exhibit USPS-29D) -- ECR MP costs reflect 0% dropshipping

3/ USPS-T-26 -- Automation flats MP costs reflect constant entry profile

4/ USPS-T-18

Standard Regular Unit Cost Estimates for Migrating Mail

	MP + D Costs	Mail Processing Costs	Delivery Costs ^{4/}	Transportation Costs ^{5/}	Other Costs ^{6/}	Total
Letters						
Automation						
Basic	8.7366	5.2736 <u>1/</u>	3.4630	0.5642	0.6562	9.9571
3-Digit	8.1455	4.7255 <u>1/</u>	3.4200	0.5642	0.6562	9.3660
5-Digit	6.7847	3.4227 <u>1/</u>	3.3620	0.5642	0.6562	8.0052
100% DBCS dropship like ECR	6.3683	3.0523 <u>1/</u>	3.3160	0.5642	0.6562	7.5888
Regular Presort						
Basic	12.8452	9.0252 <u>1/</u>	3.8200	0.5642	0.6562	14.0657
3/5-Digit	10.5299	6.7389 <u>1/</u>	3.7910	0.5642	0.6562	11.7504
Enhanced Carrier Route						
Auto Basic	5.7461	2.3891 <u>2/</u>	3.3570	0.5642	0.6562	6.9666
Basic	6.3520	1.9840 <u>2/</u>	4.3680	0.5642	0.6562	7.5725
High Density	4.1211	0.3611 <u>2/</u>	3.7600	0.5642	0.6562	5.3415
Saturation	3.2131	0.3611 <u>2/</u>	2.8520	0.5642	0.6562	4.4335
Flats or Nonletters						
Automation						
Basic	22.5577	16.3387 <u>3/</u>	6.2190	0.5642	0.6562	23.7782
3/5-Digit	15.4551	9.2361 <u>3/</u>	6.2190	0.5642	0.6562	16.6756
Regular Presort						
Basic	26.1585	19.1565 <u>3/</u>	7.0020	0.5642	0.6562	27.3790
3/5-Digit	18.4201	11.4181 <u>3/</u>	7.0020	0.5642	0.6562	19.6406
Enhanced Carrier Route						
Basic	8.2324	2.3834 <u>2/</u>	5.8490	0.5642	0.6562	9.4529
High Density	5.4313	0.2753 <u>2/</u>	5.1560	0.5642	0.6562	6.6518
Saturation	3.7703	0.2753 <u>2/</u>	3.4950	0.5642	0.6562	4.9908

1/ USPS-T-29 (Exhibit USPS-29A)

2/ USPS-T-29 (Exhibit USPS-29D) -- ECR MP costs reflect current level of dropshipping

3/ USPS-T-26 -- Automation flats MP costs reflect mail characteristics entry profile

4/ USPS-T-18

5/ CRA Before Rates (BR) CS&C 14 costs in cents/volume = (315973+60847)/(34359010+32424240)

6/ CRA Before Rates Other / Total cost-CS3 * piavv-CS6&7*piavv-CS10*piavv-CS14) costs/volume=(27481700+16343300)/(34359010+32424240)

Standard Nonprofit Unit Cost Estimates (for discounts)

	MP + D Costs	Mail Processing Costs	Delivery Costs	4/
Letters				
Presort				
<i>Basic</i>	11.1096	7.7726 <u>1/</u>	3.3370	
<i>3/5-Digit</i>	8.8744	5.5254 <u>1/</u>	3.3490	
Automation				
<i>Basic</i>	6.9987	4.0747 <u>1/</u>	2.9240	
<i>3-Digit</i>	6.5087	3.6227 <u>1/</u>	2.8860	
<i>5-Digit</i>	5.4750	2.6390 <u>1/</u>	2.8360	
NP Enhanced Carrier Route				
<i>Auto Basic</i>	4.7344	2.4924 <u>2/</u>	2.2420	
<i>Basic</i>	4.9737	2.0597 <u>2/</u>	2.9140	
<i>High Density</i>	3.2197	0.7487 <u>2/</u>	2.4710	
<i>Saturation</i>	2.6187	0.7487 <u>2/</u>	1.8700	
Flats or Nonletters				
Presort				
<i>Basic</i>	24.5199	18.6549 <u>3/</u>	5.8650	
<i>3/5-Digit</i>	14.9234	9.0584 <u>3/</u>	5.8650	
Automation				
<i>Basic</i>	19.3567	13.9147 <u>3/</u>	5.4420	
<i>3/5-Digit</i>	12.8334	7.3914 <u>3/</u>	5.4420	
NP Enhanced Carrier Route				
<i>Basic</i>	7.3220	3.6400 <u>2/</u>	3.6820	
<i>High Density</i>	5.3400	2.0900 <u>2/</u>	3.2500	
<i>Saturation</i>	4.5490	2.0900 <u>2/</u>	2.4590	

1/ USPS-T-29 (Exhibit USPS-29A)

2/ USPS-T-29 (Exhibit USPS-29D) -- ECR MP costs reflect 0% dropshipping

3/ USPS-T-26 -- Automation flats MP costs reflect constant entry profile

4/ USPS-T-18

Standard Nonprofit Unit Cost Estimates for Migrating Mail

	MP + D Costs	Mail Processing Costs	Delivery Costs ^{4/}	Transportation Costs ^{5/}	Other Costs ^{6/}	Total
Letters						
Presort						
Basic	11.1096	7.7726 ^{1/}	3.3370	0.5091	0.6562	12.2749
3/5-Digit	8.8744	5.5254 ^{1/}	3.3490	0.5091	0.6562	10.0397
Automation						
Basic	6.9987	4.0747 ^{1/}	2.9240	0.5091	0.6562	8.1640
3-Digit	6.5087	3.6227 ^{1/}	2.8860	0.5091	0.6562	7.6740
5-Digit	5.4750	2.6390 ^{1/}	2.8360	0.5091	0.6562	6.6403
100% DBCS dropship like NPCCR	5.1967	2.4137 ^{1/}	2.7830	0.5091	0.6562	6.3620
NP Enhanced Carrier Route						
Auto Basic	4.4228	2.1808 ^{2/}	2.2420	0.5091	0.6562	5.5882
Basic	4.6622	1.7482 ^{2/}	2.9140	0.5091	0.6562	5.8275
High Density	2.7074	0.2364 ^{2/}	2.4710	0.5091	0.6562	3.8728
Saturation	2.1064	0.2364 ^{2/}	1.8700	0.5091	0.6562	3.2718
Flats or Nonletters						
Presort						
Basic	24.5199	18.6549 ^{3/}	5.8650	0.5091	0.6562	25.6852
3/5-Digit	14.9234	9.0584 ^{3/}	5.8650	0.5091	0.6562	16.0887
Automation						
Basic	20.9757	15.5337 ^{3/}	5.4420	0.5091	0.6562	22.1410
3/5-Digit	14.9266	9.4846 ^{3/}	5.4420	0.5091	0.6562	16.0919
NP Enhanced Carrier Route						
Basic	6.2617	2.5797 ^{2/}	3.6820	0.5091	0.6562	7.4270
High Density	3.7694	0.5194 ^{2/}	3.2500	0.5091	0.6562	4.9348
Saturation	2.9784	0.5194 ^{2/}	2.4590	0.5091	0.6562	4.1438

1/ USPS-T-29 (Exhibit USPS-29A)

2/ USPS-T-29 (Exhibit USPS-29D) -- ECR MP costs reflect current level of dropshipping

3/ USPS-T-26 -- Automation flats MP costs reflect mail characteristics entry profile

4/ USPS-T-18

5/ CRA before rates CS&C 14 costs in cents/volume = (6039500+709000)/(10123230+3132000)

6/ CRA Before Rates Other =(Total cost-CS3.1 * piaav-CS6+7*piaav-CS10*piaav-CS14) costs/volume=(27481700+16343200)/24250010=224242420

Development of "Other" Costs

	Total Attributable Costs [1]	Volumes [2]	Mail Processing C/S 3.1		Delivery				Transportation C/S 14 [9]	Total "Other" Costs [10]	"Other" Unit Costs [11]
			Direct Labor [3]	Piggyback [4]	C/S 6&7 [5]	Piggyback [6]	C/S 10 [7]	Piggyback [8]			
Standard (A)											
Regular ECR	4,905,590	34,359,010	1,735,498	1.56284	896,995	1.30701	359,374	1.19684	315,973	274,817	0.6562
Nonprofit Nonprofit ECR	2,144,273	32,424,240	306,208	1.56331	830,413	1.30485	298,891	1.19686	60,847	163,433	0.5537

[1] Test Year Cost Segments and Components.

[2] Test Year Cost Segments and Components.

[3] Test Year Cost Segments and Components.

[4] USPS LR-H-77.

[5] Test Year Cost Segments and Components.

[6] USPS LR-H-77.

[7] Test Year Cost Segments and Components.

[8] USPS LR-H-77.

[9] Test Year Cost Segments and Components.

[10] Column [1] minus sum of ((Column [3] times Column [4]),(Column [5] times Column [6]),(Column [7] times Column [8]),Column [9]).

[11] Column [11] divided by Column [2].

***Summary of Standard (A) TY ECR and NECR Mail
Processing Unit Costs and Dropship Equalization***

Exhibit USPS-29D

Reconciling Base Year ECR Unit Cost to Test Year CRA

Shape	Rate Category	[1] Base Year Unit Cost	[2] Wage Rate Adjustment	[3] Test Year Unit Cost	[4] Test Year Volume	[5] Test Year Total Cost	[6] Reconciled TY Unit Cost
Letter	Auto Basic			2.4097	2,123.22	5,116.36	2.3891
	Basic	1.9004	1.053	2.0011	6,781.04	13,569.44	1.9840
	High Density	0.3458	1.053	0.3642	394.08	143.51	0.3611
	Saturation	0.3458	1.053	0.3642	3,095.86	1,127.43	0.3611
Nonletters	Basic	2.2830	1.053	2.4040	10,706.61	25,738.43	2.3834
	High Density	0.2637	1.053	0.2777	1,150.76	319.51	0.2753
	Saturation	0.2637	1.053	0.2777	8,172.67	2,269.16	0.2753
Total	Average				32,424.24	48,283.84	

1/ Average TY Unit Cost (Total Cost/Total Volume)	1.4891
2/ Average TY CRA Unit Cost (LR-H-106)	1.4764
3/ Reconciliation Factor (Row 2/ divided by Row 1/)	0.9915

- [1] (Base Year (BY) Unit Cost from USPS LR-H-109) / (Billing Determinant Volume (shown below)).
- [2] Wage Rate Adjustment = (BY Wage Rate \$23.777) / (TY Wage Rate \$25.031 from USPS LR-H-146).
- [3] Test Year (TY) Unit Cost = (BY Unit Cost (Column [1])) * (Wage Rate Adjustment (Column [2])).
- [4] Exhibit USPS-6A (witness Tolley).
- [5] Test Year Total Cost = TY Unit Cost (Column [3]) * TY Volume (Column [4]).
- [6] Reconciled TY Unit Cost = TY Unit Cost (Column [3]) * Reconciliation Factor (Row 3/).

	LR-H-145 <u>Volume</u>	LR-H-109 <u>Costs (000s)</u>	[1] Unit Cost
Not WS Endorsed Letters	9,663,821,871	183,648	1.9004
WS Endorsed Letters	2,525,428,603	8,734	0.3458
Not WS Endorsed Nonletters	8,462,895,453	193,206	2.2830
WS Endorsed Nonletters	8,528,590,689	22,488	0.2637

Reconciling Base Year Nonprofit ECR Unit Cost to Test Year CRA

Shape	Rate Category	[1] Base Year Unit Cost	[2] Wage Rate Adjustment	[3] Test Year Unit Cost	[4] Test Year Volume	[5] Test Year Total Cost	[6] Reconciled TY Unit Cost
Letter	Auto Basic			2.2554	356.91	804.98	2.1808
	Basic	1.7169	1.053	1.8079	1,478.33	2,672.74	1.7482
	High Density	0.2322	1.053	0.2445	39.47	9.65	0.2364
	Saturation	0.2322	1.053	0.2445	496.01	121.27	0.2364
Nonletters	Basic	2.5336	1.053	2.6679	572.45	1,527.24	2.5797
	High Density	0.5102	1.053	0.5372	14.39	7.73	0.5194
	Saturation	0.5102	1.053	0.5372	174.43	93.71	0.5194
Total	Average				3,131.99	5,237.32	

1/ Average TY Unit Cost (Total Cost/Total Volume) 1.6722
 2/ Average TY CRA Unit Cost (LR-H-106) 1.6169
 3/ Reconciliation Factor (Row 2/ divided by Row 1/) 0.9669

- [1] (Base Year (BY) Unit Cost from USPS LR-H-109) / (Billing Determinant Volume (shown below)).
- [2] Wage Rate Adjustment = (BY Wage Rate \$23.777) / (TY Wage Rate \$25.031 from USPS LR-H-146).
- [3] Test Year (TY) Unit Cost = BY Unit Cost (Column [1]) * Wage Rate Adjustment (Column [2]).
- [4] Exhibit USPS-6A (witness Tolley).
- [5] Test Year Total Cost = TY Unit Cost (Column [3]) * TY Volume (Column [4]).
- [6] Reconciled TY Unit Cost = TY Unit Cost (Column [3]) * Reconciliation Factor (Row 3/).

	LR-H-145 <u>Volume</u>	LR-H-109 <u>Costs (000s)</u>	[1] Unit Cost
Not WS Endorsed Letters	1,838,787,723	31,571	1.7169
WS Endorsed Letters	437,996,845	1,017	0.2322
Not WS Endorsed Nonletters	447,580,229	11,340	2.5336
WS Endorsed Nonletters	184,252,466	940	0.5102

Dropship Normalization of Saturation vs. Non-Saturation ECR Mail Processing Cost Differences

Unit Cost Avoidance per Pound by Entry Point (from USPS LR-H-111)

	<u>None</u>	<u>BMC</u>	<u>SCF</u>	<u>DDU</u>
Average Letter/Nonletter	\$0.0000	\$0.0904	\$0.1105	\$0.1379

Pounds By Entry Point (from FY96 Billing Determinants USPS LR-H-145)

<u>Letters</u>	<u>None</u>	<u>BMC</u>	<u>SCF</u>	<u>DDU</u>
Non-Saturation	104,880,958	310,813,167	192,178,644	8,436,165
Saturation	19,815,933	10,930,722	109,649,881	22,714,978

<u>Letters</u>	Total Cost Avoided by Entry Point (Unit Cost Avoidance * Pounds)				Cost Avoided cents/piece
	<u>None</u>	<u>BMC</u>	<u>SCF</u>	<u>DDU</u>	
Non-Saturation	\$0	\$28,097,510	\$21,235,740	\$1,163,347	\$50,496,598
Saturation	\$0	\$988,137	\$12,116,312	\$3,132,395	\$16,236,845

Pounds By Entry Point (from FY96 Billing Determinants USPS LR-H-145)

<u>Nonletters</u>	<u>none</u>	<u>BMC</u>	<u>SCF</u>	<u>DDU</u>
Non-Saturation	131,003,169	516,040,026	1,172,283,460	43,016,825
Saturation	58,525,216	22,291,810	408,827,050	980,008,342

<u>Nonletters</u>	Total Cost Avoided by Entry Point (Unit Cost Avoidance * Pounds)				Cost Avoided cents/piece
	<u>None</u>	<u>BMC</u>	<u>SCF</u>	<u>DDU</u>	
Non-Saturation	\$0	\$46,650,018	\$129,537,322	\$5,932,020	\$182,119,361
Saturation	\$0	\$2,015,180	\$45,175,389	\$135,143,150	\$182,333,719

FY96 Billing Determinant Volume

USPS LR-H-145

Non-Saturation Letters	9,663,821,871
Saturation Letters	2,525,428,603
Nonsaturation Nonletters	8,462,895,453
Saturation Nonletters	8,528,590,689

Dropship Normalization of Saturation vs. Non-Saturation Nonprofit ECR Mail Processing Cost Differences

Unit Cost Avoidance per Pound by Entry Point (from USPS LR-H-111)

	<u>None</u>	<u>BMC</u>	<u>SCF</u>	<u>DDU</u>
Average Letter/Nonletter	\$0.0000	\$0.0904	\$0.1105	\$0.1379

Pounds By Entry Point (from FY96 Billing Determinants USPS LR-H-145)

<u>Letters</u>	<u>None</u>	<u>BMC</u>	<u>SCF</u>	<u>DDU</u>
Non-Saturation	25,932,915	31,586,887	20,562,914	4,361,725
Saturation	3,062,792	526,596	11,520,885	6,693,781

Total Cost Avoided by Entry Point (Unit Cost Avoidance * Pounds)

<u>Letters</u>	<u>None</u>	<u>BMC</u>	<u>SCF</u>	<u>DDU</u>	<u>Total</u>	<u>Cost Avoided cents/piece</u>
Non-Saturation	\$0	\$2,855,455	\$2,272,202	\$601,482	\$5,729,138	0.3116
Saturation	\$0	\$47,604	\$1,273,058	\$923,072	\$2,243,734	0.5123

Pounds By Entry Point (from FY96 Billing Determinants USPS LR-H-145)

<u>Nonletters</u>	<u>none</u>	<u>BMC</u>	<u>SCF</u>	<u>DDU</u>
Non-Saturation	16,942,425	15,347,935	25,362,818	4,028,650
Saturation	2,337,621	223,112	15,470,905	8,441,349

Total Cost Avoided by Entry Point (Unit Cost Avoidance * Pounds)

<u>Nonletters</u>	<u>None</u>	<u>BMC</u>	<u>SCF</u>	<u>DDU</u>	<u>Total</u>	<u>Cost Avoided cents/piece</u>
Non-Saturation	\$0	\$1,387,453	\$2,802,591	\$555,551	\$4,745,596	1.0603
Saturation	\$0	\$20,169	\$1,709,535	\$1,164,062	\$2,893,766	1.5705

FY96 Billing Determinant Volume

USPS LR-H-145

Non-Saturation Letters	1,838,787,723
Saturation Letters	437,996,845
Nonsaturation Nonletters	447,580,229
Saturation Nonletters	184,252,466

Regular 100% DBCS 5-Digit Automation Letter Dropship Adjustment
to Reflect Basic ECR Letter Dropship Profile

Unit Cost Avoidance per Pound by Entry Point (from USPS LR-H-111)

Average Letter/Nonletter	<u>None</u>	<u>BMC</u>	<u>SCF</u>	<u>DDU</u>
	\$0.0000	\$0.0904	\$0.1105	\$0.1379

Pounds By Entry Point (from FY96 Billing Determinants USPS LR-H-145)

	<u>None</u>	<u>BMC</u>	<u>SCF</u>	<u>DDU</u>
Total Other Letters	712,294	373,541	91,454	0
ECR Basic Letters (Migrating)	115,698	323,460	237,384	0

Total Cost Avoided by Entry Point (Unit Cost Avoidance * Pounds)

	<u>None</u>	<u>BMC</u>	<u>SCF</u>	<u>DDU</u>	<u>Total</u>	<u>Cost Avoided cents/piece</u>
Total Other Letters	\$0	\$33,768	\$10,106	\$0	\$43,874	0.2300
ECR Basic Letters (Migrating)	\$0	\$29,241	\$26,231	\$0	\$55,472	0.5497

FY96 Billing Determinant Volume

USPS LR-H-145

Total Other Letters	19,075,363
ECR Basic Letters (Migrating)	10,090,942

Nonprofit 100% DBCS 5-Digit Automation Letter Dropship Adjustment
to Reflect Basic Nonprofit ECR Letter Dropship Profile

Unit Cost Avoidance per Pound by Entry Point (from USPS LR-H-111)

	<u>None</u>	<u>BMC</u>	<u>SCF</u>	<u>DDU</u>
Average Letter/Nonletter	\$0.0000	\$0.0904	\$0.1105	\$0.1379

Pounds By Entry Point (from FY96 Billing Determinants USPS LR-H-145)

	<u>None</u>	<u>BMC</u>	<u>SCF</u>	<u>DDU</u>	
Total Other Letters	272,208	46,888	42,714	0	361,810
ECR Basic Letters (Migrating)	25,712	32,212	26,071	0	83,996

Total Cost Avoided by Entry Point (Unit Cost Avoidance * Pounds)

	<u>None</u>	<u>BMC</u>	<u>SCF</u>	<u>DDU</u>	<u>Total</u>	<u>Cost Avoided cents/piece</u>
Total Other Letters	\$0	\$4,239	\$4,720	\$0	\$8,959	0.1165
ECR Basic Letters (Migrating)	\$0	\$2,912	\$2,881	\$0	\$5,793	0.3130

FY96 Billing Determinant Volume

USPS LR-H-145

Total Other Letters	7,687,399
ECR Basic Letters (Migrating)	1,850,970

***Summary of Selected Parcel Post
Mail Processing Costs***

Exhibit USPS-29E

PARCEL POST MAIL PROCESSING COST SUMMARY AND DEVELOPMENT

Table 1: Cost Pool Analysis Summary (from page 2)

	BMC	SCF	NonMOD	Proportional
Modeled (Proportional)	63.10	23.41	6.28	92.78
Not parcels (Fixed)		3.17	0.85	Fixed
Not worksharing (Fixed)		8.63	2.31	30.99
Not Modeled (Fixed)		12.63	3.39	Total
CRA Costs by Facility	63.10	47.84	12.83	123.77

Table 2: Nonmodel Cost Factor Development

Weighted Avg Model Cost¹	56.96
Proportional Cost Pools	92.78
CRA Proportional Adjustment	1.63
CRA Fixed Adjustment	30.99

Table 3: Total Cost Development

	Model Cost ² in cents	Proportional Adjustment	Fixed Adjustment	Total Cost ³ in cents
Inter Mach NonBC	70.29	1.63	30.99	146.00
Inter Mach BC	68.13	1.63	30.99	141.98
Inter NMO	151.27	1.63	30.99	277.42
Intra Mach NonBC	53.80	1.63	30.99	119.13
Intra Mach BC	51.64	1.63	30.99	115.10
Intra NMO	105.26	1.63	30.99	202.46
NMO Inter > 108" Dif.	427.89	1.63	30.99	728.06
NMO Intra > 108" Dif.	308.99	1.63	30.99	534.35

Table 4: Discount/Surcharge Cost Summary

	(cents)
Inter-BMC NMO Surcharge	131.4
Intra-BMC Discount:	
Machinable	26.9
Nonmachinable	75.0
Weighted Average	31.1
Prebarcode Discount	4.0
NMO Cost Diff. for Inter-BMC > 108"	450.6
NMO Cost Diff. for Intra-BMC > 108"	331.9

¹Weighted average model costs from Appendix V on cost summary pages 2-4, and 7-12.²Model costs from Appendix V on cost summary pages.³Total Costs = Model Costs times Proportional Adjustment plus Fixed Adjustment.

PARCEL POST MAIL PROCESSING CRA COST POOLS
From USPS LR-H-106

		Total	Proportional	Fixed	Reason
1 mods	bcs/	0.044		0.044	Not parcels
2 mods	express	0.008		0.008	Not parcels
3 mods	fsm/	0.958		0.958	Not parcels
4 mods	lsm/	0.010		0.010	Not parcels
5 mods	manf	0.351		0.351	Not parcels
6 mods	manl	0.383		0.383	Not parcels
7 mods	manp	2.324	2.324		Modeled
8 mods	mecparc	0.985	0.985		Modeled
9 mods	ocr/	0.006		0.006	Not parcels
10 mods	priority	0.234		0.234	Not parcels
11 mods	spbs Oth	0.661		0.661	Not Modeled
12 mods	spbsPrio	0.741		0.741	Not parcels
13 mods	BusReply	0.104		0.104	Not parcels
14 mods	INTL	0.173		0.173	Not parcels
15 mods	LD15	0.000		0.000	Not parcels
16 mods	LD41	0.000		0.000	Not parcels
17 mods	LD42	0.018		0.018	Not Modeled
18 mods	LD43	6.683		6.683	Not worksharing
19 mods	LD44	0.103		0.103	Not worksharing
20 mods	LD48 Exp	0.006		0.006	Not parcels
21 mods	LD48 Oth	0.218		0.218	Not worksharing
22 mods	LD48_SSv	0.021		0.021	Not worksharing
23 mods	LD49	0.398		0.398	Not worksharing
24 mods	LD79	0.291		0.291	Not worksharing
25 mods	MAILGRAM	0.155		0.155	Not parcels
26 mods	Registry	0.020		0.020	Not worksharing
27 mods	REWRAP	0.002		0.002	Not worksharing
28 mods	1Bulk pr	0.011		0.011	Not Modeled
29 mods	1CancMPP	0.857		0.857	Not worksharing
30 mods	1EEQMT	0.532		0.532	Not Modeled
31 mods	1MISC	0.471		0.471	Not Modeled
32 mods	1OPbulk	1.287		1.287	Not Modeled
33 mods	1OPpref	2.195		2.195	Not Modeled
34 mods	1Platfrm	20.097	20.097		Modeled
35 mods	1POUCHN	1.588		1.588	Not Modeled
36 mods	1SackS_h	2.801		2.801	Not Modeled
37 mods	1SackS_m	2.533		2.533	Not Modeled
38 mods	1SCAN	0.034		0.034	Not worksharing
39 mods	1SUPPOR	0.536		0.536	Not Modeled
Subtotal		47.839	23.406	24.432	
40 BMCs	nmo	6.237	6.237		Modeled
41 BMCs	psm	11.475	11.475		Modeled
42 BMCs	spb	2.871	2.871		Modeled
43 BMCs	ssm	3.915	3.915		Modeled
44 BMCs	Othr	18.563	18.563		Modeled
45 BMCs	Pla	20.040	20.040		Modeled
Subtotal		63.101	63.101	0.000	
46 Non Mods		12.830	6.278	6.553	
Total		123.770	92.785	30.985	

Inter-BMC Nonmachinable Surcharge Cost Development Summary

Machinable Inter-BMC Modeled Costs for 10,000 Pieces

Operation Description	# handlings ¹	\$ per oper. ²	total cost ⁵	TY
Unload Containers @ OSCF	10,000	0.027	268.44	
Unload Bedload Sacks @ BMC	450	0.028	12.54	
Unload Bedload Loose @ BMC	680	0.049	33.08	
Unload Sacks in OTR @ BMC	1,880	0.016	29.41	
Unload loose in OTR @ BMC	4,380	0.019	81.21	
Unload OWC @ BMC	2,450	0.044	106.96	
Unload Pallet @ BMC	160	0.033	5.24	
Unload Postal Pak @ BMC	10,000	0.024	244.51	
Unload Bedload Sacks @ SCF	2,091	0.029	61.38	
Unload Sacks in OTR @ SCF	253	0.014	3.44	
Unload loose in OTR @ SCF	5,284	0.016	85.01	
Unload OWC @ SCF	1,142	0.038	43.26	
Unload Bedload Sacks @ DDU	2,673	0.029	78.47	
Unload loose in OTR @ DDU	6,025	0.016	96.94	
Unload OWC @ DDU	1,302	0.038	49.32	
Total Per Piece Unloading Unit Costs			0.1199	

Nonmachinable Inter-BMC Modeled Costs for 10,000 Pieces

Operation Description	# handlings ³	\$ per oper. ⁴	total cost ⁵	TY
Unload Containers @ OSCF	10,000	0.068	678.09	
Unload Bedload NMOs @ BMC	400	0.188	75.09	
Unload NMOs in OTRs @ BMC	7,250	0.047	342.13	
Unload NMOs in OWC @ BMC	2,220	0.111	246.50	
Unload NMOs on Pallet @ OBMC	130	0.110	14.36	
Unload NMOs on Pallet @ DBMC	10,000	0.110	1104.82	
Unload Bedload NMOs @ SCF	1,132	0.171	193.14	
Unload NMOs in OWC @ SCF	4,703	0.041	192.60	
Unload NMOs in OTRs @ SCF	2,717	0.096	260.48	
Unload NMOs on Pallets @ SCF	217	0.096	20.96	
Unload Bedload NMOs @ DDU	2,673	0.171	455.98	
Unload NMOs in OTRs @ DDU	6,025	0.041	246.73	
Unload NMOs in OWC @ DDU	1,302	0.096	125.45	
Total Per Piece Unloading Unit Costs			0.3956	

Dump OTR of sacks	1,880	0.039	72.69	
Dump OTR of loose	4,380	0.046	200.71	
Dump Other Wheeled Cont.	2,450	0.108	264.35	
Dump Pallet	160	0.048	7.63	
Dump Postal Pak	10,000	0.036	355.90	
Sack Sorter	2,330	0.023	53.95	
Sack shakeout	2,330	0.055	128.74	
Primary Sort (Key)	10,000	0.058	575.92	
Primary Sort (Scan)	5,850	0.036	210.51	
Secondary (Scan)	11,225	0.036	403.92	
Sweep Runouts P. Pak @ OBMC	10,000	0.051	509.49	
Sweep Runouts OTRs @ DBMC	7,327	0.055	400.03	
Sack and Tie	2,673	0.185	494.86	
Crossdock Bedload Sacks@SCF	2,091	0.095	199.18	
Crossdock Sacks in OTR@SCF	253	0.040	10.18	
Crossdock loose in OTR@SCF	5,284	0.048	251.59	
Crossdock OWC @ SCF	1,142	0.112	128.02	
Manually Dump Sacks @ DDU	2,673	0.043	115.08	
Total Per Piece Sort-Related Unit Costs			0.4383	

Primary NMO Sort @ OBMC	10,000	0.248	2484.81	
Primary NMO Sort @ DBMC	10,000	0.248	2484.81	
Move IHC @ SCF	1,132	0.080	90.87	
Move OTRs @ SCF	4,703	0.061	285.00	
Move Pallet @ SCF	2,717	0.084	227.00	
Move OWC @ SCF	217	0.143	31.01	
Manual Sort @ SCF	8,770	0.076	666.11	
Move IHC @ SCF	2,344	0.080	188.14	
Move OTRs @ SCF	5,284	0.061	320.18	
Move OWC @ SCF	1,142	0.143	162.80	
Total Per Piece Sort-Related Unit Costs			0.6941	

Bedload Sacks @ SCF	450	0.025	11.15	
Bedload loose @ SCF	680	0.149	101.20	
Load Sacks in OTRs @ SCF	1,880	0.027	51.06	
Load Loose in OTRs @ SCF	4,380	0.032	141.00	
Load OWCs @ SCF	2,450	0.076	185.71	
Load Pallets @ SCF	160	0.026	4.17	
Load Postal Pak @ BMC	10,000	0.022	223.96	
Bedload Sacks @ BMC	2,384	0.029	68.09	
Load OTRs w/ sacks @ BMC	289	0.031	9.05	
Load OTRs w/ loose @ BMC	6,025	0.037	223.52	
Load OWC @ BMC	1,302	0.087	113.73	
Bedload Sacks @ SCF	2,344	0.025	58.10	
Load OTRs w/ loose @ SCF	5,284	0.032	170.10	
Load OWC @ SCF	1,142	0.076	86.55	
Total Per Piece Loading Unit Costs			0.1447	

Bedload NMOs @ SCF	400	0.149	59.53	
Load NMOs in OTRs @ SCF	7,250	0.082	594.05	
Load NMOs in OWC @ SCF	2,220	0.193	428.01	
Load NMOs on Pallets @ SCF	130	0.088	11.42	
Load NMOs on Pallets @ DBMC	10,000	0.101	1011.96	
Bedload NMOs @ DBMC	1,461	0.172	250.56	
Load NMOs in OTRs @ DBMC	5,444	0.094	514.09	
Load NMOs on Pallets @ DBMC	2,717	0.101	274.94	
Load NMOs in OWC @ DBMC	378	0.222	83.90	
Bedload NMOs @ SCF	2,344	0.149	348.87	
Load NMOs in OTRs @ SCF	5,284	0.082	432.95	
Load NMOs in OWC @ SCF	1,142	0.193	220.14	
Total Per Piece Loading Unit Costs			0.4230	

Modeled Unit Cost	0.7029		
Proportional Adjustment	1.6291		
Fixed Adjustment	0.3099		
Total Unit Cost	1.4550		

Total Modeled Unit Cost	1.5127		
Proportional Adjustment	1.6291		
Fixed Adjustment	0.3099		
Total Unit Cost	2.7742		

Difference 1.3192

¹Nonbarcoded Machinable Nonpresort Inter-BMC Model Cost Summary Appendix V page 3 Column [1] * 10,000.

²Nonbarcoded Machinable Nonpresort Inter-BMC Model Cost Summary Appendix V page 3 Column [6]

³Nonmachinable Nonpresort Inter-BMC Model Cost Summary Appendix V page 4 Column [1] * 10,000.

⁴Nonmachinable Nonpresort Inter-BMC Model Cost Summary Appendix V page 4 Column [6]

⁵Number of Handlings * Dollars per Operation

Machinable Intra-BMC Discount Cost Development Summary

Machinable Inter-BMC Modeled Costs for 10,000 Pieces				Machinable Intra-BMC Modeled Costs for 10,000 Pieces				
Operation Description	# handlings ¹	\$ per oper. ²	total cost ⁵	TY	Operation Description	# handlings ³	\$ per oper. ⁴	total cost ⁵
Unload Containers @ OSCF	10,000	0.027	268.44		Unload Containers @ OSCF	10,000	0	268.44
Unload Bedload Sacks @ BMC	450	0.028	12.54		Unload Bedload Sacks @ BMC	450	0.028	12.54
Unload Bedload Loose @ BMC	680	0.049	33.08		Unload Bedload Loose @ BMC	680	0.049	33.08
Unload Sacks in OTR @ BMC	1,880	0.016	29.41		Unload Sacks in OTR @ BMC	1,880	0.016	29.41
Unload loose in OTR @ BMC	4,380	0.019	81.21		Unload loose in OTR @ BMC	4,380	0.019	81.21
Unload OWC @ BMC	2,450	0.044	106.96		Unload OWC @ BMC	2,450	0.044	106.96
Unload Pallet @ BMC	160	0.033	5.24		Unload Pallet @ BMC	160	0.033	5.24
Unload Postal Pak @ BMC	10,000	0.024	244.51		Unload Bedload Sacks @ SCF	2,091	0.029	61.38
Unload Bedload Sacks @ SCF	2,091	0.029	61.38		Unload Sacks in OTR @ SCF	253	0.014	3.44
Unload Sacks in OTR @ SCF	253	0.014	3.44		Unload loose in OTR @ SCF	5,284	0.016	85.01
Unload loose in OTR @ SCF	5,284	0.016	85.01		Unload OWC @ SCF	1,142	0.038	43.26
Unload OWC @ SCF	1,142	0.038	43.26		Unload Bedload Sacks @ DDU	2,673	0.029	78.47
Unload Bedload Sacks @ DDU	2,673	0.029	78.47		Unload loose in OTR @ DDU	6,025	0.016	96.94
Unload loose in OTR @ DDU	6,025	0.016	96.94		Unload OWC @ DDU	1,302	0.038	49.32
Unload OWC @ DDU	1,302	0.038	49.32		Total Per Piece Unloading Unit Costs			0.0955
Total Per Piece Unloading Unit Costs			0.1199					
Dump OTR of sacks	1,880	0.039	72.69		Dump OTR of sacks	1,880	0.039	72.69
Dump OTR of loose	4,380	0.046	200.71		Dump OTR of loose	4,380	0.046	200.71
Dump Other Wheeled Cont.	2,450	0.108	264.35		Dump Other Wheeled Cont.	2,450	0.108	264.35
Dump Pallet	160	0.048	7.63		Dump Pallet	160	0.048	7.63
Dump Postal Pak	10,000	0.036	355.90		Sack Sorter	2,330	0.023	53.95
Sack Sorter	2,330	0.023	53.95		Sack shakeout	2,330	0.055	128.74
Sack shakeout ⁶	2,330	0.055	128.74		Primary Sort (Key)	10,000	0.058	575.92
Primary Sort (Key)	10,000	0.058	575.92		Secondary (Scan)	8,300	0.036	298.67
Primary Sort (Scan)	5,850	0.036	210.51		Sweep Runouts P. Pak @ OBMC	7,327	0.055	400.03
Secondary (Scan)	11,225	0.036	403.92		Sack and Tie	2,673	0.185	494.86
Sweep Runouts P. Pak @ OBMC	10,000	0.051	509.49		Crossdock Bedload Sacks@SCF	2,091	0.095	199.18
Sweep Runouts OTRs @ DBMC	7,327	0.055	400.03		Crossdock Sacks in OTR@SCF	253	0.040	10.18
Sack and Tie	2,673	0.185	494.86		Crossdock loose in OTR@SCF	5,284	0.048	251.59
Crossdock Bedload Sacks@SCF	2,091	0.095	199.18		Crossdock OWC @ SCF	1,142	0.112	128.02
Crossdock Sacks in OTR@SCF	253	0.040	10.18		Manually Dump Sacks @ DDU	2,673	0.043	115.08
Crossdock loose in OTR@SCF	5,284	0.048	251.59		Total Per Piece Sort-Related Unit Costs			0.3202
Crossdock OWC @ SCF	1,142	0.112	128.02					
Manually Dump Sacks @ DDU	2,673	0.043	115.08					
Total Per Piece Sort-Related Unit Costs			0.4383					
Bedload Sacks @ SCF	450	0.025	11.15		Bedload Sacks @ SCF	450	0.025	11.15
Bedload loose @ SCF	680	0.149	101.20		Bedload loose @ SCF	680	0.149	101.20
Load Sacks in OTRs @ SCF	1,880	0.027	51.06		Load Sacks in OTRs @ SCF	1,880	0.027	51.06
Load Loose in OTRs @ SCF	4,380	0.032	141.00		Load Loose in OTRs @ SCF	4,380	0.032	141.00
Load OWCs @ SCF	2,450	0.076	185.71		Load OWCs @ SCF	2,450	0.076	185.71
Load Pallets @ SCF	160	0.026	4.17		Load Pallets @ SCF	160	0.026	4.17
Load Postal Pak @ BMC	10,000	0.022	223.96		Bedload Sacks @ BMC	2,384	0.029	68.09
Bedload Sacks @ BMC	2,384	0.029	68.09		Load OTRs w/ sacks @ BMC	289	0.031	9.05
Load OTRs w/ sacks @ BMC	289	0.031	9.05		Load OTRs w/ loose @ BMC	6,025	0.037	223.52
Load OTRs w/ loose @ BMC	6,025	0.037	223.52		Load OWC @ BMC	1,302	0.087	113.73
Load OWC @ BMC	1,302	0.087	113.73		Bedload Sacks @ SCF	2,344	0.025	58.10
Bedload Sacks @ SCF	2,344	0.025	58.10		Load OTRs w/ loose @ SCF	5,284	0.032	170.10
Load OTRs w/ loose @ SCF	5,284	0.032	170.10		Load OWC @ SCF	1,142	0.076	86.55
Load OWC @ SCF	1,142	0.076	86.55		Total Per Piece Loading Unit Costs			0.1223
Total Per Piece Loading Unit Costs			0.1447					
Total Modeled Unit Cost			0.7029		Total Modeled Unit Cost			0.5380
Proportional Adjustment			1.6291		Proportional Adjustment			1.6291
Fixed Adjustment			0.3099		Fixed Adjustment			0.3099
Total Unit Cost:			1.4550		Total Unit Cost:			1.1863
Difference			0.2687					

¹Nonbarcoded Machinable Nonpresort Inter-BMC Model Cost Summary Appendix V page 3 Column [1] * 10,000

²Nonbarcoded Machinable Nonpresort Inter-BMC Model Cost Summary Appendix V page 3 Column [6]

³Nonbarcoded Machinable Nonpresort Intra-BMC Model Cost Summary Appendix V page 8 Column [1] * 10,000

⁴Nonbarcoded Machinable Nonpresort Intra-BMC Model Cost Summary Appendix V page 8 Column [6]

⁵Number of Handlings * Dollars per Operation

Intra-BMC Nonmachinable Discount Cost Development Summary

Nonmachinable Inter-BMC Modeled Costs for 10,000 Pieces				Nonmachinable Intra-BMC Modeled Costs for 10,000 Pieces				
Operation Description	# handlings ³	\$ per oper. ⁴	total cost ⁵	TY	Operation Description	# handlings ³	\$ per oper. ⁴	total cost ⁵
Unload Containers @ OSCF	10,000	0.068	678.09		Unload Containers @ OSCF	10,000	0.068	678.09
Unload Bedload NMOs @ BMC	400	0.188	75.09		Unload Bedload NMOs @ BMC	400	0.188	75.09
Unload NMOs in OTRs @ BMC	7,250	0.047	342.13		Unload NMOs in OTRs @ BMC	7,250	0.047	342.13
Unload NMOs in OWC @ BMC	2,220	0.111	246.50		Unload NMOs in OWC @ BMC	2,220	0.111	246.50
Unload NMOs on Pallet @ OBMC	130	0.110	14.36		Unload NMOs on Pallet @ OBMC	130	0.110	14.36
Unload NMOs on Pallet @ DBMC	10,000	0.110	1104.82		Unload Bedload NMOs @ SCF	1,132	0.171	193.14
Unload Bedload NMOs @ SCF	1,132	0.171	193.14		Unload NMOs in OWC @ SCF	4,703	0.041	192.60
Unload NMOs in OWC @ SCF	4,703	0.041	192.60		Unload NMOs in OTRs @ SCF	2,717	0.096	260.48
Unload NMOs in OTRs @ SCF	2,717	0.096	260.48		Unload NMOs on Pallets @ SCF	217	0.096	20.96
Unload NMOs on Pallets @ SCF	217	0.096	20.96		Unload Bedload NMOs @ DDU	2,673	0.171	455.98
Unload Bedload NMOs @ DDU	2,673	0.171	455.98		Unload NMOs in OTRs @ DDU	6,025	0.041	246.73
Unload NMOs in OTRs @ DDU	6,025	0.041	246.73		Unload NMOs in OWC @ DDU	1,302	0.096	125.45
Unload NMOs in OWC @ DDU	1,302	0.096	125.45		Total Per Piece Unloading Unit Costs			0.2852
Total Per Piece Unloading Unit Costs			0.3956					
Primary NMO Sort @ OBMC	10,000	0.248	2484.81		Primary NMO Sort @ DBMC	10,000	0.248	2484.81
Primary NMO Sort @ DBMC	10,000	0.248	2484.81		Move IHC @ SCF	1,132	0.080	90.87
Move IHC @ SCF	1,132	0.080	90.87		Move OTRs @ SCF	4,703	0.061	285.00
Move OTRs @ SCF	4,703	0.061	285.00		Move Pallet @ SCF	2,717	0.084	227.00
Move Pallet @ SCF	2,717	0.084	227.00		Move OWC @ SCF	217	0.143	31.01
Move OWC @ SCF	217	0.143	31.01		Manual Sort @ SCF	8,770	0.076	666.11
Manual Sort @ SCF	8,770	0.076	666.11		Move IHC @ SCF	2,344	0.080	188.14
Move IHC @ SCF	2,344	0.080	188.14		Move OTRs @ SCF	5,284	0.061	320.18
Move OTRs @ SCF	5,284	0.061	320.18		Move OWC @ SCF	1,142	0.143	162.80
Move OWC @ SCF	1,142	0.143	162.80		Total Per Piece Sort-Related Unit Costs			0.4456
Total Per Piece Sort-Related Unit Costs			0.6941					
Bedload NMOs @ SCF	400	0.149	59.53		Bedload NMOs @ SCF	400	0.149	59.53
Load NMOs in OTRs @ SCF	7,250	0.082	594.05		Load NMOs in OTRs @ SCF	7,250	0.082	594.05
Load NMOs in OWC @ SCF	2,220	0.193	428.01		Load NMOs in OWC @ SCF	2,220	0.193	428.01
Load NMOs on Pallets @ SCF	130	0.088	11.42		Load NMOs on Pallets @ SCF	130	0.088	11.42
Load NMOs on Pallets @ OBMC	10,000	0.101	1011.96		Bedload NMOs @ DBMC	1,461	0.172	250.56
Bedload NMOs @ DBMC	1,461	0.172	250.56		Load NMOs in OTRs @ DBMC	5,444	0.094	514.09
Load NMOs in OTRs @ DBMC	5,444	0.094	514.09		Load NMOs on Pallets @ DBMC	2,717	0.101	274.94
Load NMOs on Pallets @ DBMC	2,717	0.101	274.94		Load NMOs in OWC @ DBMC	378	0.222	83.90
Load NMOs in OWC @ DBMC	378	0.222	83.90		Bedload NMOs @ SCF	2,344	0.149	348.87
Bedload NMOs @ SCF	2,344	0.149	348.87		Load NMOs in OTRs @ SCF	5,284	0.082	432.95
Load NMOs in OTRs @ SCF	5,284	0.082	432.95		Load NMOs in OWC @ SCF	1,142	0.193	220.14
Load NMOs in OWC @ SCF	1,142	0.193	220.14		Total Per Piece Loading Unit Costs			0.3218
Total Per Piece Loading Unit Costs			0.4230					

Total Modeled Unit Cost	1.5127
Proportional Adjustment	1.6291
Fixed Adjustment	0.3099
Total Unit Cost	2.7742

Total Modeled Unit Cost	1.0526
Proportional Adjustment	1.6291
Fixed Adjustment	0.3099
Total Unit Cost	2.0246

Difference 0.7496

¹Nonmachinable Nonpresort Inter-BMC Model Cost Summary Appendix V page 4 Column [1] * 10,000

²Nonmachinable Nonpresort Inter-BMC Model Cost Summary Appendix V page 4 Column [6]

³Nonmachinable Nonpresort Intra-BMC Model Cost Summary Appendix V page 9 Column [1] * 10,000

⁴Nonmachinable Nonpresort Intra-BMC Model Cost Summary Appendix V page 9 Column [6].

⁵Number of Handlings * Dollars per Operation

Prebarcoding Cost Savings Development Summary

Operation Description	[1] Model cost	[2] Proportional Adjustment	[3] Fixed Adjustment	[4] Adjusted Cost	[5] Cost per ribbon	[6] Total Cost
Parcel Sorting Machine (Key)	\$0.0576	1.629	\$0.3099	\$0.4037	\$0.0050	\$0.4087
Parcel Sorting Machine (Scan)	\$0.0360	1.629	\$0.3099	\$0.3685	\$0.0000	\$0.3685

Total Test Year Attributable Costs Avoided by Nonpresort Prebarcoded Machinable Parcels¹ \$0.0402

1] Appendix V page 2 for key and page 3 for scan.

2] Exhibit USPS-29E page 1

3] Exhibit USPS-29E page 1.

4] Adjusted Cost = Model Cost times Proportional Adjustment plus Fixed Adjustment.

5] Engineering Estimate.

6] Total Cost = Adjusted Cost plus Cost per Ribbon.

(Total Cost (Key) - Total Cost (Scan)) / 10,000

***Summary of Special Standard
Mail Processing Costs***

Exhibit USPS-29F

SPECIAL STANDARD MAIL PROCESSING COST SUMMARY AND DEVELOPMENT

Table 1: Cost Pool Analysis Summary (from page 2)

	BMC	SCF	NonMOD	Proportional
Modeled	38.863	6.354	2.296	47.513
Not parcels		2.211	0.799	Fixed
Not worksharing		4.599	1.662	15.933
Not Modeled		4.893	1.768	Total
Total	38.863	18.057	6.526	63.446

Table 2: Nonmodel Cost Factor Development

Weighted Avg Model Cost¹	36.19
Proportional Cost Pools	47.51
CRA Proportional Adjustment	1.31
CRA Fixed Adjustment	15.93

Table 3: Total Cost Development

	Model Cost in cents	Proportional Adjustment	Fixed Adjustment	Total Cost in cents
Avg. Nonpresort	37.733	1.31	15.93	65.47
Avg. BMC cost	29.123	1.31	15.93	54.17
Avg. 5-D Presort	12.167	1.31	15.93	31.91

Table 4: Discount Cost Summary

	Cost	Discount
Avg. Nonpresort	65.47	
Avg. BMC cost	54.17	11.3
Avg. 5-D Presort	31.91	33.6

Table 5: Volume Percentages

USPS LR-H-145	Nonpresort	86%	Inter Mach NonBC	44%	51%
USPS LR-H-145	BMC Presort	12%	Inter Mach BC	16%	18%
USPS LR-H-145	5-D Presort	2%	Inter NMO	9%	10%
Parcel Post Proxy	Inter-BMC	80%	Intra Mach NonBC	11%	13%
Parcel Post Proxy	Intra-BMC	20%	Intra Mach BC	4%	5%
USPS LR-H-131	Machinable	87%	Intra NMO	2%	3%
USPS LR-H-131	NonMachinable	13%	BMC Presort NonBC	3%	25%
USPS LR-H-131	Nonpresort NonBC	74%	BMC Presort BC	7%	62%
USPS LR-H-131	Nonpresort BC	26%	BMC NMO	2%	13%
USPS LR-H-131	BMC Presort NonBC	29%	5-D Presort	2%	
USPS LR-H-131	BMC Presort BC	71%		100%	

SPECIAL STANDARD MAIL PROCESSING CRA COST POOLS
From USPS LR-H-106

		Total	Proportional	Fixed	Reason
mods	bcs/	0.006		0.006	Not parcels
mods	express	0.074		0.074	Not parcels
mods	fsm/	1.000		1.000	Not parcels
mods	Ism/	0.013		0.013	Not parcels
mods	manf	0.467		0.467	Not parcels
mods	mani	0.217		0.217	Not parcels
mods	manp	0.801	0.801		Modeled
mods	mecparc	0.097	0.097		Modeled
mods	ocr/	0.088		0.088	Not parcels
mods	priority	0.128		0.128	Not parcels
mods	spbs Oth	0.425		0.425	Not Modeled
mods	spbsPrio	0.213		0.213	Not parcels
mods	BusReply	0.000		0.000	Not parcels
mods	INTL	0.002		0.002	Not parcels
mods	LD15	0.000		0.000	Not parcels
mods	LD41	0.000		0.000	Not parcels
mods	LD42	0.019		0.019	Not Modeled
mods	LD43	3.665		3.665	Not worksharing
mods	LD44	0.272		0.272	Not worksharing
mods	LD48 Exp	0.002		0.002	Not parcels
mods	LD48 Oth	0.130		0.130	Not worksharing
mods	LD48_SSV	0.083		0.083	Not worksharing
mods	LD49	0.217		0.217	Not worksharing
mods	LD79	0.001		0.001	Not worksharing
mods	MAILGRAM	0.000		0.000	Not parcels
mods	Registry	0.044		0.044	Not worksharing
mods	REWRAP	0.000		0.000	Not worksharing
mods	1Bulk pr	0.007		0.007	Not Modeled
mods	1CancMPP	0.184		0.184	Not worksharing
mods	1EEQMT	0.110		0.110	Not Modeled
mods	1MISC	0.137		0.137	Not Modeled
mods	1OPbulk	0.765		0.765	Not Modeled
mods	1OPpref	0.983		0.983	Not Modeled
mods	1Platfrm	5.456	5.456		Modeled
mods	1POUCHNG	0.897		0.897	Not Modeled
mods	1SackS_h	0.580		0.580	Not Modeled
mods	1SackS_m	0.816		0.816	Not Modeled
mods	1SCAN	0.004		0.004	Not worksharing
mods	1SUPPORT	0.155		0.155	Not Modeled
SUBTOTAL		18.057	6.354	11.703	
BMCs	nmo	0.968	0.968		Modeled
BMCs	psm	17.094	17.094		Modeled
BMCs	spb	1.730	1.730		Modeled
BMCs	ssm	1.860	1.860		Modeled
BMCs	Othr	8.881	8.881		Modeled
BMCs	Pla	8.330	8.330		Modeled
SUBTOTAL		38.863	38.863	0.000	
Non Mods		6.526	2.296	12.020	
Total		63.446	47.513	23.723	

***Standard (A) Regular Letter
Mail Processing Cost Models***

Appendix I

Test Year Standard (A) Regular Automation Basic Letters Cost Summary

	[1] Mix of Handlings	[2] Pieces per Hour	[3] Wage Rate	[4] Direct Labor Cents/Piece	[5] Piggyback Factor	[6] Premium Pay Adj.	[7] Operation Unit Cost	[8] Modeled Unit Cost
Outgoing Primary								
Manual	220	812	\$25.445	3.1336	1.3720	-0.1316	4.1677	0.0915
MPBCS	4,405	8,393	\$25.445	0.3032	1.7190	-0.0127	0.5084	0.2240
Outgoing Secondary								
Manual	70	691	\$25.445	3.6823	1.3720	-0.1547	4.8975	0.0342
MPBCS	725	8,393	\$25.445	0.3032	1.7190	-0.0127	0.5084	0.0369
AADC Distribution								
Manual	396	759	\$25.445	3.3524	1.3720	-0.1408	4.4587	0.1766
MPBCS	5,791	8,393	\$25.445	0.3032	1.7190	-0.0127	0.5084	0.2944
SCF Operations								
Manual	570	896	\$25.445	2.8398	1.3720	-0.1193	3.7770	0.2155
MPBCS	3,368	8,393	\$25.445	0.3032	1.7190	-0.0127	0.5084	0.1712
Incoming Primary								
Manual	319	562	\$25.445	4.5276	1.3720	-0.1902	6.0217	0.1921
MPBCS	1,438	8,393	\$25.445	0.3032	1.7190	-0.0127	0.5084	0.0731
Incoming Secondary								
Manual MODs Sites	1,443	646	\$25.445	3.9389	1.3720	-0.1654	5.2387	0.7558
Manual Non-Auto Sites	1,474	1,143	\$25.445	2.2261	1.3720	-0.0935	2.9607	0.4364
MPBCS	2,224	6,633	\$25.445	0.3836	1.7190	-0.0161	0.6433	0.1431
DBCS First-Pass	5,633	7,467	\$25.445	0.3408	2.4340	-0.0143	0.8151	0.4591
DBCS Second-Pass	5,351	7,467	\$25.445	0.3408	2.4340	-0.0143	0.8151	0.4362
CSBCS First-Pass	1,266	17,124	\$25.445	0.1486	1.9480	-0.0062	0.2832	0.0359
CSBCS Second-Pass	1,247	17,124	\$25.445	0.1486	1.9480	-0.0062	0.2832	0.0353
CSBCS Third-Pass	1,234	17,124	\$25.445	0.1486	1.9480	-0.0062	0.2832	0.0350
Other								
Accept./Verification	10,000						0.1844	0.1844
Sort to P. O. Boxes:								
DPS	609	2,341	\$25.45	1.0868	1.368	-0.0456	1.4412	0.0877
Non-DPS	357	1,171	\$25.45	2.1735	1.368	-0.0913	2.8824	0.1028
% DPS		63.05%						

Figures in Columns [1], [2], [3], and [5] are reported in subsequent pages in this Appendix.

Column [4] = 1/Column [2] page 43 * Column [3] page 42

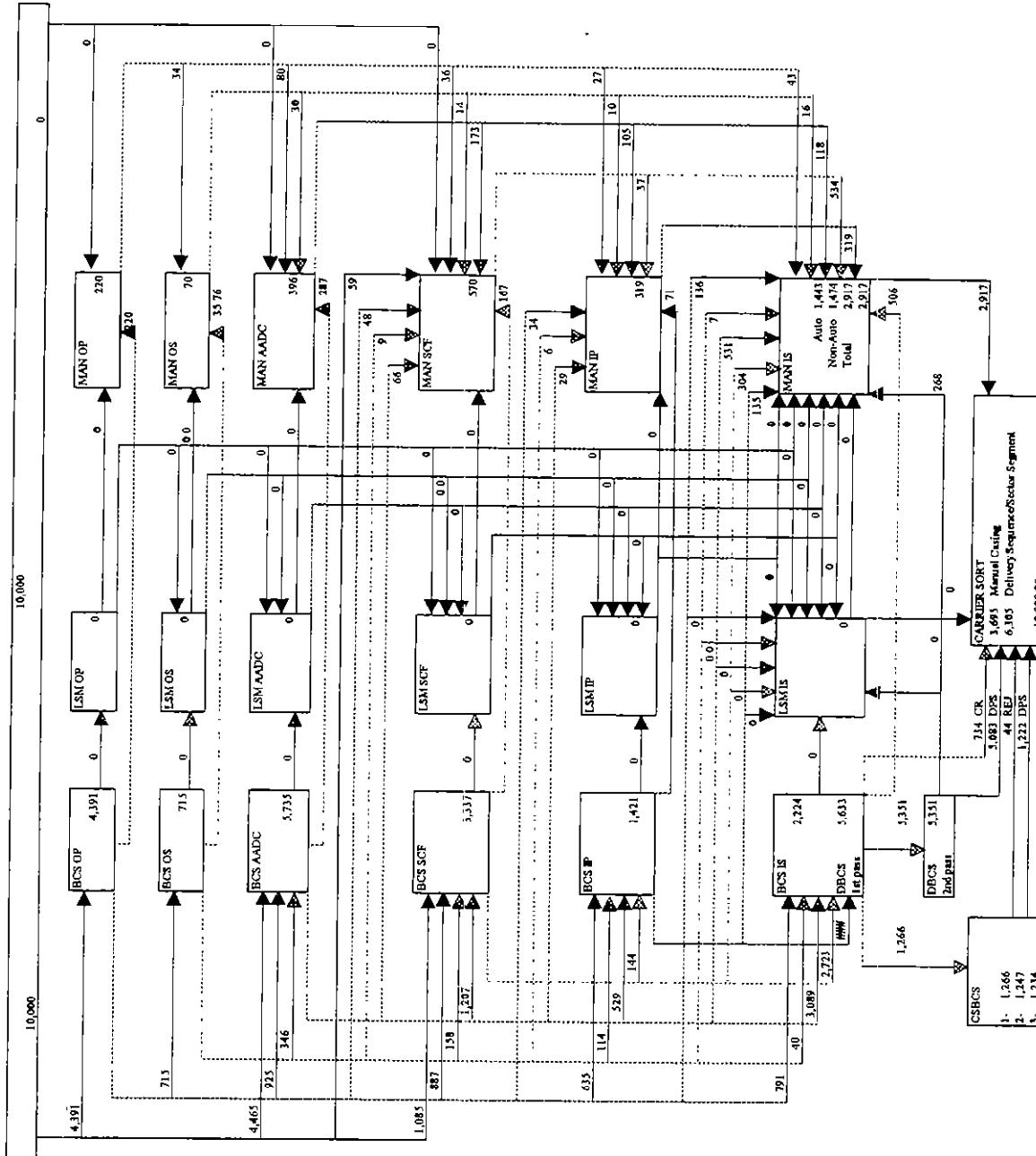
Column [6] = Column [4] * (premium pay factor page 42 - 1)

Column [7] = (Column [4] * Column [5] page 42) + Column [6]

Column [8] = Column [7] * Column [1] mail flow / 10,000

MODEL COST	4.2210
PROPORTIONAL ADJ.	1.0661
FIXED ADJUSTMENT	0.7737
TOTAL UNIT COST	5.2736

Standard (A) Regular Automation Basic Letters



Test Year Standard (A) Regular Automation 3-Digit Letters Cost Summary

	[1] Mix of Handlings	[2] Pieces per Hour	[3] Wage Rate	[4] Direct Labor Cents/Piece	[5] Piggyback Factor	[6] Premium Pay Adj.	[7] Operation Unit Cost	[8] Model Unit Co
Incoming Primary								
Manual	989	562	\$25.445	4.5276	1.3720	-0.1902	6.0217	0.595
MPBCS	9,485	8,393	\$25.445	0.3032	1.7190	-0.0127	0.5084	0.482
Incoming Secondary								
Manual MODs Sites	1,225	646	\$25.445	3.9389	1.3720	-0.1654	5.2387	0.641
Manual Non-Auto Sites	1,466	1,143	\$25.445	2.2261	1.3720	-0.0935	2.9607	0.434
MPBCS	2,295	6,633	\$25.445	0.3836	1.7190	-0.0161	0.6433	0.147
DBCS First-Pass	5,812	7,467	\$25.445	0.3408	2.4340	-0.0143	0.8151	0.473
DBCS Second-Pass	5,521	7,467	\$25.445	0.3408	2.4340	-0.0143	0.8151	0.450
CSBCS First-Pass	1,306	17,124	\$25.445	0.1486	1.9480	-0.0062	0.2832	0.037
CSBCS Second-Pass	1,287	17,124	\$25.445	0.1486	1.9480	-0.0062	0.2832	0.036
CSBCS Third-Pass	1,274	17,124	\$25.445	0.1486	1.9480	-0.0062	0.2832	0.036
Other								
Accept/Verification	10,000						0.1844	0.1844
Sort to P. O. Boxes:								
DPS	628	2,341	\$25.445	1.0868	1.368	-0.0456	1.4412	0.0905
Non-DPS	337	1,171	\$25.445	2.1735	1.368	-0.0913	2.8824	0.0972
% DPS	65.06%							

Figures in Columns [1], [2], [3], and [5] are reported in subsequent pages in this Appendix.

Column [4] = 1/Column [2] page 43 * Column [3] page 42

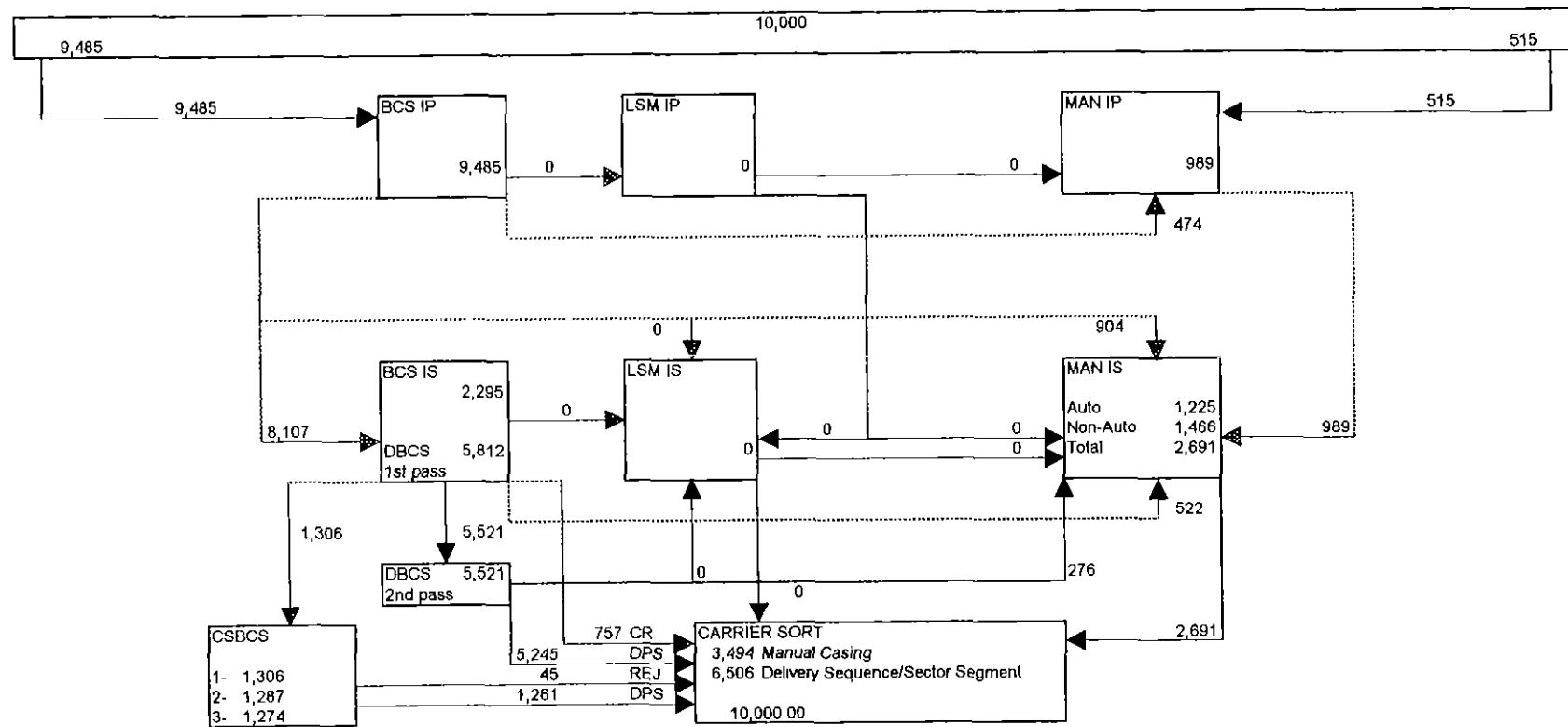
Column [6] = Column [4] * (premium pay factor page 42 - 1)

Column [7] = (Column [4] * Column [5] page 42) + Column [6]

Column [8] = Column [7] * Column [1] mail flow / 10,000

MODEL COST	3.70
PROPORTIONAL ADJ. Exhibit USPS-29	1.06
FIXED ADJUSTMENT Exhibit USPS-29A	0.77
TOTAL UNIT COST	4.72

Standard (A) Regular Automation 3-Digit Letters



Test Year Standard (A) Regular Automation 5-Digit Letters Cost Summary

	[1] Mix of Handlings	[2] Pieces per Hour	[3] Wage Rate	[4] Direct Labor Cents/Piece	[5] Piggyback Factor	[6] Premium Pay Adj.	[7] Operation Unit Cost	[8] Modeled Unit Cost
Incoming Secondary								
Manual MODs Sites	840	646	\$25.445	3.9389	1.3720	-0.1654	5.2387	0.4403
Manual Non-Auto Sites	1,466	1,143	\$25.445	2.2261	1.3720	-0.0935	2.9607	0.4341
MPBCS	2,416	6,633	\$25.445	0.3836	1.7190	-0.0161	0.6433	0.1554
DBCS First-Pass	6,118	7,467	\$25.445	0.3408	2.4340	-0.0143	0.8151	0.4987
DBCS Second-Pass	5,812	7,467	\$25.445	0.3408	2.4340	-0.0143	0.8151	0.4737
CSBCS First-Pass	1,375	17,124	\$25.445	0.1486	1.9480	-0.0062	0.2832	0.0389
CSBCS Second-Pass	1,354	17,124	\$25.445	0.1486	1.9480	-0.0062	0.2832	0.0384
CSBCS Third-Pass	1,341	17,124	\$25.445	0.1486	1.9480	-0.0062	0.2832	0.0380
Other								
Accept./Verification	10,000						0.1844	0.1844
<i>Sort to P. O. Boxes:</i>								
DPS	661	2,341	\$25.445	1.0868	1.368	-0.0456	1.4412	0.0953
Non-DPS	304	1,171	\$25.445	2.1735	1.368	-0.0913	2.8824	0.0877
% DPS	68.48%							

Figures in Columns [1], [2], [3], and [5] are reported in subsequent pages in this Appendix.

Column [4] = 1/Column [2] page 43 * Column [3] page 42

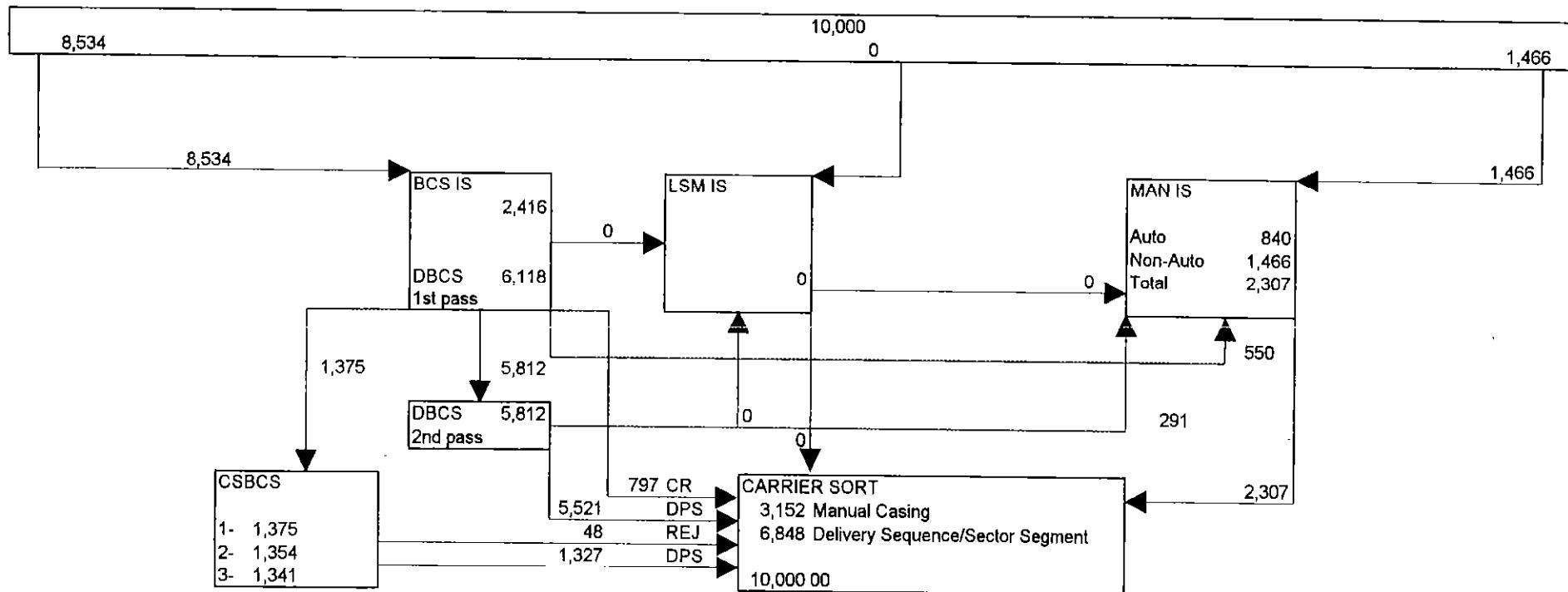
Column [6] = Column [4] * (premium pay factor page 42 - 1)

Column [7] = (Column [4] * Column [5] page 42) + Column [6]

Column [8] = Column [7] * Column [1] mail flow / 10,000

MODEL COST	2.4849
PROPORTIONAL ADJ. <small>Exhibit USPS-29A</small>	1.0661
FIXED ADJUSTMENT <small>Exhibit USPS-29A</small>	0.7737
TOTAL UNIT COST	3.4227

Standard (A) Regular Automation 5-Digit Letters



Test Year Standard (A) Regular Automation 5-D 100% DBCS Letters Cost Summary

	[1] Mix of Handlings	[2] Pieces per Hour	[3] Wage Rate	[4] Direct Labor Cents/Piece	[5] Piggyback Factor	[6] Premium Pay Adj.	[7] Operation Unit Cost	[8] Model Unit Co
Incoming Secondary								
Manual MODs Sites	975	646	\$25.445	3.9389	1.3720	-0.1654	5.2387	0.5
Manual Non-Auto Sites	0	1,143	\$25.445	2.2261	1.3720	-0.0935	2.9607	0.0
MPBCS	0	6,633	\$25.445	0.3836	1.7190	-0.0161	0.6433	0.0
DBCS First-Pass	10,000	7,467	\$25.445	0.3408	2.4340	-0.0143	0.8151	0.8
DBCS Second-Pass	9,500	7,467	\$25.445	0.3408	2.4340	-0.0143	0.8151	0.7
CSBCS First-Pass	0	17,124	\$25.445	0.1486	1.9430	-0.0062	0.2832	0.0
CSBCS Second-Pass	0	17,124	\$25.445	0.1486	1.9430	-0.0062	0.2832	0.0
CSBCS Third-Pass	0	17,124	\$25.445	0.1486	1.9430	-0.0062	0.2832	0.0
Other								
Accept./Verification	10,000						0.1844	0.18
Sort to P. O. Boxes:								
DPS	871	2,341	\$25.445	1.0868	1.368	-0.0456	1.4412	0.12
Non-DPS	94	1,171	\$25.445	2.1735	1.368	-0.0913	2.8824	0.02

Figures in Column [1], [2], [3], and [5] are reported in subsequent pages in this Appendix.

Column [4] = 1/Column [2] page 43 * Column [3] page 42

Column [6] = Column [4] * (premium pay factor page 42 - 1)

Column [7] = (Column [4] * Column [5] page 42) + Column [6]

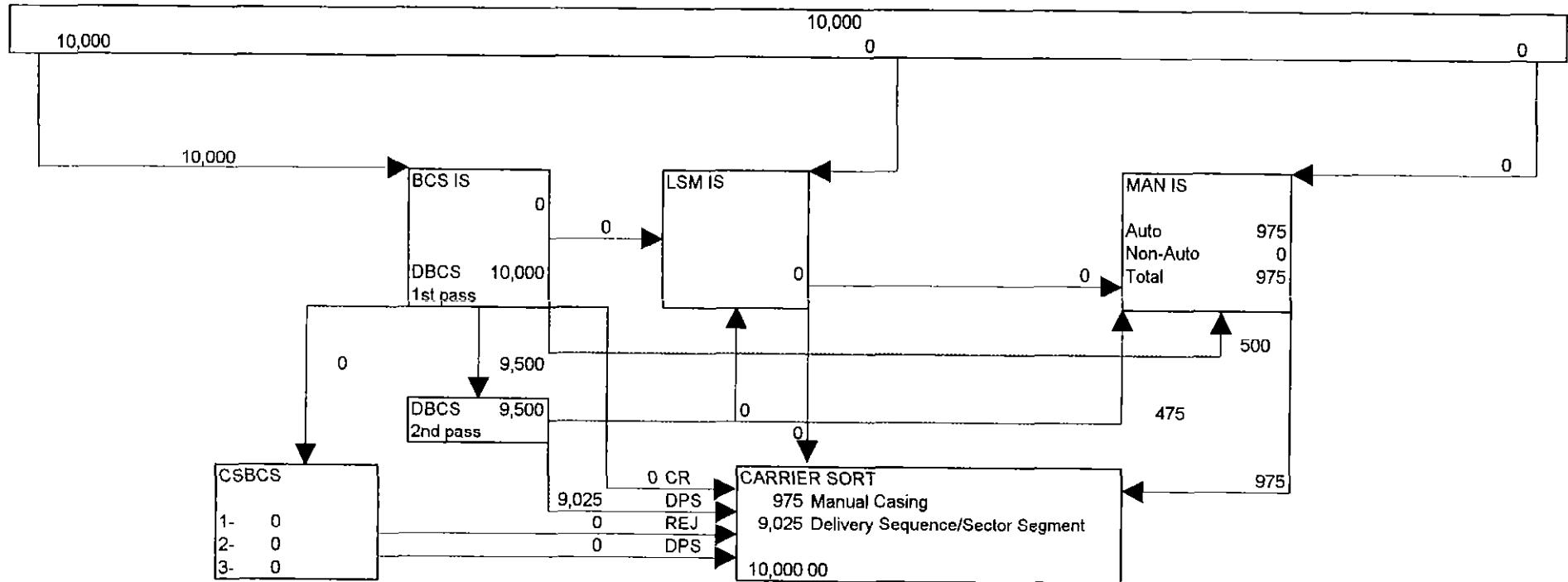
Column [8] = Column [7] * Column [1] mail flow / 10,000

MODEL COST	2.43
PROPORTIONAL ADJ. <small>Exhibit USPS-29A</small>	1.06
FIXED ADJUSTMENT <small>Exhibit USPS-29A</small>	0.77
TOTAL UNIT COST	3.37

* This cost summary describes the cost of processing ECR Basic letters projected to qualify for and migrate to the Regular Automation 5-Digit category. All such migrating letters will destinate at sites with DBCSs, because Automation ECR Basic is available at all other sites. An adjustment to account for the ECR Basic letter dropship profile is performed in Exhibit USPS-29D. The cost of delivering DPS letters and non-DPS letters is reweighted below to reflect the higher percentage of DPS sortation.

	Percent	Cost in Cents
DPS	90.25%	3.177
Non-DPS	9.75%	4.606
Total Delivery Costs	100.00%	3.316

Standard (A) Regular Automation 5-D 100% DBCS Letters



Test Year Standard (A) Regular Automation ECR Letters Cost Summary

	[1] Mix of Handlings	[2] Pieces per Hour	[3] Wage Rate	[4] Direct Labor Cents/Piece	[5] Piggyback Factor	[6] Premium Pay Adj.	[7] Operation Unit Cost	[8] Modeled Unit Cos
<u>Incoming Secondary</u>								
CSBCS First-Pass	5,012	17,124	\$25.445	0.1486	1.9480	-0.0061	0.2834	0.14
CSBCS Second-Pass	4,936	17,124	\$25.445	0.1486	1.9480	-0.0061	0.2834	0.139
CSBCS Third-Pass	4,887	17,124	\$25.445	0.1486	1.9480	-0.0061	0.2834	0.138
<u>Other</u>								
Sort to P. O. Boxes:								
DPS	82	2,341	\$25.445	1.0868	1.3660	-0.0446	-1.4399	-0.011
Non-DPS	0	1,171	\$25.445	2.1735	1.3660	-0.0891	2.8799	0.000
% DPS	48.38%							

Figures in Column [1], [2], [3], and [5] are reported in subsequent pages in this Appendix.

Column [4] = 1/Column [2] page 43 * Column [3] page 42

MODEL COST

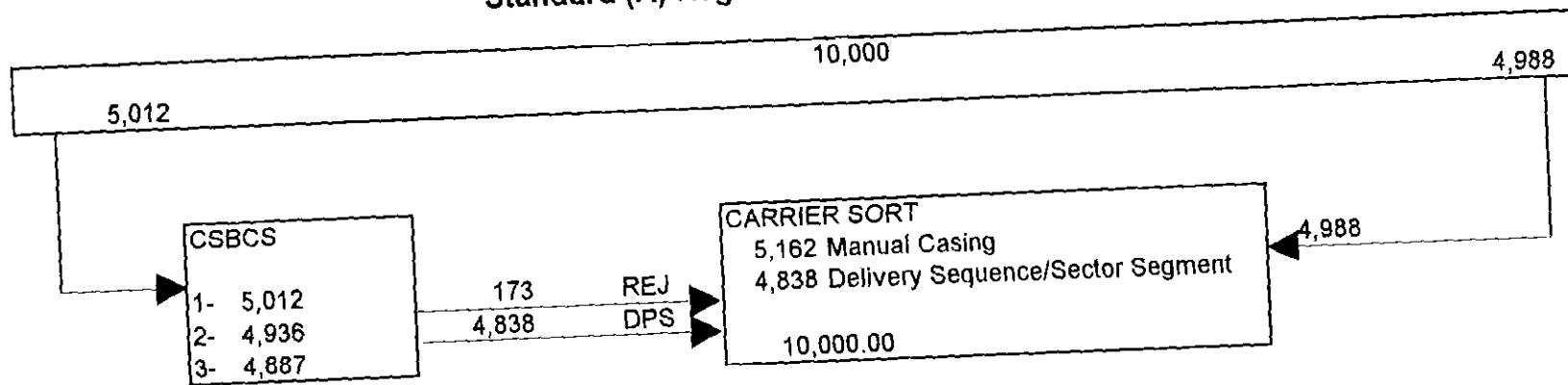
0.408

Column [6] = Column [4] * (premium pay factor page 42 - 1)

Column [7] = (Column [4] * Column [5] page 42) + Column [6]

Column [8] = Column [7] * Column [1] mail flow / 10,000

Standard (A) Regular Automation ECR Letters



Test Year Standard (A) Regular Upgradable Tray Basic Letters Cost Summary

	[1] Mix of Handlings	[2] Pieces per Hour	[3] Wage Rate	[4] Direct Labor Cents/Piece	[5] Piggyback Factor	[6] Premium Pay Adj.	[7] Operation Unit Cost	[8] Modeled Unit Cost
<u>Outgoing Primary</u>								
Manual	152	812	\$25.445	3.1336	1.3720	-0.1316	4.1677	0.0633
MLOCR	4,479	7,350	\$25.445	0.3462	2.0950	-0.0145	0.7107	0.3183
RBCS Images Processed	2,016	816	\$14.919	1.8293	1.4500	-0.0768	1.7525	0.3533
LMLM	144	4,985	\$25.445	0.5104	1.4500	-0.0214	0.7187	0.0104
BCS-OSS	1,969	11,984	\$25.445	0.2123	1.7190	-0.0089	0.3561	0.0701
MPBCS	215	8,393	\$25.445	0.3032	1.7190	-0.0127	0.5084	0.0109
<u>Outgoing Secondary</u>								
Manual	71	691	\$25.445	3.6823	1.3720	-0.1547	4.8975	0.0346
MPBCS	956	8,393	\$25.445	0.3032	1.7190	-0.0127	0.5084	0.0486
<u>AADC Distribution</u>								
Manual	280	759	\$25.445	3.3524	1.3720	-0.1408	4.4587	0.1248
MLOCR	4,554	7,350	\$25.445	0.3462	2.0950	-0.0145	0.7107	0.3237
RBCS Images Processed	2,050	816	\$14.919	1.8293	1.4500	-0.0768	1.7525	0.3593
LMLM	146	4,985	\$25.445	0.5104	1.4500	-0.0214	0.7187	0.0105
BCS-OSS	2,002	11,984	\$25.445	0.2123	1.7190	-0.0089	0.3561	0.0713
MPBCS	1,031	8,393	\$25.445	0.3032	1.7190	-0.0127	0.5084	0.0524
<u>SCF Operations</u>								
Manual	476	896	\$25.445	2.8398	1.3720	-0.1193	3.7770	0.1798
MLOCR	1,093	7,350	\$25.445	0.3462	2.0950	-0.0145	0.7107	0.0777
RBCS Images Processed	434	816	\$14.919	1.8293	1.4500	-0.0768	1.7525	0.0761
LMLM	31	4,985	\$25.445	0.5104	1.4500	-0.0214	0.7187	0.0022
BCS-OSS	424	11,984	\$25.445	0.2123	1.7190	-0.0089	0.3561	0.0151
MPBCS	1,838	8,393	\$25.445	0.3032	1.7190	-0.0127	0.5084	0.0934
<u>Incoming Primary</u>								
Manual	262	562	\$25.445	4.5276	1.3720	-0.1902	6.0217	0.1576
MLOCR	0	7,350	\$25.445	0.3462	2.0950	-0.0145	0.7107	0.0000
RBCS Images Processed	0	816	\$14.919	1.8293	1.4500	-0.0768	1.7525	0.0000
LMLM	0	4,985	\$25.445	0.5104	1.4500	-0.0214	0.7187	0.0000
BCS-OSS	0	11,984	\$25.445	0.2123	1.7190	-0.0089	0.3561	0.0000
MPBCS	1,314	8,393	\$25.445	0.3032	1.7190	-0.0127	0.5084	0.0668
<u>Incoming Secondary</u>								
Manual MODs Sites	1,775	646	\$25.445	3.9389	1.3720	-0.1654	5.2387	0.9300
Manual Non-Auto Sites	1,469	1,143	\$25.445	2.2261	1.3720	-0.0935	2.9607	0.4350
MPBCS	2,122	6,633	\$25.445	0.3836	1.7190	-0.0161	0.6433	0.1365
DBCS First-Pass	5,372	7,467	\$25.445	0.3408	2.4340	-0.0143	0.8151	0.4379
DBCS Second-Pass	5,103	7,467	\$25.445	0.3408	2.4340	-0.0143	0.8151	0.4160
CSBCS First-Pass	1,207	17,124	\$25.445	0.1486	1.9480	-0.0062	0.2832	0.0342
CSBCS Second-Pass	1,189	17,124	\$25.445	0.1486	1.9480	-0.0062	0.2832	0.0337
CSBCS Third-Pass	1,177	17,124	\$25.445	0.1486	1.9480	-0.0062	0.2832	0.0333
<u>Other</u>								
Acceptance/Verification	10,000						0.1844	0.1844
<u>Sort to P. O. Boxes:</u>								
DPS	580	2,341	\$25.445	1.0868	1.3660	-0.0456	1.4389	0.0835
Non-DPS	385	1,171	\$25.445	2.1735	1.3660	-0.0913	2.8777	0.1107
%DPS		60.14%						

Figures in Columns [1], [2], [3], and [5] are reported in subsequent pages in this Appendix.

Column [4] = 1/Column [2] page 43 * Column [3] page 42

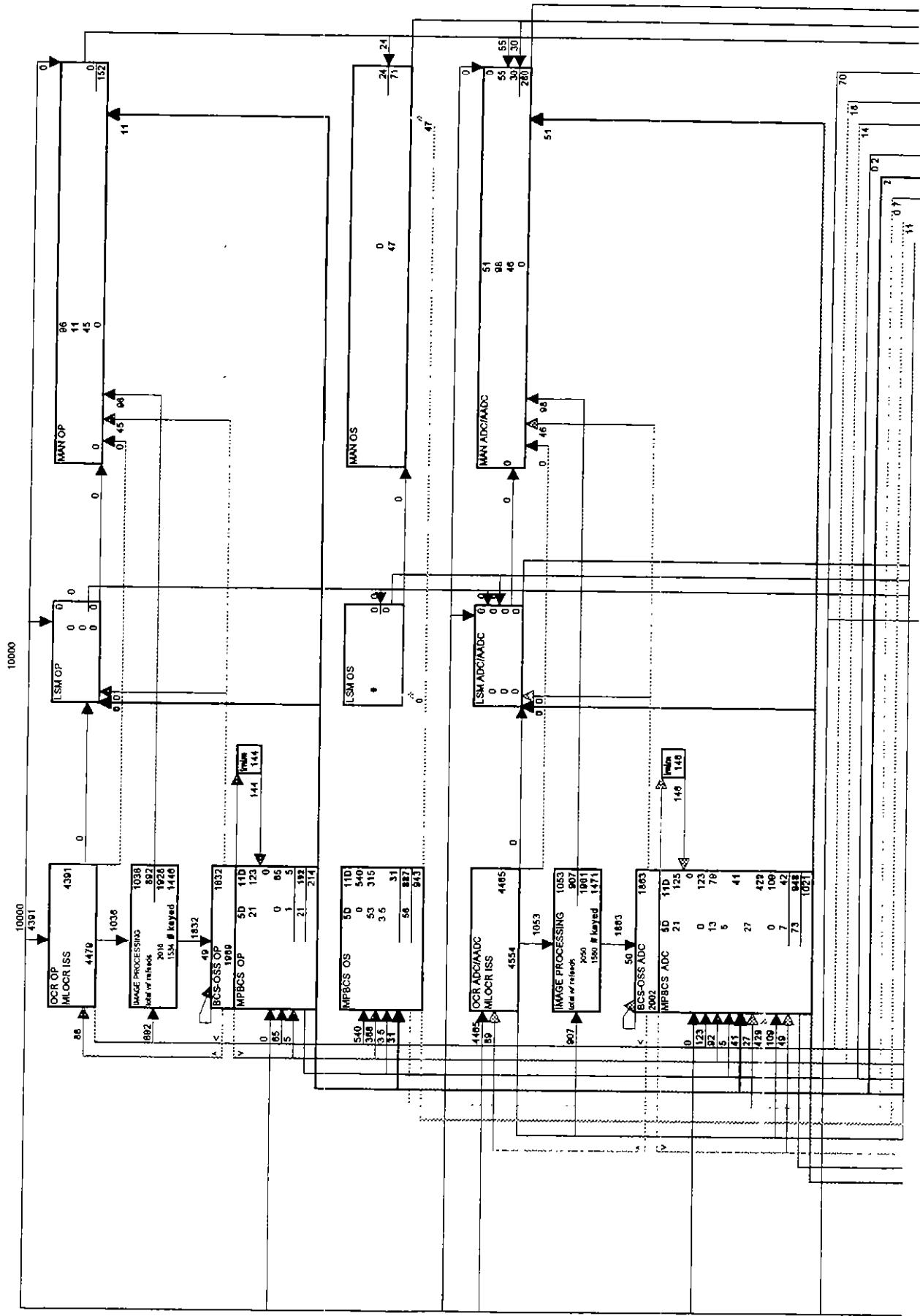
Column [6] = Column [4] * (premium pay factor page 42 - 1)

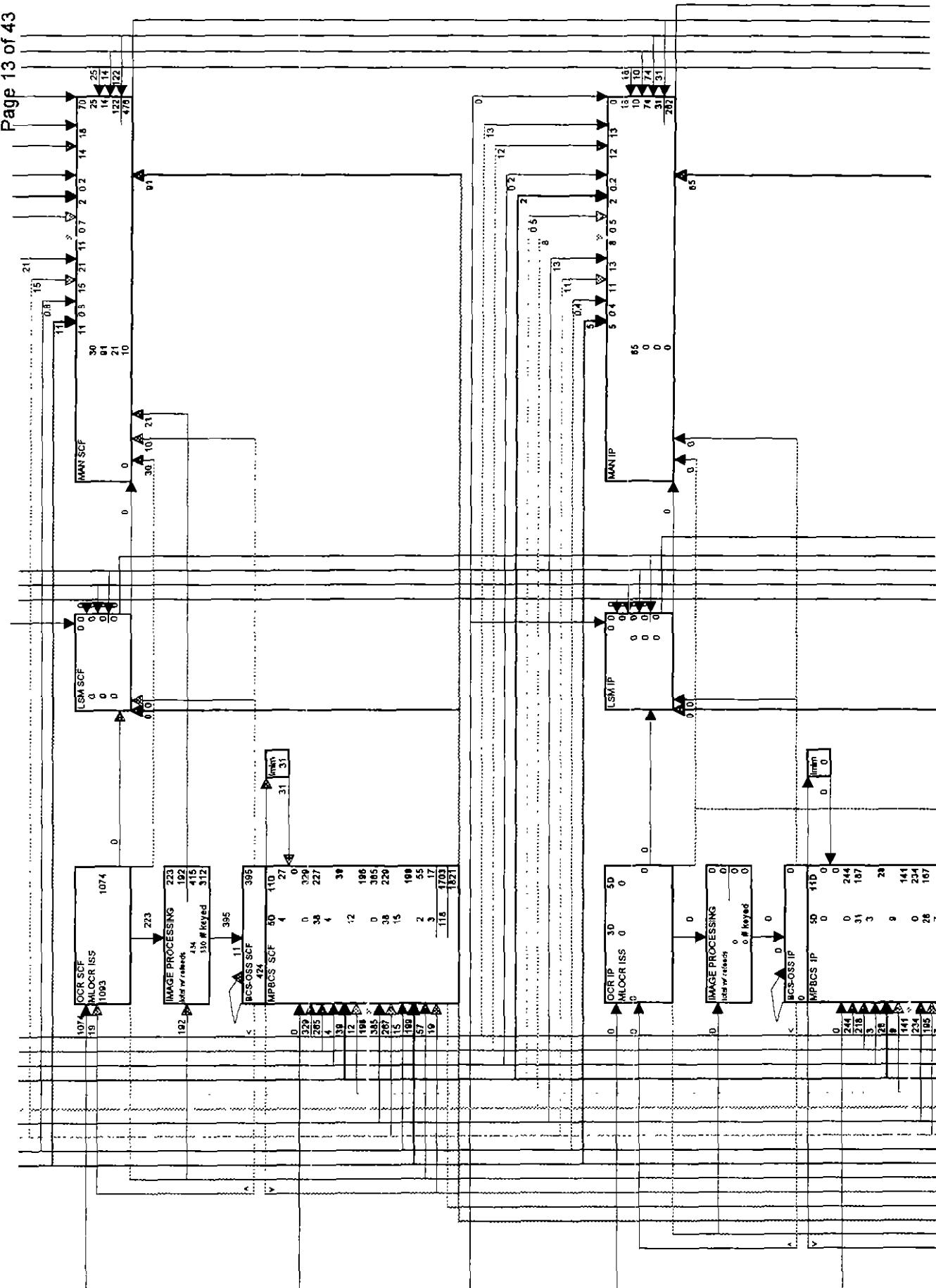
Column [7] = (Column [4] * Column [5] page 42) + Column [6]

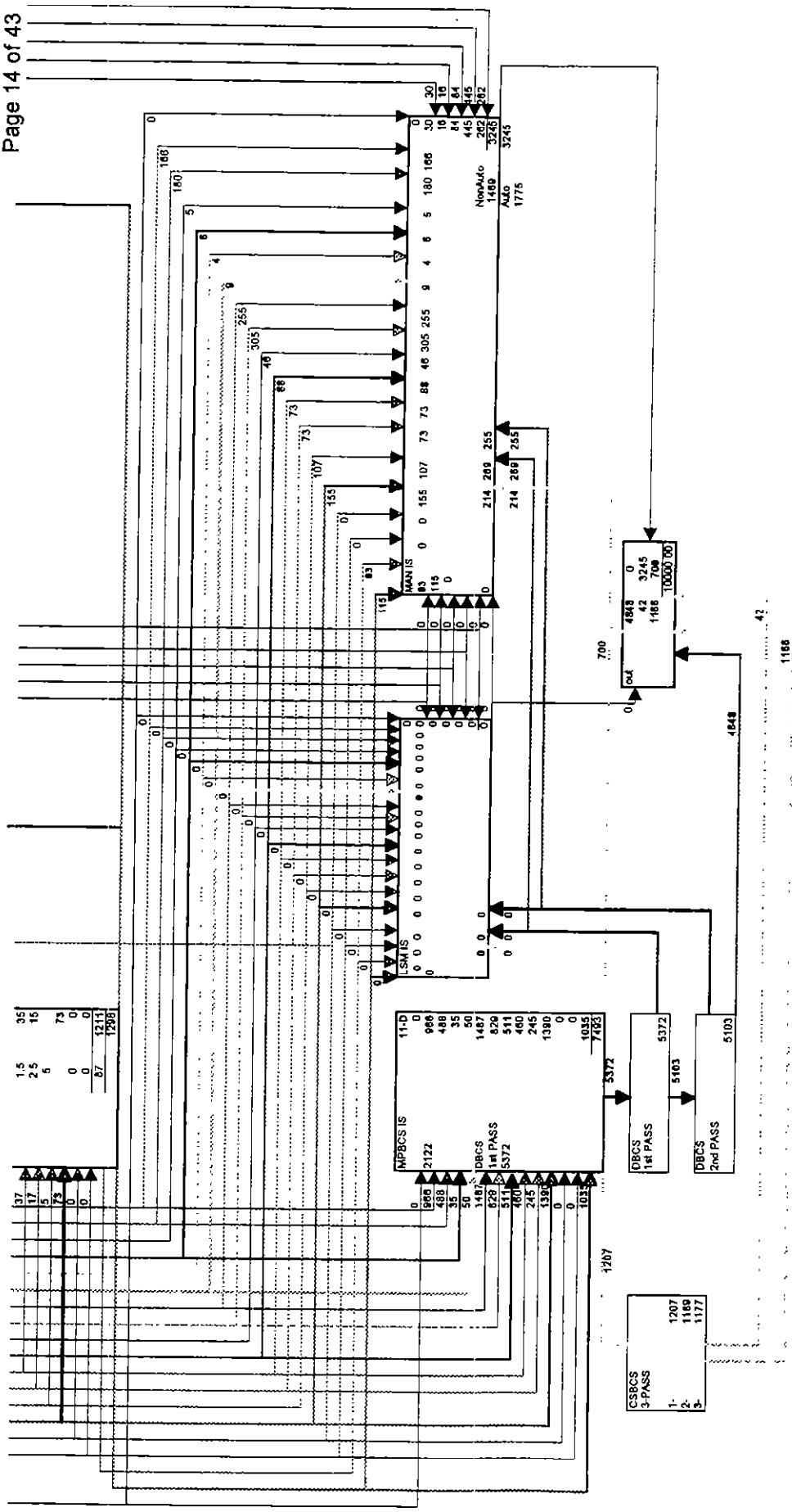
Column [8] = Column [7] * Column [1] mail flow / 10,000

MODEL COST	5.3554
PROPORTIONAL ADJ. Exhibit USPS-28A	1.0661
FIXED ADJUSTMENT Exhibit USPS-29A	0.7737
TOTAL UNIT COST	6.4829

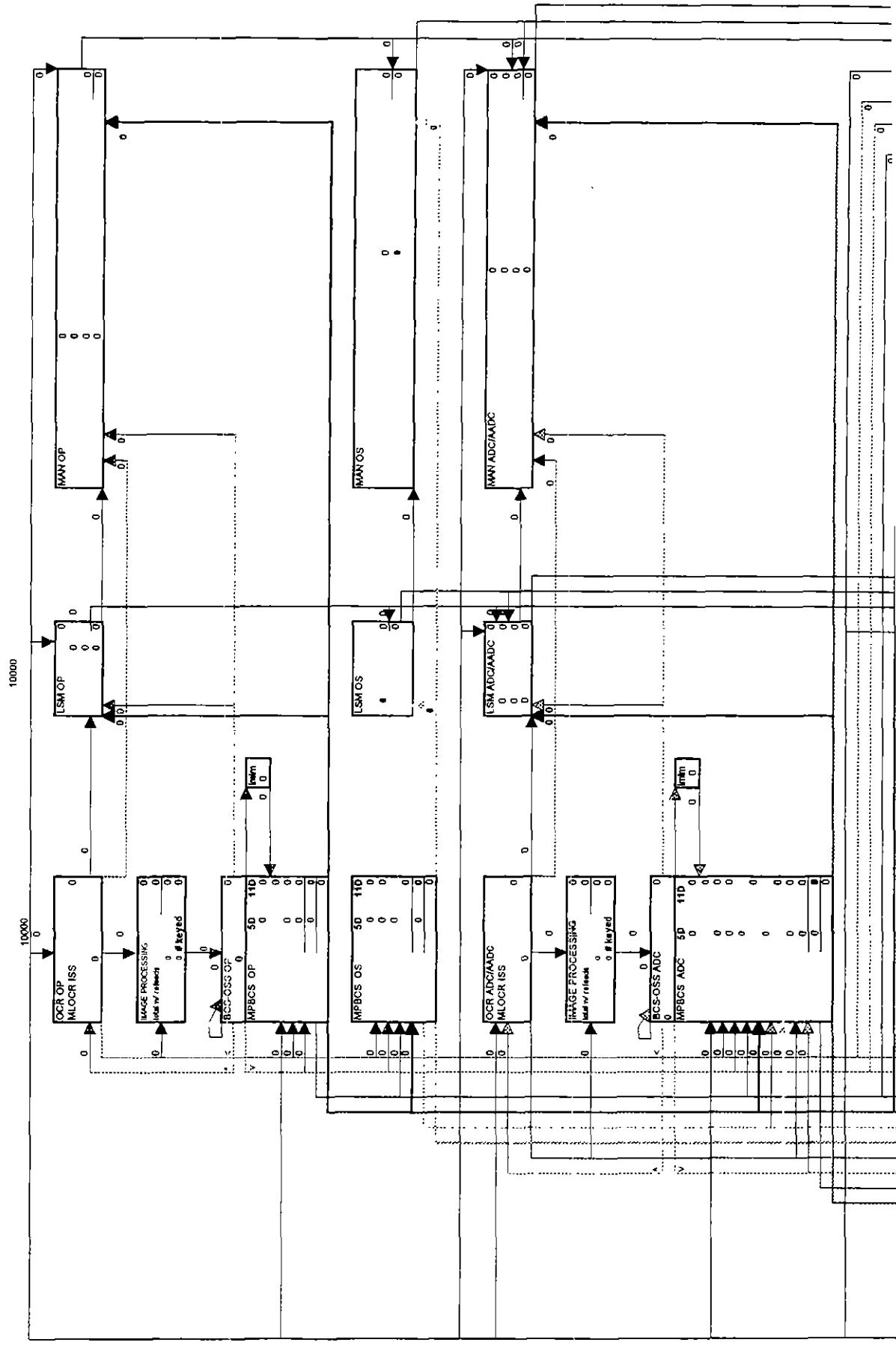
Standard (A) Regular Upgradable Tray Basic Letters

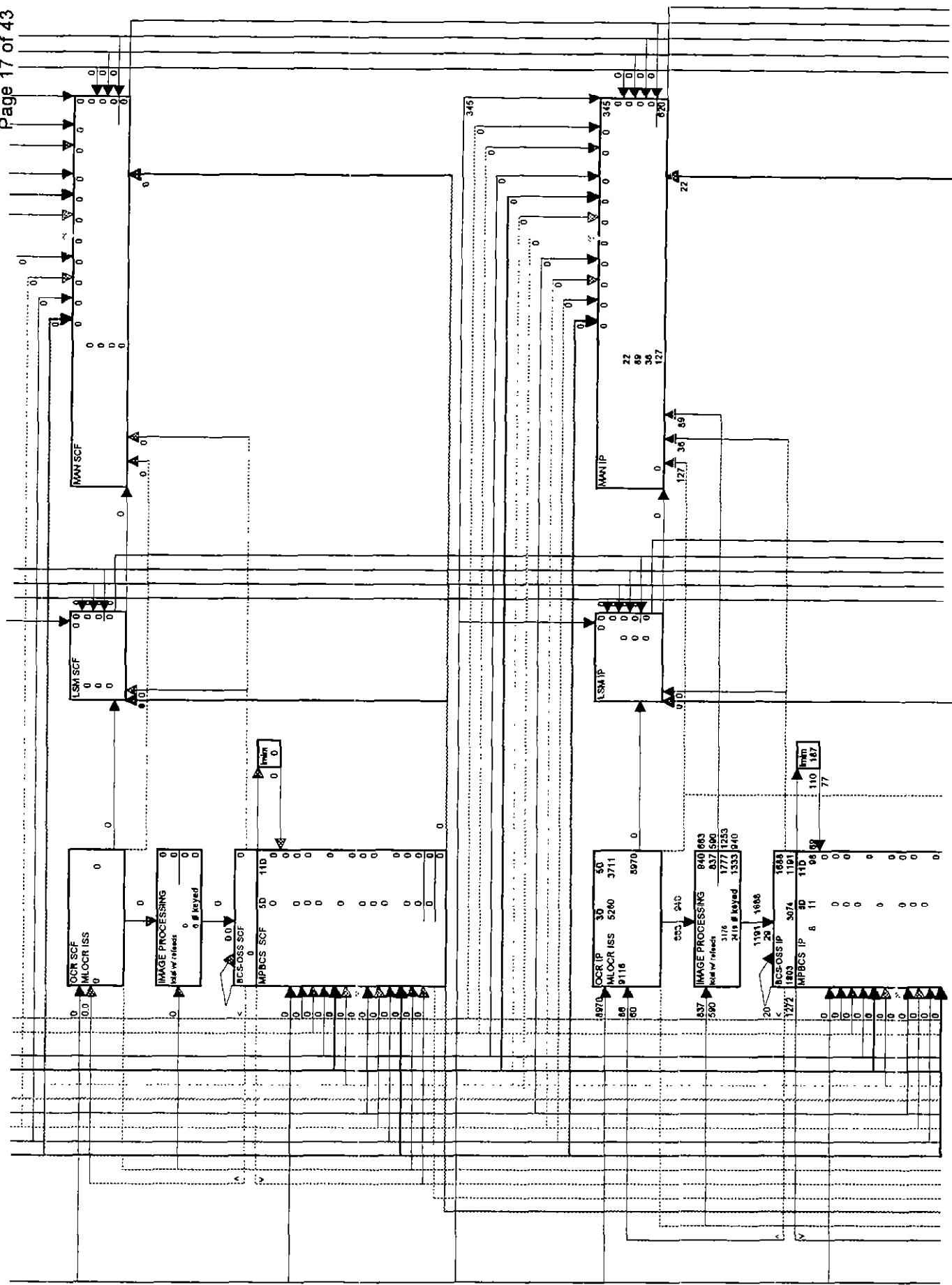


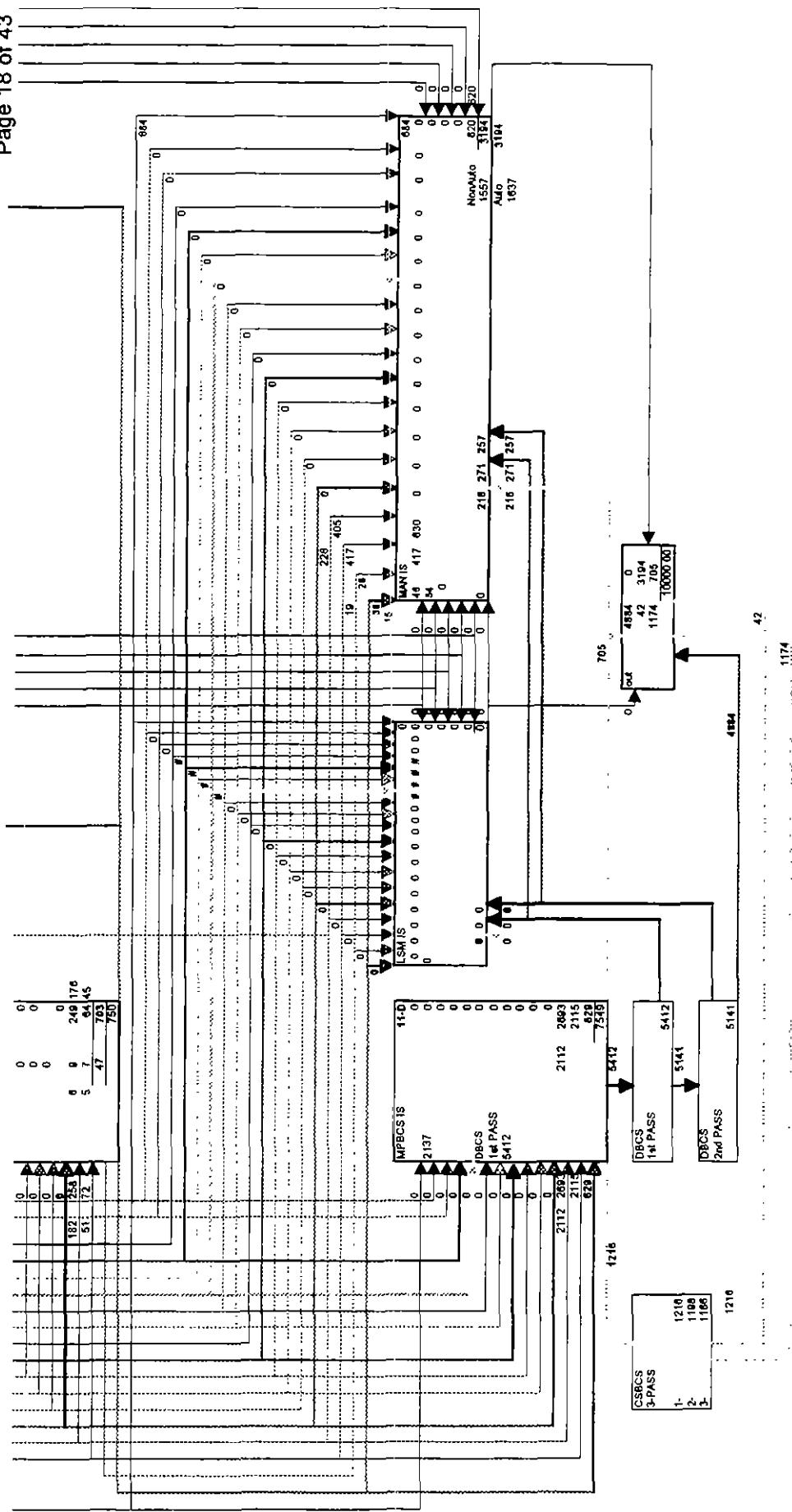




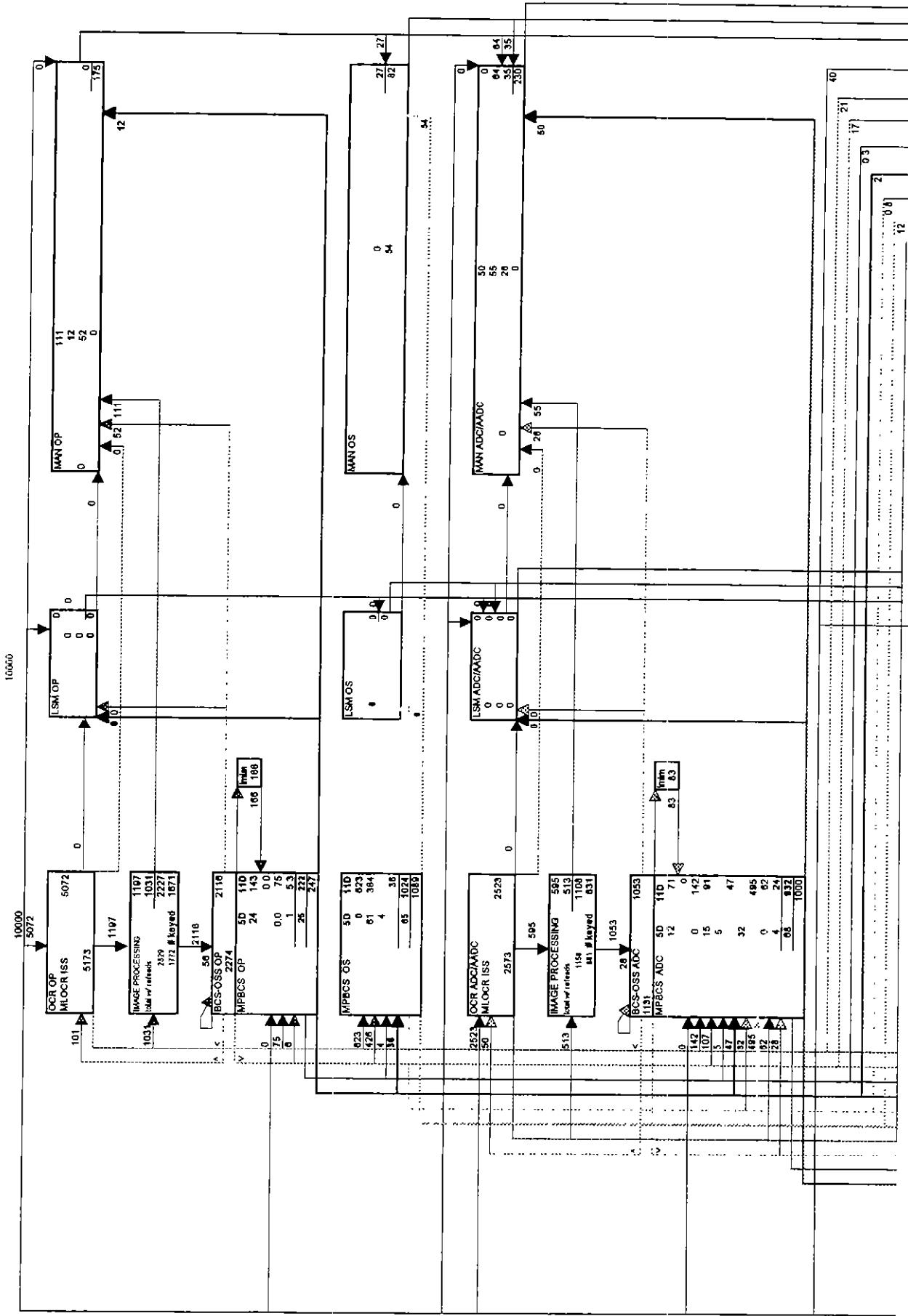
Standard (A) Regular Upgradable Tray 3/5-Digit Presort Letters

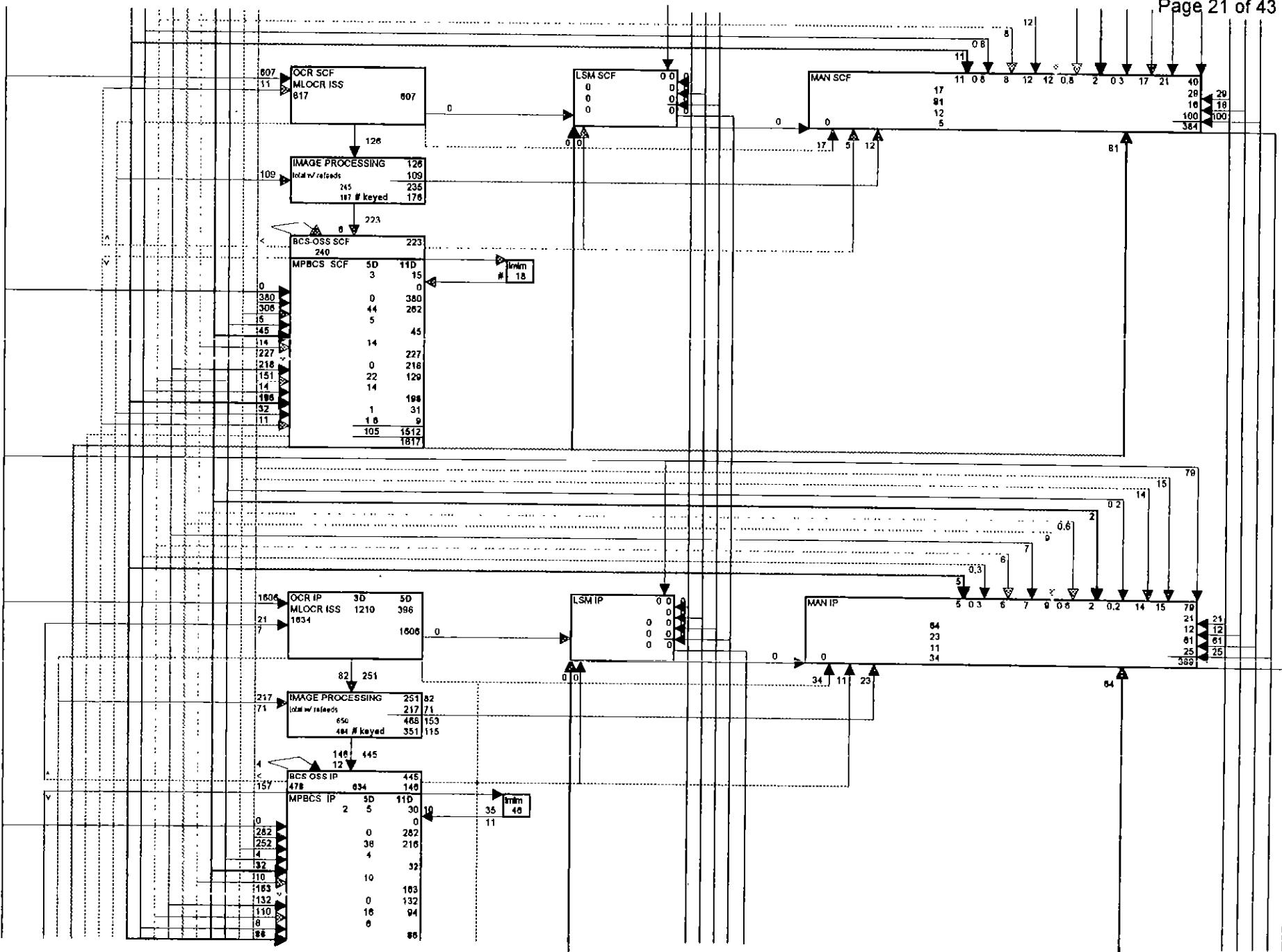


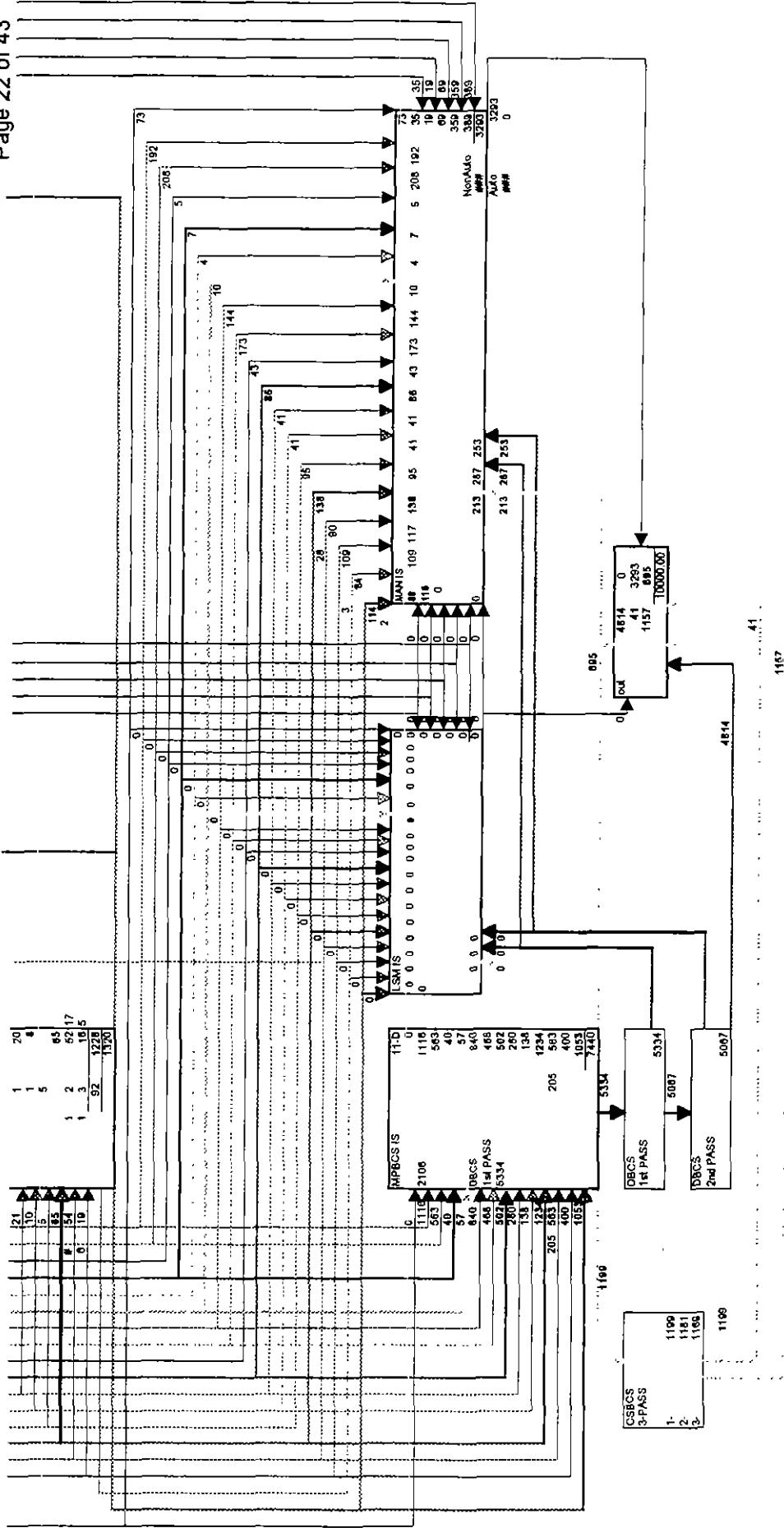




Standard (A) Regular Upgradable Package in "Non-OCR Upgradable" Trays, Basic Letters







Test Year Standard (A) Regular Upgradable Packages in "Non-OCR Upgradable" Trays, 3/5 Presort Letters Cost Summary

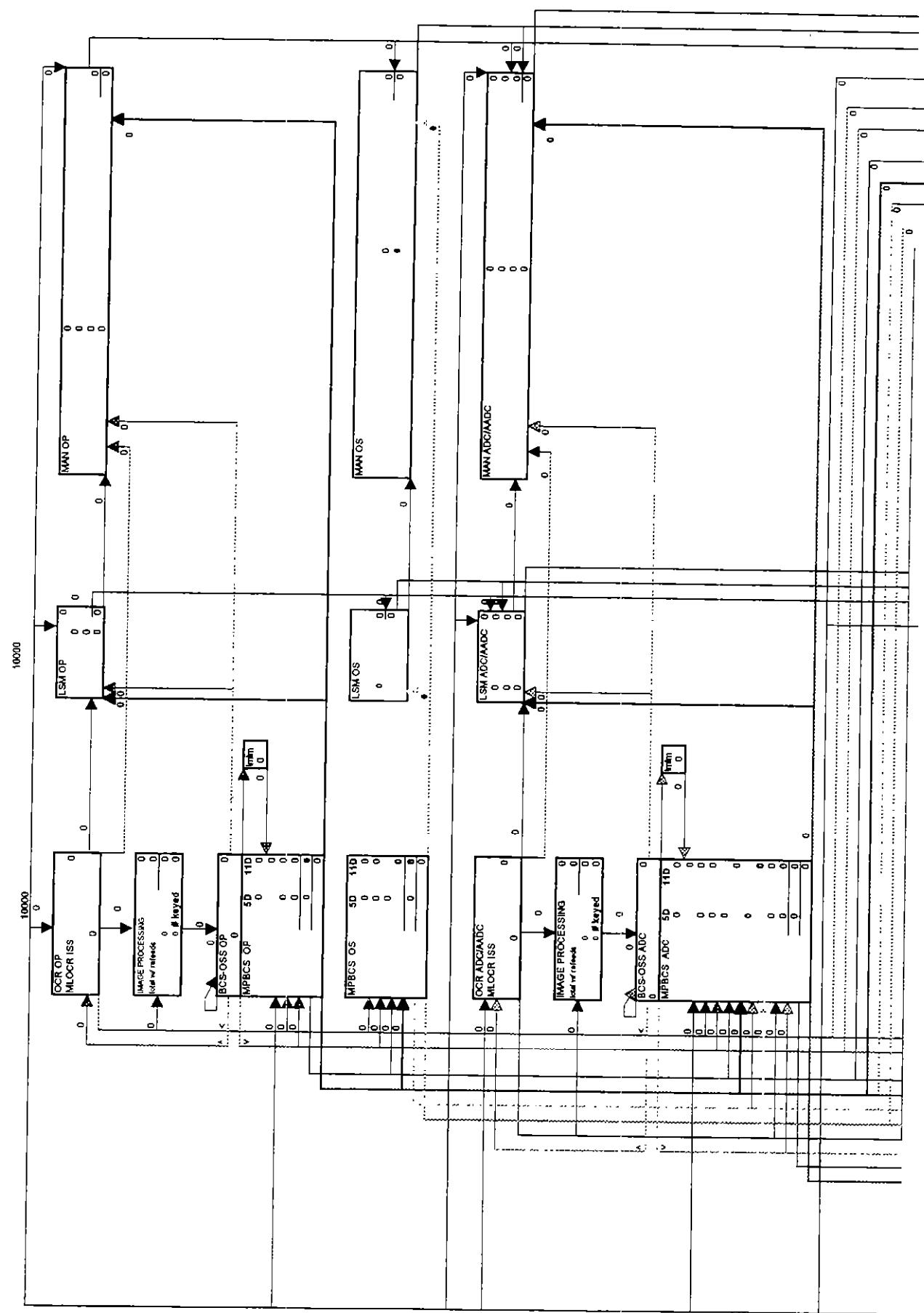
	[1] Mix of Handlings	[2] Pieces per Hour	[3] Wage Rate	[4] Direct Labor Cents/Piece	[5] Piggyback Factor	[6] Premium Pay Adj	[7] Operation Unit Cost	[8] Modeled Unit Cost
Outgoing Primary								
Manual	0	812	\$25.445	3.1336	1.3720	-0.1316	4.1677	0.0000
MLOCR	0	7,350	\$25.445	0.3462	2.0950	-0.0145	0.7107	0.0000
RBCS Images Processed	0	816	\$14.919	1.8293	1.4500	-0.0768	1.7525	0.0000
LMLM	0	4,985	\$25.445	0.5104	1.4500	-0.0214	0.7187	0.0000
BCS-OSS	0	11,984	\$25.445	0.2123	1.7190	-0.0089	0.3561	0.0000
MPBCS	0	8,393	\$25.445	0.3032	1.7190	-0.0127	0.5084	0.0000
Outgoing Secondary								
Manual	0	691	\$25.445	3.6823	1.3720	-0.1547	4.8975	0.0000
MPBCS	0	8,393	\$25.445	0.3032	1.7190	-0.0127	0.5084	0.0000
ADC Distribution								
Manual	0	759	\$25.445	3.3524	1.3720	-0.1408	4.4587	0.0000
MLOCR	0	7,350	\$25.445	0.3462	2.0950	-0.0145	0.7107	0.0000
RBCS Images Processed	0	816	\$14.919	1.8293	1.4500	-0.0768	1.7525	0.0000
LMLM	0	4,985	\$25.445	0.5104	1.4500	-0.0214	0.7187	0.0000
BCS-OSS	0	11,984	\$25.445	0.2123	1.7190	-0.0089	0.3561	0.0000
MPBCS	0	8,393	\$25.445	0.3032	1.7190	-0.0127	0.5084	0.0000
SCF Operations								
Manual	0	896	\$25.445	2.8398	1.3720	-0.1193	3.7770	0.0000
MLOCR	0	7,350	\$25.445	0.3462	2.0950	-0.0145	0.7107	0.0000
RBCS Images Processed	0	816	\$14.919	1.8293	1.4500	-0.0768	1.7525	0.0000
LMLM	0	4,985	\$25.445	0.5104	1.4500	-0.0214	0.7187	0.0000
BCS-OSS	0	11,984	\$25.445	0.2123	1.7190	-0.0089	0.3561	0.0000
MPBCS	0	8,393	\$25.445	0.3032	1.7190	-0.0127	0.5084	0.0000
Incoming Primary								
Manual	535	562	\$25.445	4.5276	1.3720	-0.1902	6.0217	0.3222
MLOCR	9,043	7,350	\$25.445	0.3462	2.0950	-0.0145	0.7107	0.6427
RBCS Images Processed	3,151	816	\$14.919	1.8293	1.4500	-0.0768	1.7525	0.5522
LMLM	186	4,985	\$25.445	0.5104	1.4500	-0.0214	0.7187	0.0134
BCS-OSS	3,050	11,984	\$25.445	0.2123	1.7190	-0.0089	0.3561	0.1086
MPBCS	753	8,393	\$25.445	0.3032	1.7190	-0.0127	0.5084	0.0383
Incoming Secondary								
Manual MODs Sites	1,637	646	\$25.445	3.9389	1.3720	-0.1654	5.2387	0.8577
Manual Non-Auto Sites	1,557	1,143	\$25.445	2.2261	1.3720	-0.0935	2.9607	0.4610
MPBCS	2,137	6,633	\$25.445	0.3836	1.7190	-0.0161	0.6433	0.1375
DBCS First-Pass	5,412	7,467	\$25.445	0.3408	2.4340	-0.0143	0.8151	0.4411
DBCS Second-Pass	5,141	7,467	\$25.445	0.3408	2.4340	-0.0143	0.8151	0.4191
CSBCS First-Pass	1,216	17,124	\$25.445	0.1486	1.9480	-0.0062	0.2832	0.0344
CSBCS Second-Pass	1,198	17,124	\$25.445	0.1486	1.9480	-0.0062	0.2832	0.0339
CSBCS Third-Pass	1,186	17,124	\$25.445	0.1486	1.9480	-0.0062	0.2832	0.0336
Other								
Acceptance/Verification	10,000						0.1844	0.1844
Sort to P. O. Boxes								
DPS	585	2,341	\$25.445	1.0868	1.3660	-0.0456	1.4389	0.0841
Non-DPS	380	1,171	\$25.445	2.1735	1.3660	-0.0913	2.8777	0.1095
Bundle Sorting Basic	10,000						0.5377	0.5377
%DPS	60.58%							

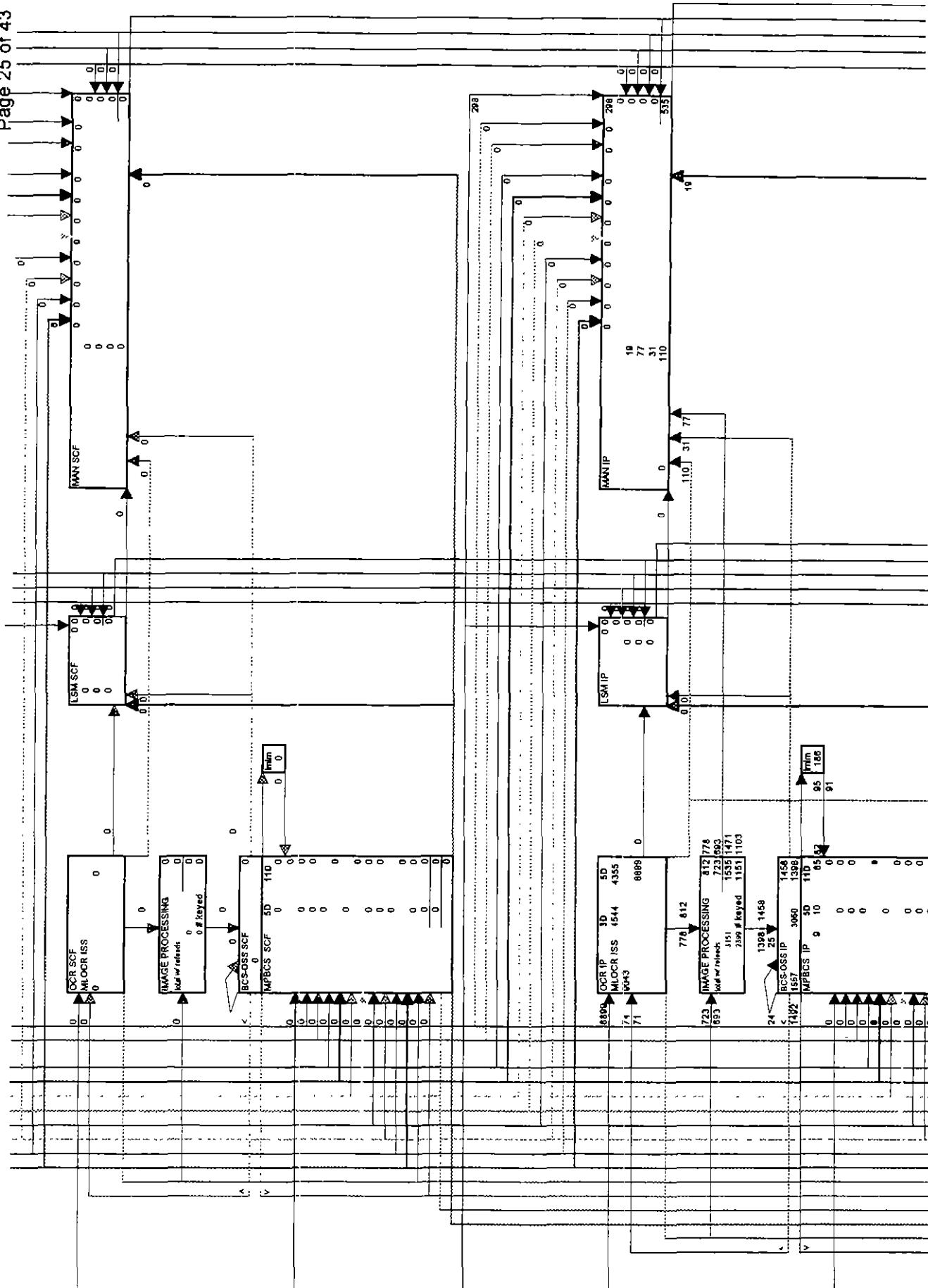
Figures in Columns [1], [2], [3], and [5] are reported in subsequent pages in this Appendix.

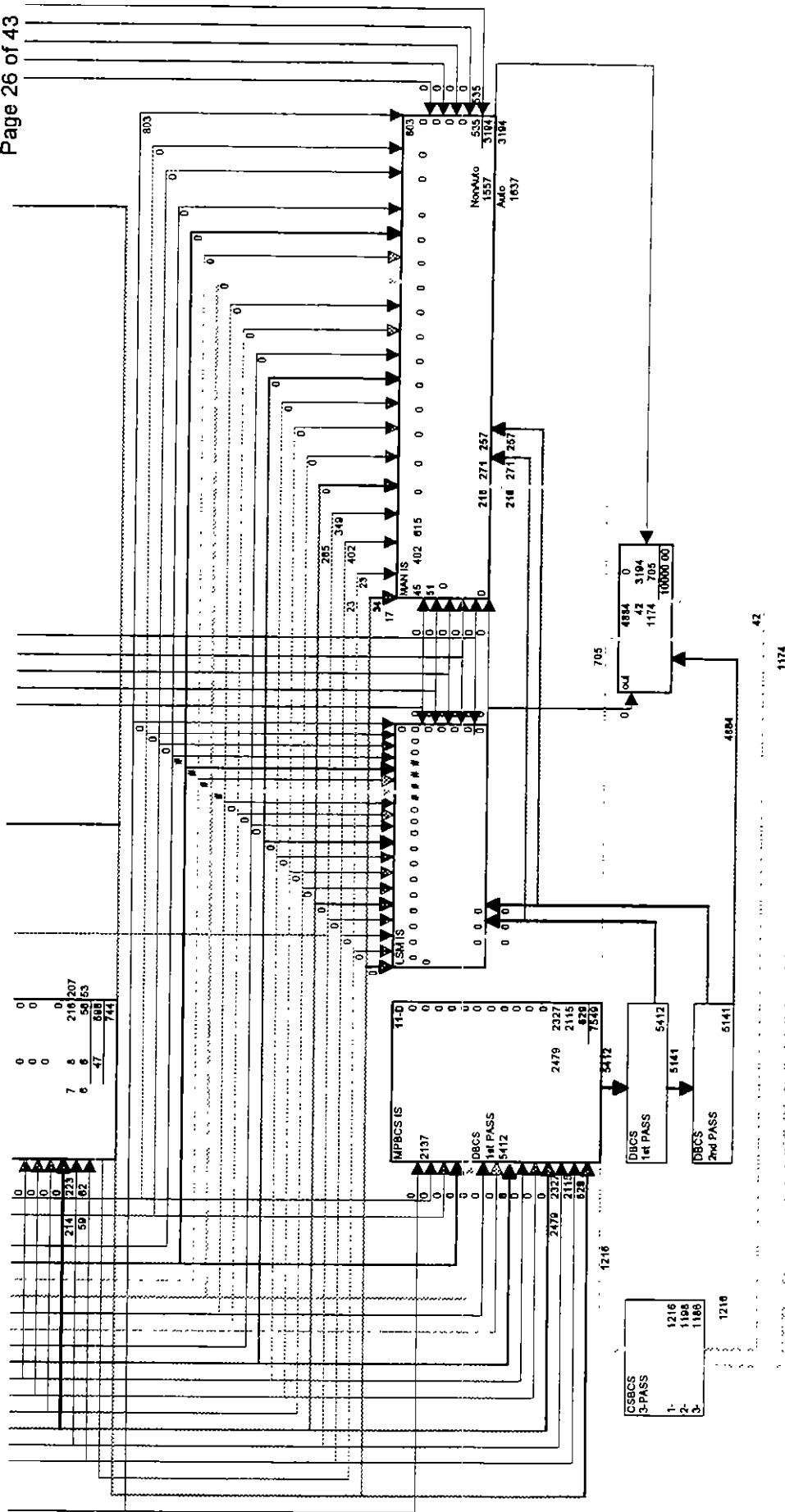
Column [4] = 1/Column [2] ^{page 43} * Column [3] ^{page 42}Column [6] = Column [4] * (premium pay factor ^{page 42} - 1)Column [7] = (Column [4] * Column [5] ^{page 42}) + Column [6]Column [8] = Column [7] * Column [1] ^{mail flow} / 10,000

MODEL COST	5.0115
PROPORTIONAL ADJ. ^{Exhibit USPS-29A}	1.0661
FIXED ADJUSTMENT ^{Exhibit USPS-29A}	0.7737
TOTAL UNIT COST	6.1163

Standard (A) Regular Upgradable Package in "Non-OCR Upgradable" Trays 3/5 Presort Letters







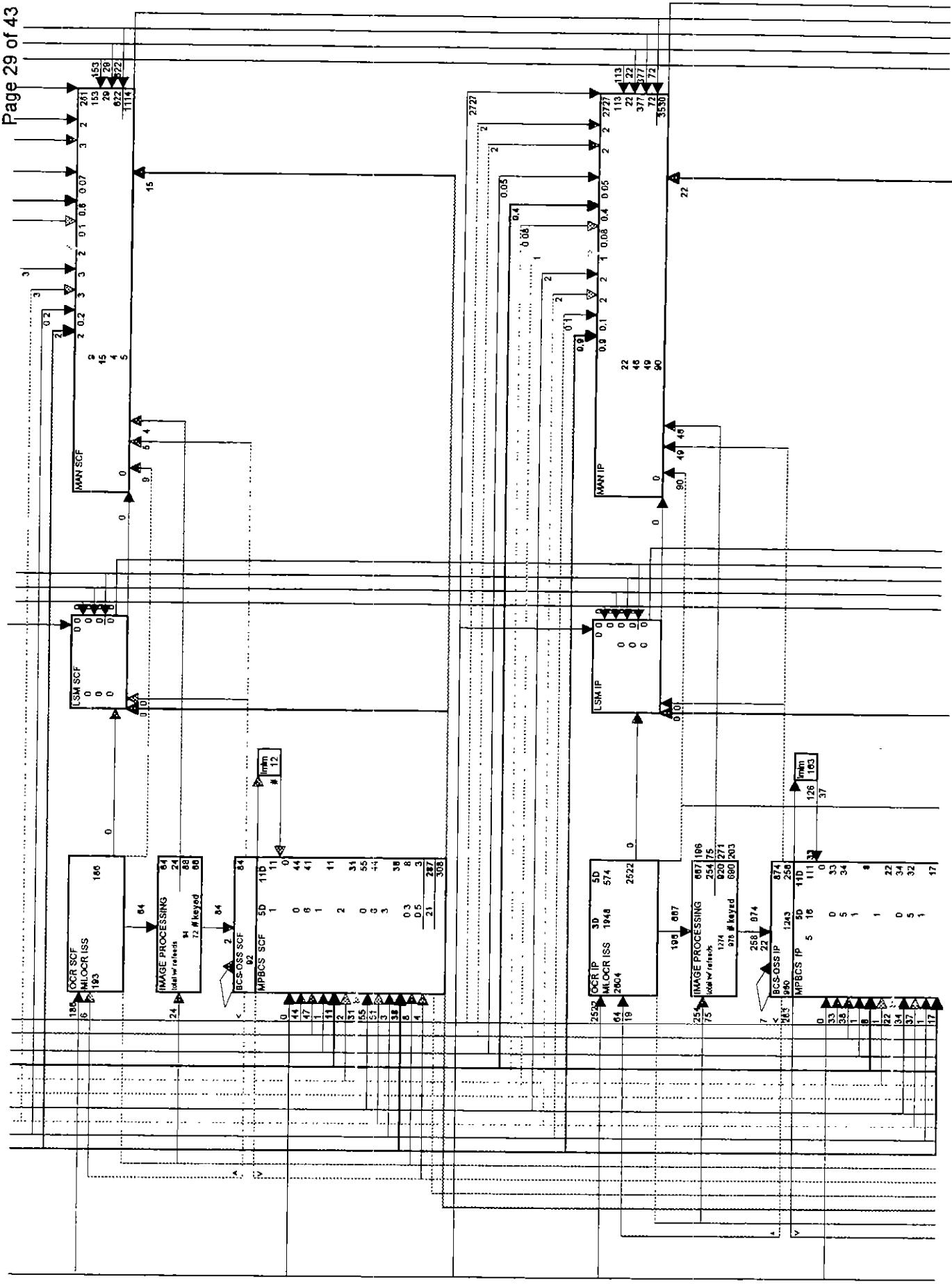
Test Year Standard (A) Regular Non-OCR Basic Letters Cost Summary

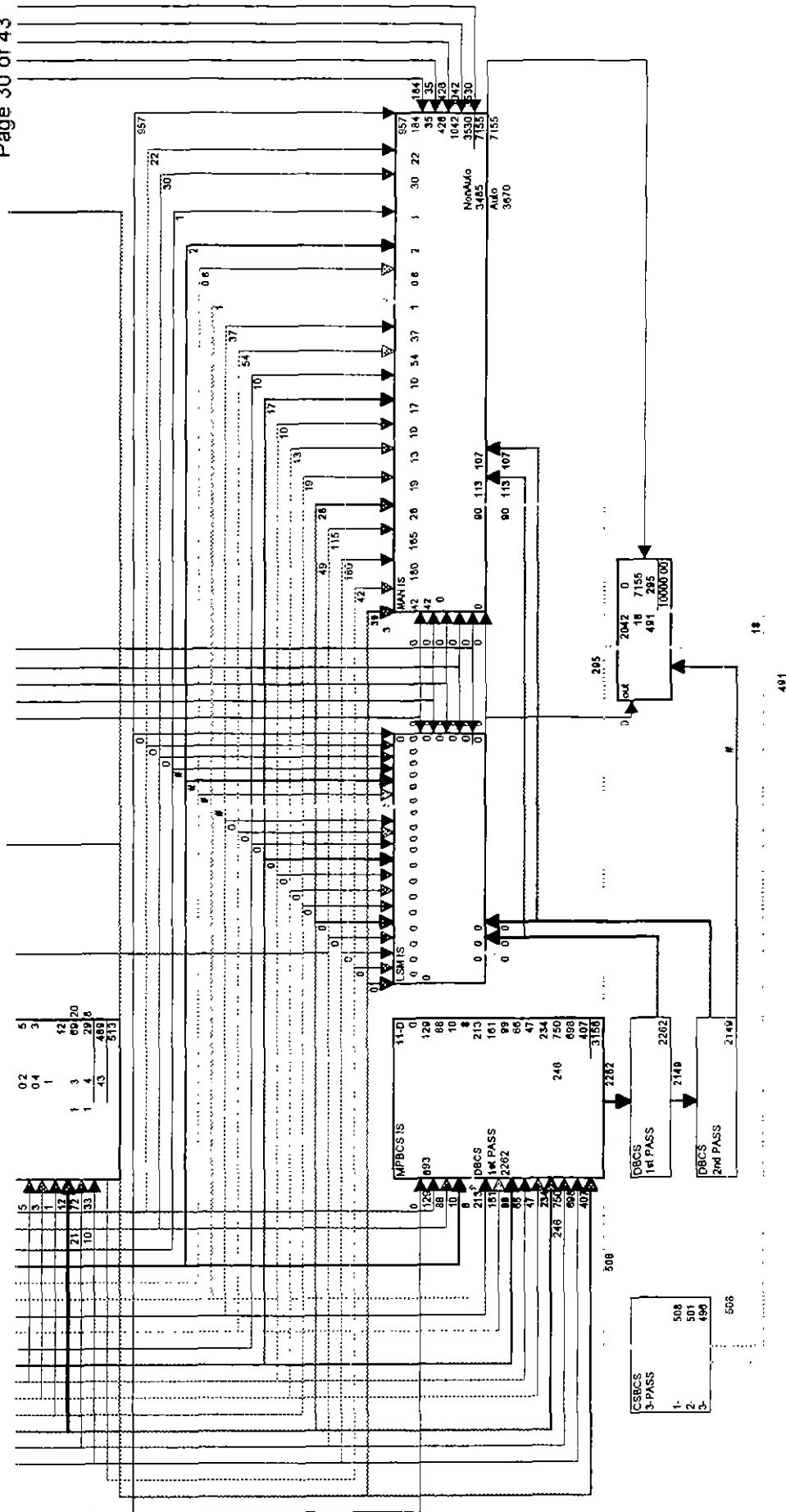
	[1] Mix of Handlings	[2] Pieces per Hour	[3] Wage Rate	[4] Direct Labor Cents/Piece	[5] Piggyback Factor	[6] Premium Pay Adj.	[7] Operation Unit Cost	[8] Modeled Unit Cost
Outgoing Primary								
Manual	932	812	\$25.445	3.1336	1.3720	-0.1316	4.1677	0.3884
MLOCR	737	7,350	\$25.445	0.3462	2.0950	-0.0145	0.7107	0.0524
RBCS Images Processed	407	816	\$14.919	1.8293	1.4500	-0.0768	1.7525	0.0714
LMLM	52	4,985	\$25.445	0.5104	1.4500	-0.0214	0.7187	0.0038
BCS-OSS	398	11,984	\$25.445	0.2123	1.7190	-0.0089	0.3561	0.0142
MPBCS	62	8,393	\$25.445	0.3032	1.7190	-0.0127	0.5084	0.0032
Outgoing Secondary								
Manual	152	691	\$25.445	3.6823	1.3720	-0.1547	4.8975	0.0742
MPBCS	149	8,393	\$25.445	0.3032	1.7190	-0.0127	0.5084	0.0076
ADC Distribution								
Manual	1,426	759	\$25.445	3.3524	1.3720	-0.1408	4.4587	0.6359
MLOCR	804	7,350	\$25.445	0.3462	2.0950	-0.0145	0.7107	0.0572
RBCS Images Processed	445	816	\$14.919	1.8293	1.4500	-0.0768	1.7525	0.0779
LMLM	57	4,985	\$25.445	0.5104	1.4500	-0.0214	0.7187	0.0041
BCS-OSS	434	11,984	\$25.445	0.2123	1.7190	-0.0089	0.3561	0.0154
MPBCS	201	8,393	\$25.445	0.3032	1.7190	-0.0127	0.5084	0.0102
SCF Operations								
Manual	1,114	896	\$25.445	2.8398	1.3720	-0.1193	3.7770	0.4208
MLOCR	193	7,350	\$25.445	0.3462	2.0950	-0.0145	0.7107	0.0137
RBCS Images Processed	94	816	\$14.919	1.8293	1.4500	-0.0768	1.7525	0.0165
LMLM	12	4,985	\$25.445	0.5104	1.4500	-0.0214	0.7187	0.0009
BCS-OSS	92	11,984	\$25.445	0.2123	1.7190	-0.0089	0.3561	0.0033
MPBCS	310	8,393	\$25.445	0.3032	1.7190	-0.0127	0.5084	0.0158
Incoming Primary								
Manual	3,530	562	\$25.445	4.5276	1.3720	-0.1902	6.0217	2.1254
MLOCR	2,604	7,350	\$25.445	0.3462	2.0950	-0.0145	0.7107	0.1851
RBCS Images Processed	1,274	816	\$14.919	1.8293	1.4500	-0.0768	1.7525	0.2233
LMLM	163	4,985	\$25.445	0.5104	1.4500	-0.0214	0.7187	0.0117
BCS-OSS	1,243	11,984	\$25.445	0.2123	1.7190	-0.0089	0.3561	0.0443
MPBCS	519	8,393	\$25.445	0.3032	1.7190	-0.0127	0.5084	0.0264
Incoming Secondary								
Manual MODs Sites	3,670	646	\$25.445	3.9389	1.3720	-0.1654	5.2387	1.9227
Manual Non-Auto Sites	3,485	1,143	\$25.445	2.2261	1.3720	-0.0935	2.9607	1.0318
MPBCS	893	6,633	\$25.445	0.3836	1.7190	-0.0161	0.6433	0.0575
DBCS First-Pass	2,262	7,467	\$25.445	0.3408	2.4340	-0.0143	0.8151	0.1844
DBCS Second-Pass	2,149	7,467	\$25.445	0.3408	2.4340	-0.0143	0.8151	0.1752
CSBCS First-Pass	508	17,124	\$25.445	0.1486	1.9480	-0.0062	0.2832	0.0144
CSBCS Second-Pass	501	17,124	\$25.445	0.1486	1.9480	-0.0062	0.2832	0.0142
CSBCS Third-Pass	496	17,124	\$25.445	0.1486	1.9480	-0.0062	0.2832	0.0140
Other								
Acceptance/Verification	10,000						0.1844	0.1844
<i>Sort to P. O. Boxes:</i>								
DPS	244	2,341	\$25.445	1.0868	1.3660	-0.0456	1.4389	0.0352
Non-DPS	721	1,171	\$25.445	2.1735	1.3660	-0.0913	2.8777	0.2074
Bundle Sorting Basic	10,000						1.7447	1.7447
%DPS	25.33%							

Figures in Columns [1], [2], [3], and [5] are reported in subsequent pages in this Appendix.

Column [4] = 1/Column [2] page 43 * Column [3] page 42Column [6] = Column [4] * (premium pay factor page 42 - 1)Column [7] = (Column [4] * Column [5] page 42) + Column [6]Column [8] = Column [7] * Column [1] mail flow / 10,000

MODEL COST	10.0887
PROPORTIONAL ADJ. <small>Exhibit USPS-29A</small>	1.0661
FIXED ADJUSTMENT <small>Exhibit USPS-29A</small>	0.7737
TOTAL UNIT COST	11.5289





Test Year Standard (A) Regular Non-OCR 3/5-Digit Presort Letters Cost Summary

	[1] Mix of Handlings	[2] Pieces per Hour	[3] Wage Rate	[4] Direct Labor Cents/Piece	[5] Piggyback Factor	[6] Premium Pay Adj.	[7] Operation Unit Cost	[8] Modeled Unit Cost
<u>Outgoing Primary</u>								
Manual	0	812	\$25.445	3.1336	1.3720	-0.1316	4.1677	0.0000
MLOCR	0	7,350	\$25.445	0.3462	2.0950	-0.0145	0.7107	0.0000
RBCS Images Processed	0	816	\$14.919	1.8293	1.4500	-0.0768	1.7525	0.0000
LMLM	0	4,985	\$25.445	0.5104	1.4500	-0.0214	0.7187	0.0000
BCS-OSS	0	11,984	\$25.445	0.2123	1.7190	-0.0089	0.3561	0.0000
MPBCS	0	8,393	\$25.445	0.3032	1.7190	-0.0127	0.5084	0.0000
<u>Outgoing Secondary</u>								
Manual	0	691	\$25.445	3.6823	1.3720	-0.1547	4.8975	0.0000
MPBCS	0	8,393	\$25.445	0.3032	1.7190	-0.0127	0.5084	0.0000
<u>ADC Distribution</u>								
Manual	0	759	\$25.445	3.3524	1.3720	-0.1408	4.4587	0.0000
MLOCR	0	7,350	\$25.445	0.3462	2.0950	-0.0145	0.7107	0.0000
RBCS Images Processed	0	816	\$14.919	1.8293	1.4500	-0.0768	1.7525	0.0000
LMLM	0	4,985	\$25.445	0.5104	1.4500	-0.0214	0.7187	0.0000
BCS-OSS	0	11,984	\$25.445	0.2123	1.7190	-0.0089	0.3561	0.0000
MPBCS	0	8,393	\$25.445	0.3032	1.7190	-0.0127	0.5084	0.0000
<u>SCF Operations</u>								
Manual	0	896	\$25.445	2.8398	1.3720	-0.1193	3.7770	0.0000
MLOCR	0	7,350	\$25.445	0.3462	2.0950	-0.0145	0.7107	0.0000
RBCS Images Processed	0	816	\$14.919	1.8293	1.4500	-0.0768	1.7525	0.0000
LMLM	0	4,985	\$25.445	0.5104	1.4500	-0.0214	0.7187	0.0000
BCS-OSS	0	11,984	\$25.445	0.2123	1.7190	-0.0089	0.3561	0.0000
MPBCS	0	8,393	\$25.445	0.3032	1.7190	-0.0127	0.5084	0.0000
<u>Incoming Primary</u>								
Manual	1,928	562	\$25.445	4.5276	1.3720	-0.1902	6.0217	1.1612
MLOCR	4,004	7,350	\$25.445	0.3462	2.0950	-0.0145	0.7107	0.2845
RBCS Images Processed	1,760	816	\$14.919	1.8293	1.4500	-0.0768	1.7525	0.3085
LMLM	279	4,985	\$25.445	0.5104	1.4500	-0.0214	0.7187	0.0201
BCS-OSS	1,699	11,984	\$25.445	0.2123	1.7190	-0.0089	0.3561	0.0605
MPBCS	500	8,393	\$25.445	0.3032	1.7190	-0.0127	0.5084	0.0254
<u>Incoming Secondary</u>								
Manual MODs Sites	3,743	646	\$25.445	3.9389	1.3720	-0.1654	5.2387	1.9606
Manual Non-Auto Sites	3,347	1,143	\$25.445	2.2261	1.3720	-0.0935	2.9607	0.9909
MPBCS	914	6,633	\$25.445	0.3836	1.7190	-0.0161	0.6433	0.0588
DBCS First-Pass	2,315	7,467	\$25.445	0.3408	2.4340	-0.0143	0.8151	0.1887
DBCS Second-Pass	2,199	7,467	\$25.445	0.3408	2.4340	-0.0143	0.8151	0.1792
CSBCS First-Pass	520	17,124	\$25.445	0.1486	1.9480	-0.0062	0.2832	0.0147
CSBCS Second-Pass	512	17,124	\$25.445	0.1486	1.9480	-0.0062	0.2832	0.0145
CSBCS Third-Pass	507	17,124	\$25.445	0.1486	1.9480	-0.0062	0.2832	0.0144
<u>Other</u>								
Acceptance/Verification	10,000						0.1844	0.1844
<i>Sort to P. O. Boxes:</i>								
DPS	250	2,341	\$25.445	1.0868	1.3660	-0.0456	1.4389	0.0360
Non-DPS	715	1,171	\$25.445	2.1735	1.3660	-0.0913	2.8777	0.2058
Bundle Sorting Basic	10,000						0.7865	0.7865
%DPS	25.91%							

Figures in Columns [1], [2], [3], and [5] are reported in subsequent pages in this Appendix.

Column [4] = 1/Column [2] page 43 * Column [3] page 42

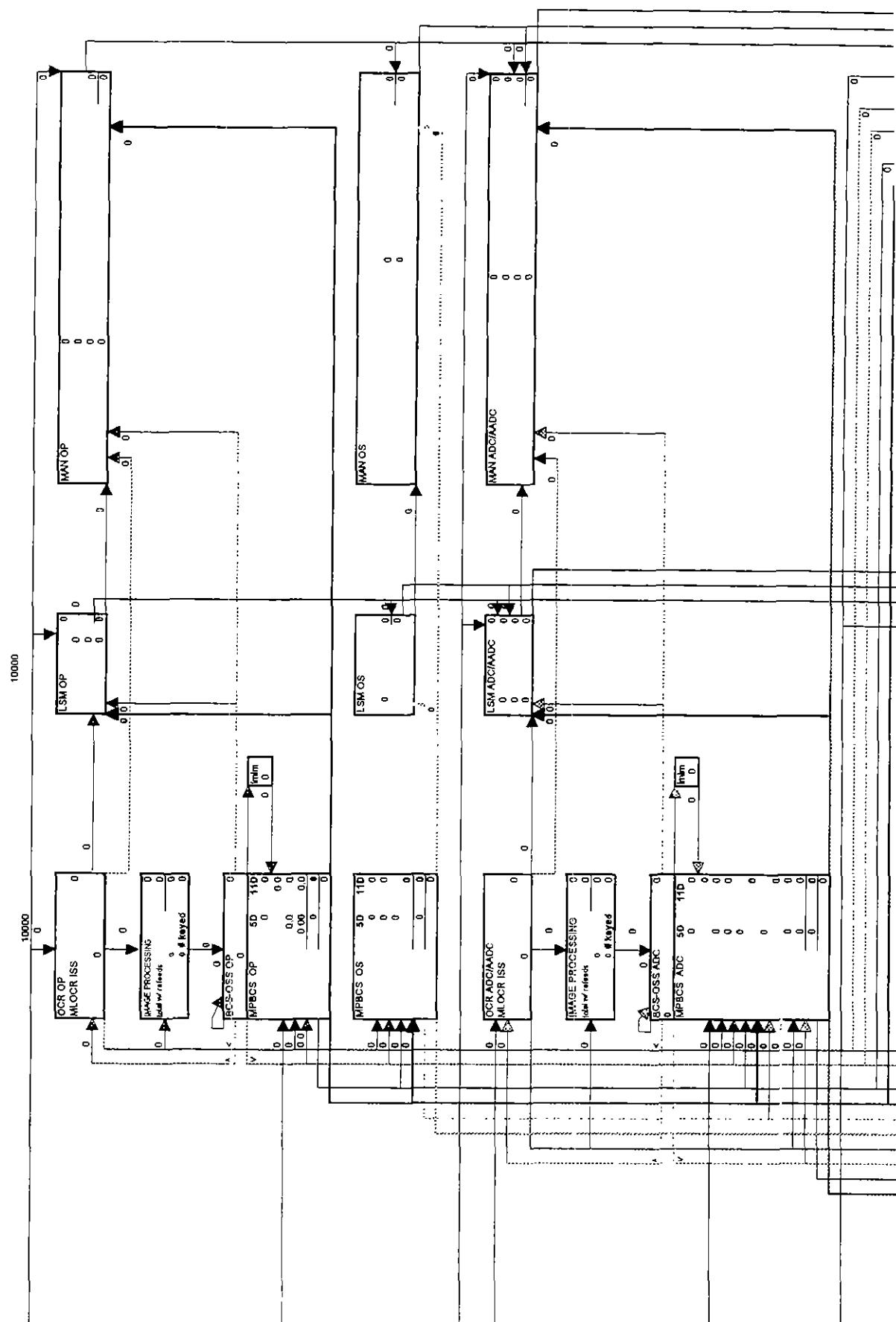
Column [6] = Column [4] * (premium pay factor page 42 - 1)

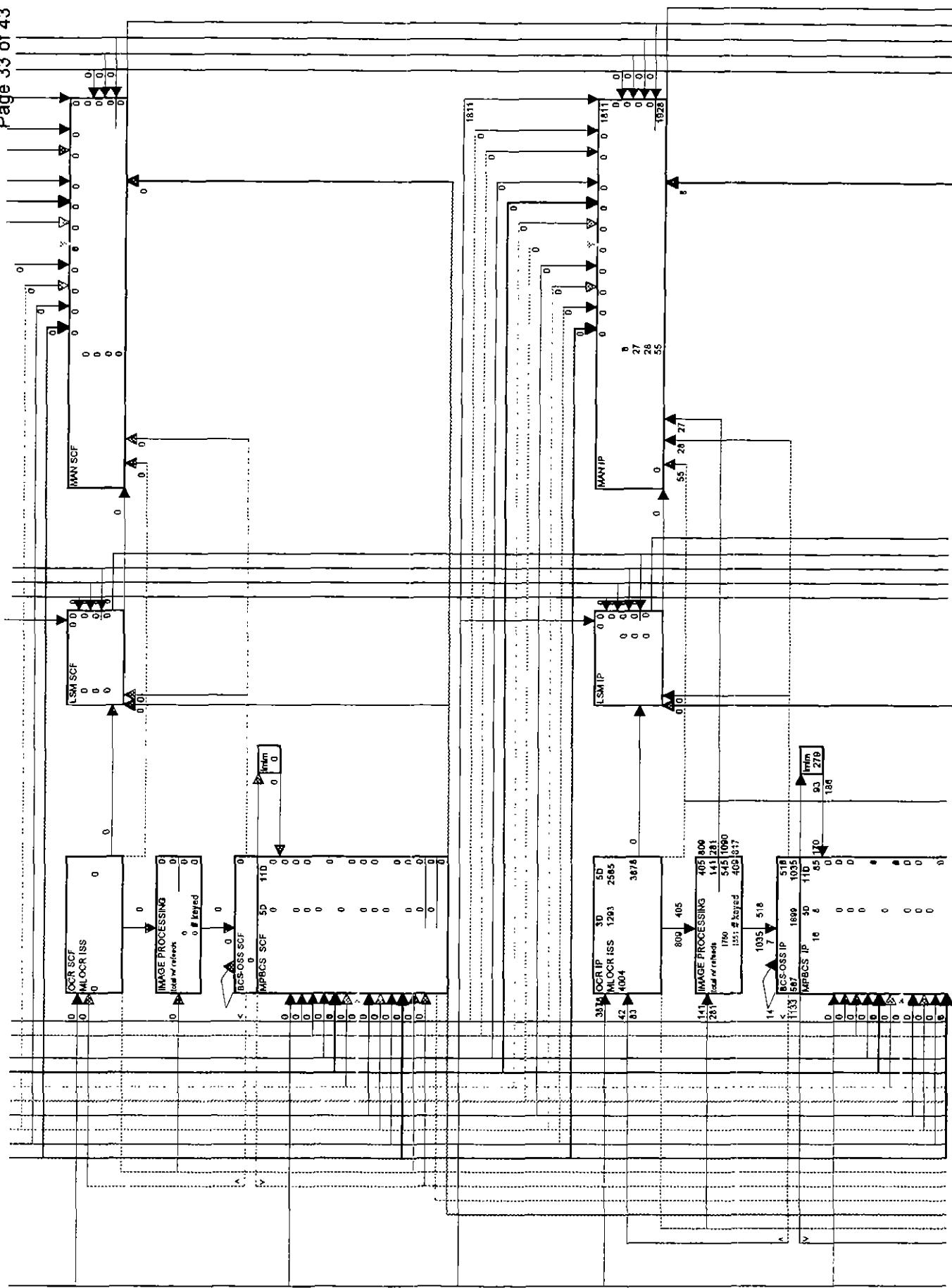
Column [7] = (Column [4] * Column [5] page 42) + Column [6]

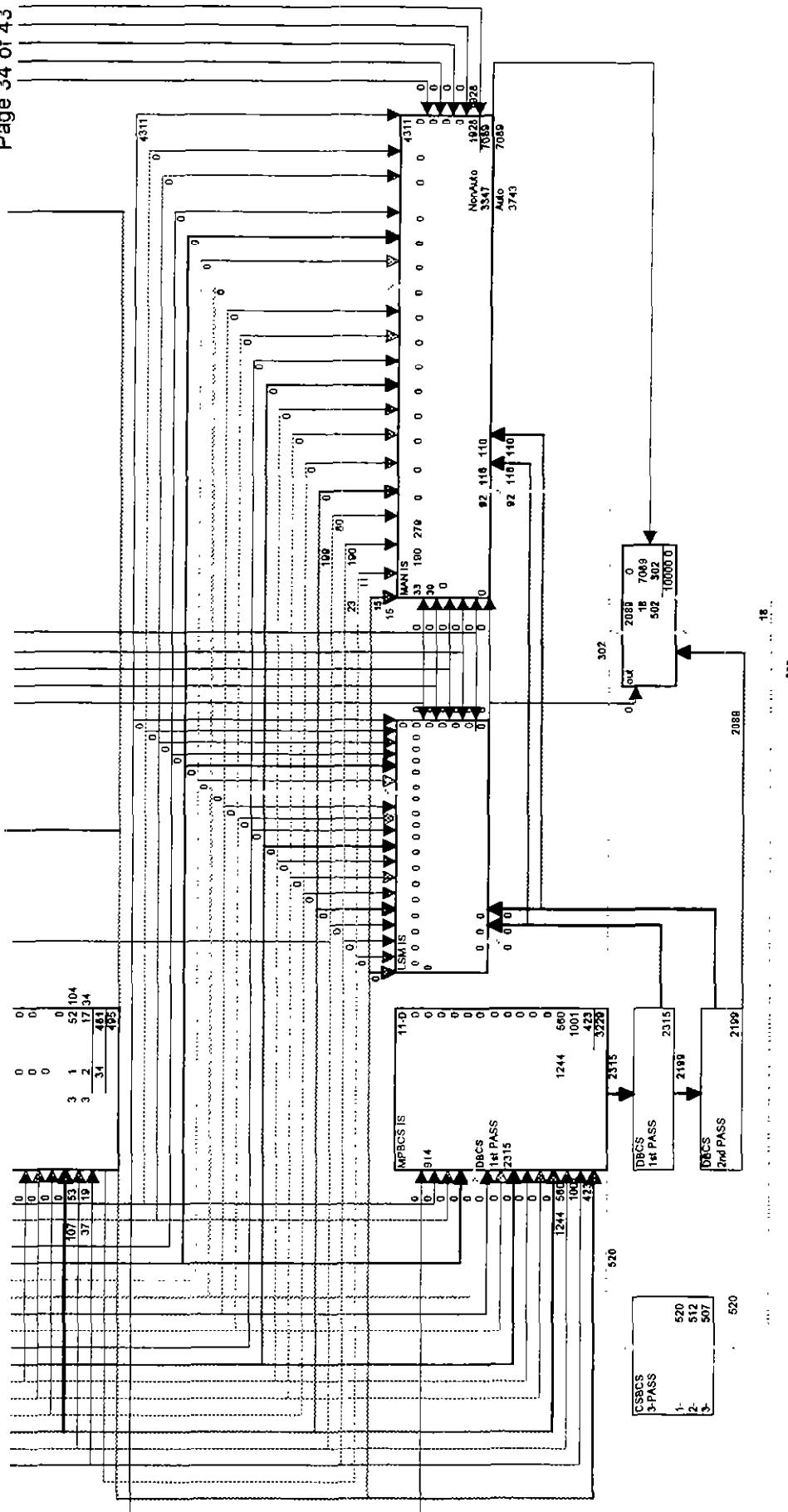
Column [8] = Column [7] * Column [1] mail flow / 10,000

MODEL COST	6.4947
PROPORTIONAL ADJ. <small>Exhibit USPS-29A</small>	1.0661
FIXED ADJUSTMENT <small>Exhibit USPS-29A</small>	0.7737
TOTAL UNIT COST	7.6975

Standard (A) Regular Non-OCR 3/5-Digit Presort Letters







Standard (A) Regular Mail Characteristic Percentages

From page 37 of this appendix (USPS LR-H-105).

Upgradable in Non-OCR Trays

Container	Total	Mixed ADC	Total Pieces			Percent	
			ADC	3-Digit	5-Digit	Not Used	% basic
Mixed ADC	22.49%	6.73%	5.17%	7.26%	3.33%	100%	44.35%
ADC	21.86%		1.42%	14.98%	5.45%	62%	% presort
3-Digit	39.60%			13.67%	25.93%	51%	55.65%
5-Digit	16.05%				16.05%		
Subtotal	100.00%	6.73%	6.59%	35.91%	50.77%		

Non-Upgradable in Non-OCR Trays

Container	Total	Mixed ADC	Total Pieces			Percent	
			ADC	3-Digit	5-Digit	Not Used	% basic
Mixed ADC	28.29%	7.75%	9.00%	10.27%	1.27%	0.0%	48.42%
ADC	20.13%		1.62%	12.37%	6.14%	0.0%	% presort
3-Digit	38.94%			16.01%	22.93%	0.0%	51.58%
5-Digit	12.65%				12.65%		
Subtotal	100.00%	7.75%	10.62%	38.65%	42.98%		
Grand Total	100.00%	7.19%	8.42%	37.15%	47.24%		

)))
Table A
Standard (A) Regular
Automation and Nonautomation-Upgradable Letters
Total Pieces by Tray Level

Tray Level	Pieces	Percent
MAADC	1,273,903,261	43.9%
AADC	1,627,186,992	44.6%
% SCF = AADC	20.40%	11.4%
Total	2,901,090,253	100.0%

Table B
Standard (A) Regular
Nonautomation-Upgradable Letters
Total Pieces by Tray Type

Tray Level	Pieces	Percent
3-Digit	263,462,793	56.1%
5-Digit	206,577,368	43.9%
Basic	227,027,198	32.6%
Upgr no packages	697,067,359	15.9%
Upgr in Packages	1,674,402,834	38.1%
Total Upgr	2,371,470,193	54.0%
Non-OCR Mach	897,120,374	
Non-Machinable	1,123,421,008	
Total Non-OCR	2,020,541,382	46.0%
Total Non-Auto	4,392,011,575	

Table C3
Standard (A) Regular Nonautomation Letters
Percent Machinable and Nonmachinable of Nonupgradable Pieces

Machinable	44.4%
Nonmachinable	55.6%

Table C1
Standard (A) Regular Nonautomation Letters Failing Upgradable Standards
Total Pieces and Pieces per Package,
by Package and Tray Level

Tray Level	Total Pieces				Total
	MADC	ADC	3-Digit	5-Digit	
MADC	136,027,685	104,431,572	146,662,081	67,365,353	454,486,691
ADC	-	28,691,355	302,709,524	110,195,087	441,595,966
3-Digit	-	-	276,198,519	523,994,861	800,193,380
5-Digit	-	-	-	324,265,345	324,265,345
Total	136,027,685	133,122,927	725,570,124	1,025,820,646	2,020,541,382

Table C2
Standard (A) Regular Nonautomation Not Failing Upgradable Standards Letters
Total Pieces and Pieces per Package,
by Package and Tray Level

Tray Level	Total Pieces				Total
	MADC	ADC	3-Digit	5-Digit	
MADC	129,712,954	150,671,657	171,973,920	21,305,565	473,664,096
ADC	-	27,192,746	207,064,947	102,793,792	337,051,485
3-Digit	-	-	268,080,897	383,875,478	651,956,375
5-Digit	-	-	-	211,730,878	211,730,878
Grand Total	129,712,954	177,864,403	647,119,764	719,705,713	1,674,402,834

* SOURCE: Information from USPS LR-H-105.

TEST-YEAR STANDARD (A) REGULAR LETTER COVERAGE FACTORS
FROM LIBRARY REFERENCE H-138

CATEGORY	OTHER	ECR
1 % MLOCR 3D ORIGINATING	100.00%	
2 % MPBCS/DBCS 3D ORIGINATING	100.00%	
3 % MPBCS/DBCS DESTINATING	94.85%	96.53%
4 % MLOCR 3D DESTINATING	93.84%	95.39%
5 % AUTO INC/SEC TOTAL GIVEN BCS 3D DESTINATION	89.97%	94.26%
6 % DPS GIVEN BCS 3D DESTINATION	80.62%	86.39%
7 % DPS OR SEC/SEG OF AUTO IS GIVEN BCS 3D DEST.	89.61%	91.65%
8 % RBCS 3D ORIGINATING	100.00%	
9 % RBCS 3D DESTINATING	88.10%	91.14%
10 % NON-ELIGIBLE AUTO CAR. ROUTE DESTINATING	61.18%	66.72%
11 % DBCS VOLUME SHARE OF DPS	80.00%	80.00%
12 % CSBCS VOLUME SHARE OF DPS	20.00%	20.00%
13 % BCS ORIGINATING MINUS BCS DESTINATING	5.15%	
14 % MLOCR ORIGINATING MINUS BCS DESTINATING	5.15%	
15 % PERCENT SORTED TO P.O. BOX	9.65%	1.69%
16 %		
17 % LSM INC/SEC GIVEN TOTAL NON-AUTO INC/SEC	0.00%	

COVERAGE FACTORS (continued)

MLOCR 3D ORIGINATING	Line Reference to page 38. 100.00% line 1
MLOCR 3D DESTINATING	93.84% line 4
RBCS Origin Coverage Factor	100.00% line 8
RBCS Destination Coverage Factor	88.10% line 9
RBCS Leakage Factor	5.00%
BCS Origin Coverage (Autonation Basic Model)	100.00% see line 2
BCS Destination Coverage Factor Given BCS Origin	94.85% see (1 - line 13)
BCS 3D Destinating	94.85% see line 3
Percent Receiving Automated Incoming Secondary Given That Mail is Destinating at Automated Facilities (use in basic & 3-D)	89.97% see line 5
Percent of Automated Incoming Secondary Sorted to Delivery Sequencing Machines	89.61% see line 7
DBCS Volume Share of DPS	80.00% see line 11
CSBCS Volume Share of DPS	20.00% see line 12
CSBCS Share of Auto Carrier Route Eligible	50.12% see (line6*line3*line12)/(line10)

Standard (A) Accept Rates from Special Studies and MODS

Automation Accept and Upgrade Rate Special Study (Library Reference H-130)

	Accept	Upgrade	Encode		
MLOCR & ISS Basic Non-Automation Compatible	61.15%	75.82%	46.37%		
MLOCR & ISS Basic Automation Compatible	76.41%	73.40%	56.08%		
MLOCR & ISS 3/5 Presort Non-Automation Compatible	64.48%	80.87%	52.15%		
MLOCR & ISS 3/5 Presort Automation Compatible	79.71%	77.35%	61.66%		
MPBCS - OSS Basic Non-Automation Compatible	72.86%	87.65%	63.86%		
MPBCS - OSS Basic Automation Compatible	83.47%	85.64%	71.48%		
MPBCS - OSS 3/5 Presort Non-Automation Compatible	70.12%	91.19%	63.94%		
MPBCS - OSS 3/5 Presort Automation Compatible	85.53%	89.65%	76.67%		
MPBCS - OSS Rejects to:	OCR-ISS	LMLM	BCS-OSS	LSM	MAN
Basic Non-Automation Compatible	7.28%	14.44%	2.54%	0.00%	2.88%
Basic Automation Compatible	4.79%	7.86%	2.67%	0.00%	1.21%
3/5 Presort Non-Automation Compatible	8.06%	17.97%	1.33%	0.00%	2.52%
3/5 Presort Automation Compatible	5.07%	6.51%	1.72%	0.00%	1.18%

FY96 MODS Accept Rates (Library Reference H-113)

BCS	Accept Rate
OP	95.0%
OS	95.0%
MMP	95.0%
SCF	95.0%
IP	95.0%
IS	89.9%

DBCS	Accept Rate
First Pass	95.0%
Second Pass	95.0%

Accept Rates used in Appendix I page 82 of USPS-T-5 in Docket No. MC96-2

	Accept Rate
Remote Computer Read	25.00%
CSBCS	
First Pass	98.50%
Second & Third Pass	99.00%

Letter Densities

From Docket No. MC96-2 USPS-T-5 Appendix I at page 83. (AADC/ADC formerly referred to as MMP).

MLOCR/ISS	OP (BCS)	OS	AADC/ADC	SCF	IP	IS	
831&881 OP	2.62%	21.92%	5.00%	14.07%	10.44%	45.96%	100.00%
832 OS		17.70%	18.17%	50.14%	8.01%	5.98%	100.00%
833 MMP			4.35%	16.23%	9.85%	69.58%	100.00%
834 SCF				9.15%	5.88%	84.97%	100.00%
835 IP					7.69%	92.31%	100.00%

MPBCS/DBCS**	OP	OS	AADC/ADC	SCF	IP	IS	
871&891 OP	0.32%	17.15%	22.17%	22.42%	16.05%	22.22%	100.32%
872 OS		1.35%	50.91%	24.55%	17.64%	6.90%	101.35%
873 MMP			0.96%	23.35%	10.23%	66.42%	100.96%
874 SCF*				0.92%	4.53%	95.47%	100.92%
875 IP					1.21%	100.00%	101.21%

*diagonal allocated 100% to IS

MPBCS-OSS	OP(BCS)	OS	AADC/ADC	SCF	IP	IS	
971 OP	0.33%	22.42%	5.62%	17.01%	14.00%	40.62%	100.00%
972 OS		20.79%	13.22%	38.81%	16.77%	10.42%	100.00%
973 MMP			2.95%	16.88%	12.28%	67.89%	100.00%
974 SCF				5.50%	4.86%	89.64%	100.00%
975 IP					4.66%	95.34%	100.00%

LSM**	OP	OS	AADC/ADC	SCF	IP	IS	
081 OP	0.00%	0.98%	25.57%	11.14%	9.34%	52.97%	100.00%
082 OS		0.00%	27.94%	4.98%	7.99%	59.10%	100.00%
083 MMP			2.26%	10.29%	3.82%	85.89%	102.26%
084 SCF*				3.09%	4.03%	95.97%	103.09%
085 IP					2.78%	100.00%	102.78%

*diagonal allocated 100% to IS

MANUAL	OP	OS	AADC/ADC	SCF	IP	IS	
	OP		15.48%	36.22%	16.42%	12.18%	19.70%
	OS			42.85%	19.43%	14.41%	23.31%
	MMP				43.63%	26.47%	29.90%
	SCF					6.47%	93.53%
	IP						100.00%

** Bold numbers indicate second handlings (i.e., flows to same machine/ same level) and are captured in the cost summary page. Numbers off the diagonal are normalized to 100% and used in the flows.

PIGGYBACK FACTORS, WAGE RATES & PREMIUM PAY FACTORS

<u>Operation</u>	LR-H-146 Wage Rate	USPS LR-H-77 Piggyback	Description Name (Cost Pool)
Manual	\$25.45	1.372	mods 14 manl
MLOCR	\$25.45	2.095	mods 11 ocr/
RBCS	\$14.92	1.450	mods 15 ld15
LMLM	\$25.45	1.450	mods 15 ld15
BCS-OSS	\$25.45	1.719	mods 11 bcs/ disaggregated MPBCS
MPBCS	\$25.45	1.719	mods 11 bcs/ disaggregated MPBCS
DBCS First/Second Pass	\$25.45	2.434	mods 11 bcs/ disaggregated DBCS
CSBCS First-Third Pass	\$25.45	1.948	mods 11 bcs/ disaggregated CSBCS
Sort to P. O. Boxes:			
DPS	\$25.45	1.366	mods 44 LD44 (P.O. Box distribution)
Non-DPS or SS	\$25.45	1.366	mods 44 LD44 (P.O. Box distribution)

**USPS LR-H-77
Premium Pay Factors**

RR 0.9580
ECR 0.9590

Productivities

See Library Reference H-113

	Operation Numbers	PPH
<u>Non-Incoming Secondary</u>		
MLOCR	831-835, 841-845, 851-855, 881-885	7,350
RBCS	816	
LMLM	776	4,985
MPBCS-OSS	971-975	11,984
MPBCS/DBCS	871-875, 891-895	8,393
<u>Incoming Secondary</u>		
MPBCS	876, 877, 878, 879, 896, 897, 898, 899	6,633
DBCS Sector Segment/DPS	914, 915, 918, 919	7,467
CSBCS ¹		17,124
<u>Manual Productivities</u>		
Manual OP (Bulk Business Mail)	045-049	812
Manual OS	040-042	691
Manual Managed Mail (State)	043	759
Manual SCF	044	896
Manual IP	150-159	562
Manual MODs Sites	160-169	646
Manual Non-Automated Sites ²		1,143
<u>Sort to P.O. Box Productivities</u>		
DPS ³		2,341
Non-DPS ⁴		1,171

¹Docket No. MC96-2, USPS-T-5 Appendix I (pph=19,038) * Realization Factor of 85%

²Docket No. MC96-2, USPS-T-5 Appendix I (pph = 911) * Volume Variability of 79.7%

³Docket No. MC96-2, USPS-T-5 Appendix I (pph = 1,920) * Volume Variability of 82%

⁴Docket No. MC96-2, USPS-T-5 Appendix I (pph = 960) * Volume Variability of 82%

***Standard (A) Regular
Letter Bundle Sorting Model***

Appendix II

)))
Standard (A) Regular Bundle Sorting Costs -- Productivities and Other Inputs

Clerk And Mail Handler Wage Rate TY98 \$25.445 1/
Premium Pay Adjustment Factor 0.958 2/

	[1] Bundles per Hour	[2] Labor Cost per Bundle (cents)	[3] Piggyback Factors	[4] Total Cost per Bundle (cents)
Pouch Rack Bundle Sorting	199	12.8085	1.600	19.9556
Tray Opening Unit / Bundle Sorting	160	15.9299	1.600	24.8187
SPBS Bundle Sorting	392	6.4929	1.708	10.8171

1/ USPS LR-H-146

2/ USPS LR-H-146

Column [1]: Docket No. MC95-1, Exhibit USPS-T-5C (Degen)

Column [2]: (FY98 Wage Rate(1/) * 100) / Column [1]

Column [3]: USPS LR-H-77

Column [4]: Column [2] * Column [3] + (Premium Pay Adj (20 - 1) * Column [2])

**Standard (A) Regular Bundle Sorting Costs -- Number of Sorts and Costs
by Bundle Type and Type of Sort**

	[1] Mixed AADC to AADC	[2] AADC to 3D	[3] 3D to 5D	[4] Final Operation
5-Digit Bundles				
Number of Sorts	1/ 0.50	0.80	1.30	
% Pouch Rack	1/ 100.00%	50.00%	18.95%	
% Sort to Tray	1/ 0.00%	50.00%	81.05%	
%SPBS	1/ 0.00%	0.00%	0.00%	
Cost per Bundle Sort (cents)	2/ 9.9778	17.9097	31.0666	
3-Digit Bundles				
Number of Sorts	1/ 0.50	1.00		0.50
% Pouch Rack	1/ 100.00%	50.00%		0.00%
% Sort to Tray	1/ 0.00%	50.00%		100.00%
%SPBS	1/ 0.00%	0.00%		0.00%
Cost per Bundle Sort (cents)	2/ 9.9778	22.3871		12.4094
AADC Bundles				
Number of Sorts	1/ 1.00			1.00
% Pouch Rack	1/ 100.00%			0.00%
% Sort to Tray	1/ 0.00%			100.00%
%SPBS	1/ 0.00%			0.00%
Cost per Bundle Sort (cents)	2/ 19.9556			24.8187
Residual Bundles				
Number of Sorts	1/			1.00
% Pouch Rack	1/			0.00%
% Sort to Tray	1/			100.00%
%SPBS	1/			0.00%
Cost per Bundle Sort (cents)	2/			24.8187

1/ Docket No. MC95-1, USPS-T-10 (Smith) 3D to 5D % Pouch Rack = (% Not Recieving Automated Inc. Sec.) / (% of Bundles Used)

2/ Number of Sorts * ((% Pouch Rack * Pouch Rack Cost3/) + (% Sort to Tray * Sort to Tray Cost3/) + (% SPBS * SPBS Cost3/))

3/ USPS-T-29, Appendix II page 1.

Costs for Bundle Sorting by Bundle and Tray Presort Levels For Bundle Sorted Bundles

	[1] Final Operation	[2] Mixed AADC to AADC	[3] AADC to 3D	[4] 3D to 5D Non-Bar	[5] Total Cost Non-Bar
Full 5D Trays	0.0000	0.0000	0.0000	0.0000	0.0000
Full 3D Trays	0.0000	0.0000	0.0000	0.0000	0.0000
Full AADC Trays	0.0000	0.0000	0.0000	0.0000	0.0000
Full Residual Trays	0.0000	0.0000	0.0000	0.0000	0.0000
5D Bundles in 3D Trays	0.0000	0.0000	0.0000	31.0666	31.0666
3D Bundles in 3D Trays	12.4094	0.0000	0.0000	0.0000	12.4094
5D Bundles in AADC Trays	0.0000	0.0000	17.9097	31.0666	48.9763
3D Bundles in AADC Trays	12.4094	0.0000	22.3871	0.0000	34.7965
AADC Bundles in AADC Trays	24.8187	0.0000	0.0000	0.0000	24.8187
5D Bundles in Residual Trays	0.0000	9.9778	17.9097	31.0666	58.9541
3D Bundles in Residual Trays	12.4094	9.9778	22.3871	0.0000	44.7743
AADC Bundles in Residual Trays	24.8187	19.9556	0.0000	0.0000	44.7743
Residual Bundles in Residual Trays	24.8187	0.0000	0.0000	0.0000	24.8187

Column [1]: USPS-T-29, Appendix II at page 2, Column [4]
 Column [2]: USPS-T-29, Appendix II at page 2, Column [1]
 Column [3]: USPS-T-29, Appendix II at page 2, Column [2]
 Column [4]: USPS-T-29, Appendix II at page 2, Column [3]
 Column [5]: Column [1] + Column [2] + Column [3] + Column [4]

Standard (A) Regular Bundle Sorting Costs -- "Bundle Breaking" Percentages
Percentage of Bundles Broken without Bundle Sorting by Tray and Bundle Type
From Docket No. MC96-2, USPS-T-5 Appendix II at page 13.

	[1] Percent of Total Bundles Not Used	[2] Percent of AC Bundles Not Used	[3] Weighted Avg. Percent AC	[4] Percent of Non-AC Bundles Not Used
Non-Barcoded				
5D Bundles in 3D Containers	22.6	51.2%	44%	0%
Bundles in State Containers	27.3	61.8%	44%	0%
Bundles in Mixed State Containers	54.5	100.0%	44%	0%

Standard (A) Regular Bundle Sorting Costs: Cost for Bundle Sorting by Bundle and Container Type

Nonbarcoded Upgradable Packages in Non-OCR Upgradable Basic Trays

Trays	[1] Volume	[2] Percent of Mail	[3] Percent of AC Bundle Not Used	[4] Bundle Sort Cost	[5] Pieces per Package	[6] Total Cost per Piece
5D Bundles in AADC Trays	102,793,792	12.7	61.8	48.9763	14.5	0.1634
3D Bundles in AADC Trays	207,064,947	25.5	61.8	34.7965	21.9	0.1549
AADC Bundles in AADC Trays	27,192,746	3.4	61.8	24.8187	19.5	0.0163
5D Bundles in Residual Trays	21,305,565	2.6	100.0	58.9541	15.6	0.0000
3D Bundles in Residual Trays	171,973,920	21.2	100.0	44.7743	18.2	0.0000
AADC Bundles in Residual Trays	150,671,657	18.6	100.0	44.7743	19.6	0.0000
Residual Bundles in Residual Trays	129,712,954	16.0	100.0	24.8187	21.0	0.0000
TOTAL VOLUME	810,715,581	1/				
TOTAL COST PER PIECE					0.3346	2/

Nonbarcoded Upgradable Packages in Non-OCR Upgradable 3/5-Digit Presort Trays

Trays	[1] Volume	[2] Percent of Mail	[3] Percent of Bundle Not Used	[4] Bundle Sort Cost	[5] Pieces per Package	[6] Total Cost per Piece
5D Bundles in 3D Trays	383,875,478	58.9	51.2	31.0666	19.8	0.4509
3D Bundles in 3D Trays	268,080,897	41.1	51.2	12.4094	28.7	0.0868
TOTAL VOLUME	651,956,375					
TOTAL COST PER PIECE					0.5377	2/

1/ Sum of Column [1]

2/ Sum of Column [6]

Column [1]: USPS LR-H-105

Column [2]: (Column [1] / TOTAL VOLUME(1/)) * 100

Column [3]: USPS-T-29, Appendix II at page 4, Column [2]

Column [4]: USPS-T-29, Appendix II at page 3, Column [5]

Column [5]: USPS LR-H-105

Standard (A) Regular Bundle Sorting Costs: Cost for Bundle Sorting by Bundle and Container Type

Non-Upgradable Non-Barcoded Basic

	[1] Volume	[2] Percent of Mail	[3] Percent of Bundle Not Used	[4] Bundle Sort Cost	[5] Pieces per Package	[6] Total Cost per Piece
Trays						
5D Bundles in AADC Trays	110,195,087	12.3	0.00	48.9763	14.0	0.4302
3D Bundles in AADC Trays	302,709,524	33.8	0.00	34.7965	26.9	0.4370
AADC Bundles in AADC Trays	28,691,355	3.2	0.00	24.8187	25.0	0.0318
5D Bundles in Residual Trays	67,365,353	7.5	0.00	58.9541	19.9	0.2227
3D Bundles in Residual Trays	146,662,081	16.4	0.00	44.7743	25.2	0.2908
AADC Bundles in Residual Trays	104,431,572	11.7	0.00	44.7743	23.5	0.2220
Residual Bundles in Residual Trays	136,027,685	15.2	0.00	24.8187	32.8	0.1149
TOTAL VOLUME	896,082,657	1/				
TOTAL COST PER PIECE					1.7494	2/

Non-Upgradable Non-Barcoded 3/5-Digit Presort

	[1] Volume	[2] Percent of Mail	[3] Percent of Bundle Not Used	[4] Bundle Sort Cost	[5] Pieces per Package	[6] Total Cost per Piece
Trays						
5D Bundles in 3D Trays	523,994,861	65.48	0.00	31.0666	30.2	0.6736
3D Bundles in 3D Trays	276,198,519	34.52	0.00	12.4094	35.4	0.1210
TOTAL VOLUME	800,193,380					
TOTAL COST PER PIECE					0.7946	2/

1/ Sum of Column [1]

2/ Sum of Column [6]

Column [1]: USPS LR-H-105

Column [2]: (Column [1] / TOTAL VOLUME(1/)) * 100

Column [3]: USPS-T-29, Appendix II at 4, Column [4]

Column [4]: USPS-T-29, Appendix II at 3, Column [5]

Column [5]: USPS LR-H-105

Column [6]: (Column [4] / Column [5]) * (1 - (Column [3] / 100)) * (Column [2] / 100)

Regular Bundle Sorting Results

Unit Cost	
Non-Barcoded Upgradable:	USPS-T-29, Appendix II at 5
Basic	0.3346
3/5	0.5377
Non-Barcoded Non-Upgradable:	USPS-T-29, Appendix II at 6
Basic	1.7494
3/5	0.7946

***Standard (A) Nonprofit Letter
Mail Processing Cost Models***

Appendix III

Test Year Standard (A) Nonprofit Automation Basic Letters Cost Summary

	[1] Mix of Handlings	[2] Pieces per Hour	[3] Wage Rate	[4] Direct Labor Cents/Piece	[5] Piggyback Factor	[6] Premium Pay Adj.	[7] Operation Unit Cost	[8] Modeled Unit Cost
Outgoing Primary								
Manual	239	812	\$25.445	3.1336	1.372	-0.1316	4.1677	0.0997
MPBCS	4,798	8,393	\$25.445	0.3032	1.719	-0.0127	0.5084	0.2439
Outgoing Secondary								
Manual	76	691	\$25.445	3.6823	1.372	-0.1547	4.8975	0.0372
MPBCS	790	8,393	\$25.445	0.3032	1.719	-0.0127	0.5084	0.0401
AADC Distribution								
Manual	396	759	\$25.445	3.3524	1.372	-0.1408	4.4587	0.1766
MPBCS	5,590	8,393	\$25.445	0.3032	1.719	-0.0127	0.5084	0.2842
SCF Operations								
Manual	565	896	\$25.445	2.8398	1.372	-0.1193	3.7770	0.2135
MPBCS	3,350	8,393	\$25.445	0.3032	1.719	-0.0127	0.5084	0.1703
Incoming Primary								
Manual	324	562	\$25.445	4.5276	1.372	-0.1902	6.0217	0.1952
MPBCS	1,489	8,393	\$25.445	0.3032	1.719	-0.0127	0.5084	0.0757
Incoming Secondary								
Manual MODs Sites	1,471	646	\$25.445	3.9389	1.372	-0.1654	5.2387	0.7704
Manual Non-Auto Sites	1,375	1,143	\$25.445	2.2261	1.372	-0.0935	2.9607	0.4071
MPBCS	2,212	6,633	\$25.445	0.3836	1.719	-0.0161	0.6433	0.1423
DBCS First-Pass	5,724	7,467	\$25.445	0.3408	2.434	-0.0143	0.8151	0.4666
DBCS Second-Pass	5,438	7,467	\$25.445	0.3408	2.434	-0.0143	0.8151	0.4432
CSBSCS First-Pass	1,286	17,124	\$25.445	0.1486	1.948	-0.0062	0.2832	0.0364
CSBSCS Second-Pass	1,267	17,124	\$25.445	0.1486	1.948	-0.0062	0.2832	0.0359
CSBSCS Third-Pass	1,254	17,124	\$25.445	0.1486	1.948	-0.0062	0.2832	0.0355
Other								
Accept./Verification	10,000						0.2664	0.2664
Sort to P. O. Boxes:								
DPS	517	2,341	\$25.445	1.0868	1.368	-0.0456	1.4412	0.0745
Non-DPS	290	1,171	\$25.445	2.1735	1.368	-0.0913	2.8824	0.0836
% DPS		64.08%						

Figures in Columns [1], [2], [3], and [5] are reported in subsequent pages in this Appendix.

Column [4] = 1/Column [2] _{page 43} * Column [3] _{page 42}

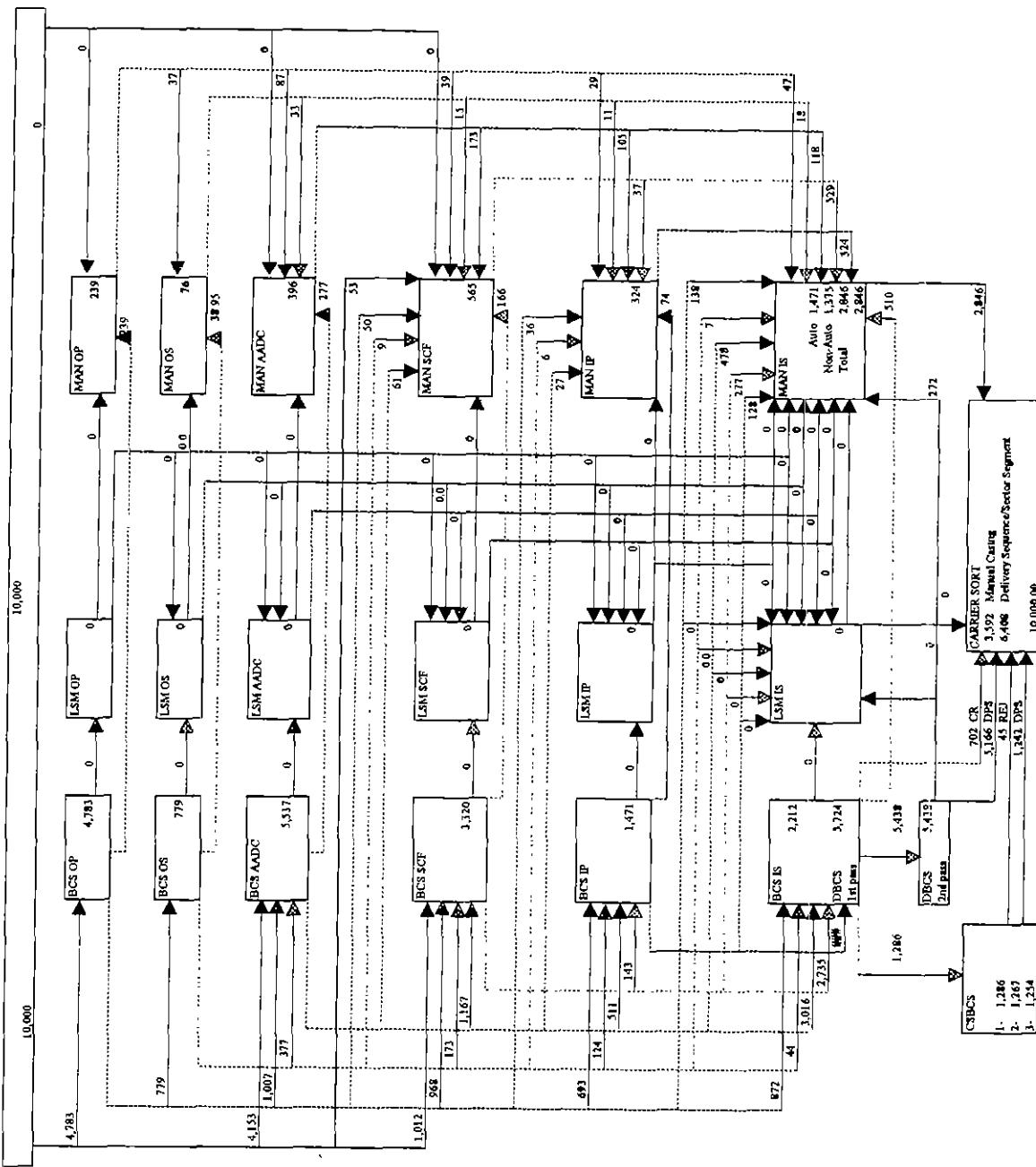
Column [6] = Column [4] * (premium pay factor _{page 42} - 1)

Column [7] = (Column [4] * Column [5] _{page 42}) + Column [6]

Column [8] = Column [7] * Column [1] _{mail flow} / 10,000

MODEL COST	4.2985
PROPORTIONAL ADJ. _{Exhibit USPS-29B}	0.8118
FIXED ADJUSTMENT _{Exhibit USPS-29B}	0.5854
TOTAL UNIT COST	4.0747

Standard (A) Nonprofit Automation Basic Letters



Test Year Standard (A) Nonprofit Automation 3-Digit Letters Cost Summary

	[1] Mix of Handlings	[2] Pieces per Hour	[3] Wage Rate	[4] Direct Labor Cents/Piece	[5] Piggyback Factor	[6] Premium Pay Adj.	[7] Operation Unit Cost	[8] Modeled Unit Cost
Incoming Primary								
Manual	969	562	\$25.445	4.5276	1.372	-0.1902	6.0217	0.5837
MPBCS	9,506	8,393	\$25.445	0.3032	1.719	-0.0127	0.5084	0.4833
Incoming Secondary								
Manual MODs Sites	1,239	646	\$25.445	3.9389	1.372	-0.1654	5.2387	0.6492
Manual Non-Auto Sites	1,368	1,143	\$25.445	2.2261	1.372	-0.0935	2.9607	0.4049
MPBCS	2,286	6,633	\$25.445	0.3836	1.719	-0.0161	0.6433	0.1470
DBCS First-Pass	5,915	7,467	\$25.445	0.3408	2.434	-0.0143	0.8151	0.4821
DBCS Second-Pass	5,619	7,467	\$25.445	0.3408	2.434	-0.0143	0.8151	0.4580
CSBCS First-Pass	1,329	17,124	\$25.445	0.1486	1.948	-0.0062	0.2832	0.0377
CSBCS Second-Pass	1,309	17,124	\$25.445	0.1486	1.948	-0.0062	0.2832	0.0371
CSBCS Third-Pass	1,296	17,124	\$25.445	0.1486	1.948	-0.0062	0.2832	0.0367
Other								
Accept./Verification	10,000						0.2664	0.2664
Sort to P. O. Boxes:								
DPS	535	2,341	\$25.445	1.0868	1.368	-0.0456	1.4412	0.0770
Non-DPS	273	1,171	\$25.445	2.1735	1.368	-0.0913	2.8824	0.0786
% DPS		66%						

Figures in Columns [1], [2], [3], and [5] are reported in subsequent pages in this Appendix.

Column [4] = 1/Column [2] page 43 * Column [3] page 42

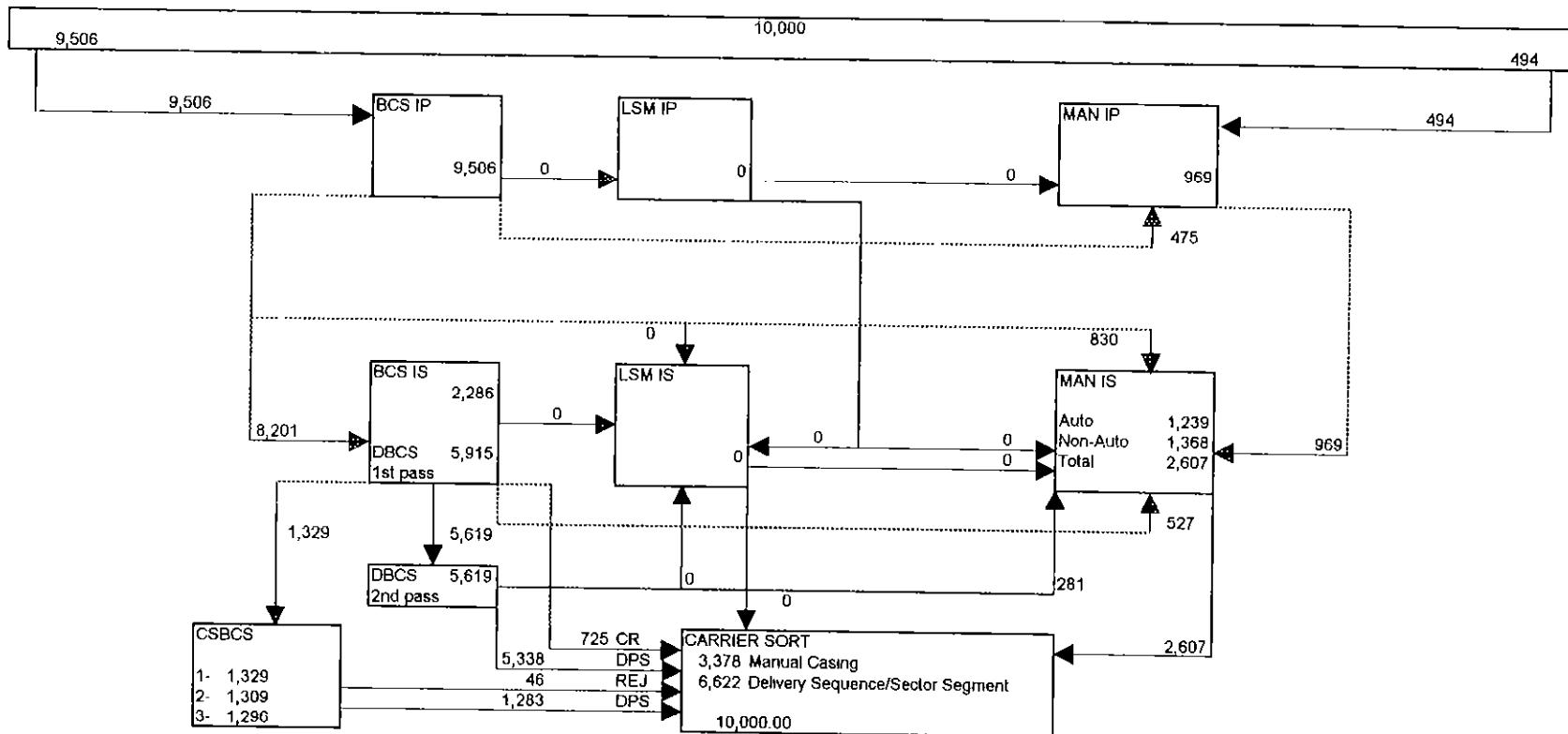
Column [6] = Column [4] * (premium pay factor page 42 - 1)

Column [7] = (Column [4] * Column [5] page 42) + Column [6]

Column [8] = Column [7] * Column [1] mail flow / 10,000

MODEL COST	3.7417
PROPORTIONAL ADJ. <small>Exhibit USPS-29B</small>	0.8118
FIXED ADJUSTMENT <small>Exhibit USPS-29B</small>	0.5854
TOTAL UNIT COST	3.6227

Standard (A) Nonprofit Automation 3-Digit Letters



Test Year Standard (A) Nonprofit Automation 5-Digit Letters Cost Summary

	[1] Mix of Handlings	[2] Pieces per Hour	[3] Wage Rate	[4] Direct Labor Cents/Piece	[5] Piggyback Factor	[6] Premium Pay Adj.	[7] Operation Unit Cost	[8] Model Unit C
Incoming Secondary								
Manual MODs Sites	850	646	\$25.445	3.9389	1.372	-0.1654	5.2387	0.445
Manual Non-Auto Sites	1,368	1,143	\$25.445	2.2261	1.372	-0.0935	2.9607	0.404
MPBCS	2,406	6,633	\$25.445	0.3836	1.719	-0.0161	0.6433	0.154
DBCS First-Pass	6,226	7,467	\$25.445	0.3408	2.434	-0.0143	0.8151	0.507
DBCS Second-Pass	5,915	7,467	\$25.445	0.3408	2.434	-0.0143	0.8151	0.482
CSBCS First-Pass	1,399	17,124	\$25.445	0.1486	1.948	-0.0062	0.2832	0.039
CSBCS Second-Pass	1,378	17,124	\$25.445	0.1486	1.948	-0.0062	0.2832	0.039
CSBCS Third-Pass	1,365	17,124	\$25.445	0.1486	1.948	-0.0062	0.2832	0.038
Other								
Accept/Verification	10,000						0.2664	0.266
Sort to P. O. Boxes:								
DPS	563	2,341	\$25.445	1.0868	1.368	-0.0456	1.4412	0.081
Non-DPS	245	1,171	\$25.445	2.1735	1.368	-0.0913	2.8824	0.070
% DPS		69.70%						

Figures in Columns [1], [2], [3], and [5] are reported in subsequent pages in this Appendix.

Column [4] = 1/Column [2] page 43 * Column [3] page 42

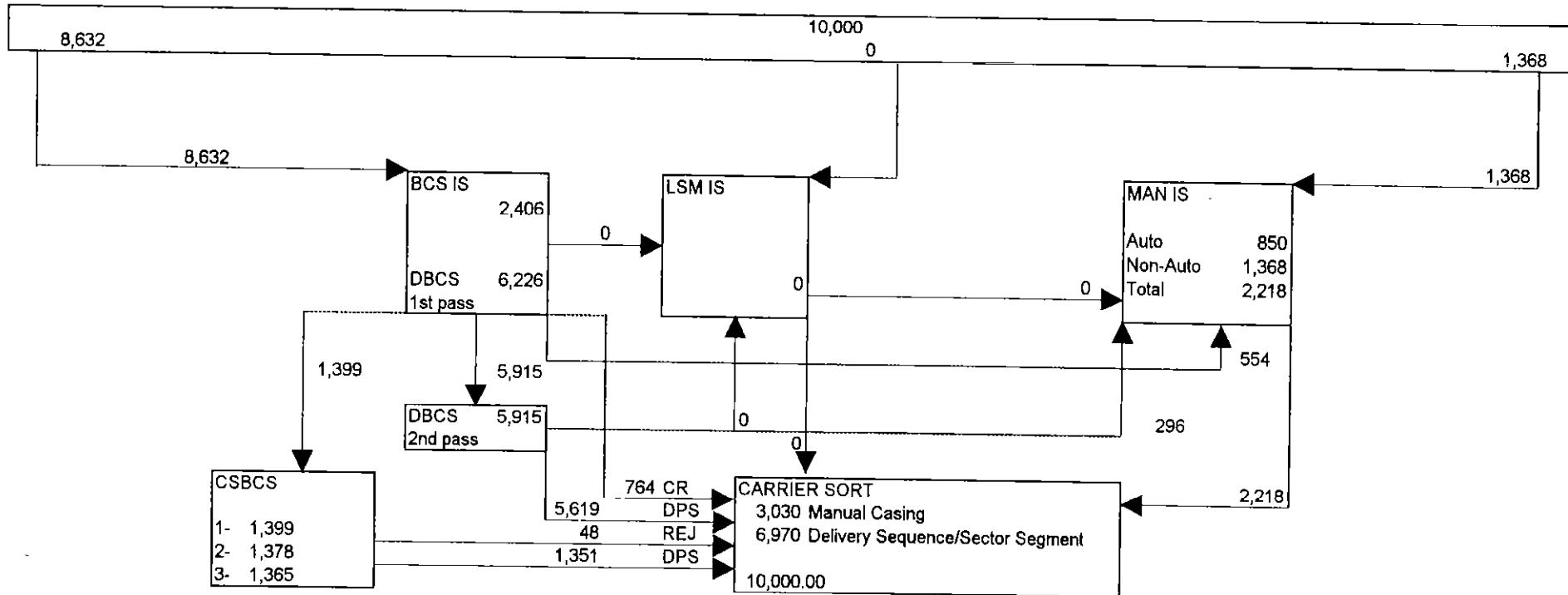
Column [6] = Column [4] * (premium pay factor page 42 - 1)

Column [7] = (Column [4] * Column [5] page 42) + Column [6]

Column [8] = Column [7] * Column [1] mail flow / 10,000

MODEL COST	2.529
PROPORTIONAL ADJ. <small>Exhibit USPS-29B</small>	0.8118
FIXED ADJUSTMENT <small>Exhibit USPS-29B</small>	0.5854
TOTAL UNIT COST	2.6390

Standard (A) Nonprofit Automation 5-Digit Letters



Test Year Standard (A) Nonprofit Automation 5-Digit 100% DBCS Letters Cost Summary

	[1] Mix of Handlings	[2] Pieces per Hour	[3] Wage Rate	[4] Direct Labor Cents/Piece	[5] Piggyback Factor	[6] Premium Pay Adj.	[7] Operation Unit Cost	[8] Modeled Unit Cost
Incoming Secondary								
Manual MODs Sites	975	646	\$25.45	3.9389	1.372	-0.1654	5.2387	0.5108
Manual Non-Auto Sites	0	1,143	\$25.45	2.2261	1.372	-0.0935	2.9607	0.0000
MPBCS	0	6,633	\$25.45	0.3836	1.719	-0.0161	0.6433	0.0000
DBCS First-Pass	10,000	7,467	\$25.45	0.3408	2.434	-0.0143	0.8151	0.8151
DBCS Second-Pass	9,500	7,467	\$25.45	0.3408	2.434	-0.0143	0.8151	0.7744
CSBCS First-Pass	0	17,124	\$25.45	0.1486	1.948	-0.0062	0.2832	0.0000
CSBCS Second-Pass	0	17,124	\$25.45	0.1486	1.948	-0.0062	0.2832	0.0000
CSBCS Third-Pass	0	17,124	\$25.45	0.1486	1.948	-0.0062	0.2832	0.0000
Other								
Accept./Verification	10,000						0.2664	0.2664
Sort to P. O. Boxes:								
DPS	729	2,341	\$25.45	1.0868	1.368	-0.0456	1.4412	0.1050
Non-DPS	79	1,171	\$25.45	2.1735	1.368	-0.0913	2.8824	0.0227

Figures in Columns [1], [2], [3], and [5] are reported in subsequent pages in this Appendix.

Column [4] = 1/Column [2] page 43 * Column [3] page 42

Column [6] = Column [4] * (premium pay factor page 42 - 1)

Column [7] = (Column [4] * Column [5] page 42) + Column [6]

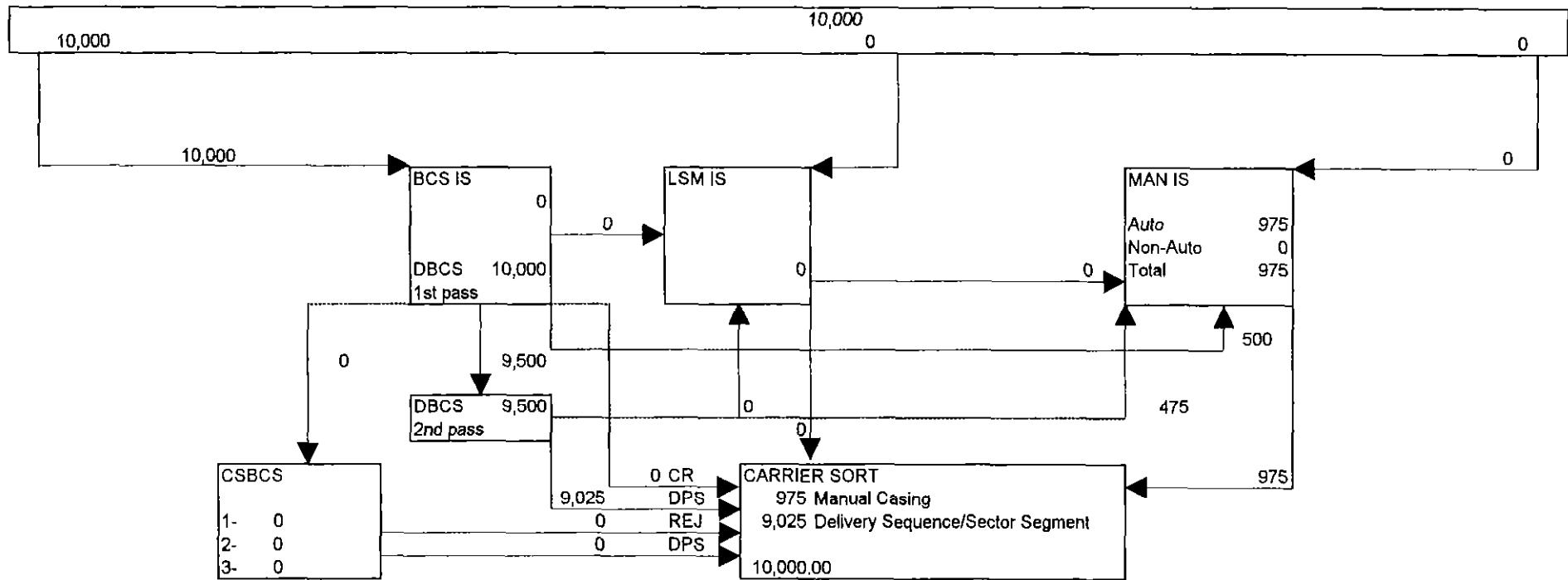
Column [8] = Column [7] * Column [1] mail flow / 10,000

MODEL COST	2.4943
PROPORTIONAL ADJ. <small>Exhibit USPS-29B</small>	0.8118
FIXED ADJUSTMENT <small>Exhibit USPS-29B</small>	0.5854
TOTAL UNIT COST	2.6101

* This cost summary describes the cost of processing NPECR Basic letters projected to qualify for and migrate to the Nonprofit Automation 5-Digit category. All such migrating letters will destinate at sites with DBCSs, because Automation NPECR Basic is available at all other sites. An adjustment to reflect the NPECR Basic letter dropship profile is performed in Exhibit USPS-29D. The cost of delivering DPS letters and non-DPS letters is reweighted below to reflect the higher percentage of DPS.

	Percent	Cost in Cents
DPS	90.25%	2.661
Non-DPS	9.75%	3.912
Total Delivery Costs	100.00%	2.783

Standard (A) Nonprofit Automation 5-Digit Letters 100% DBCS



	[1] Mix of Handlings	[2] Pieces per Hour	[3] Wage Rate	[4] Direct Labor Cents/Piece	[5] Piggyback Factor	[6] Premium Pay Adj.	[7] Operation Unit Cost	[8] Modeled Unit Cost
Incoming Secondary								
CSBCS First-Pass	5,480	17,124	\$25.445	0.1486	1.372	-0.0062	0.1976	0.1083
CSBCS Second-Pass	5,397	17,124	\$25.445	0.1486	1.372	-0.0059	0.1979	0.1068
CSBCS Third-Pass	5,343	17,124	\$25.445	0.1486	1.372	-0.0059	0.1979	0.1058
Other								
<i>Sort to P. O. Boxes:</i>								
DPS	86	2,341	\$25.445	1.0868	1.366	-0.0435	-1.4410	-0.0124
Non-DPS	0	1,171	\$25.445	2.1735	1.366	-0.0869	2.8821	0.0000
% DPS		52.90%						

Figures in Columns [1], [2], [3], and [5] are reported in subsequent pages in this Appendix.

Column [4] = 1/Column [2] page 43 * Column [3] page 42

MODEL COST

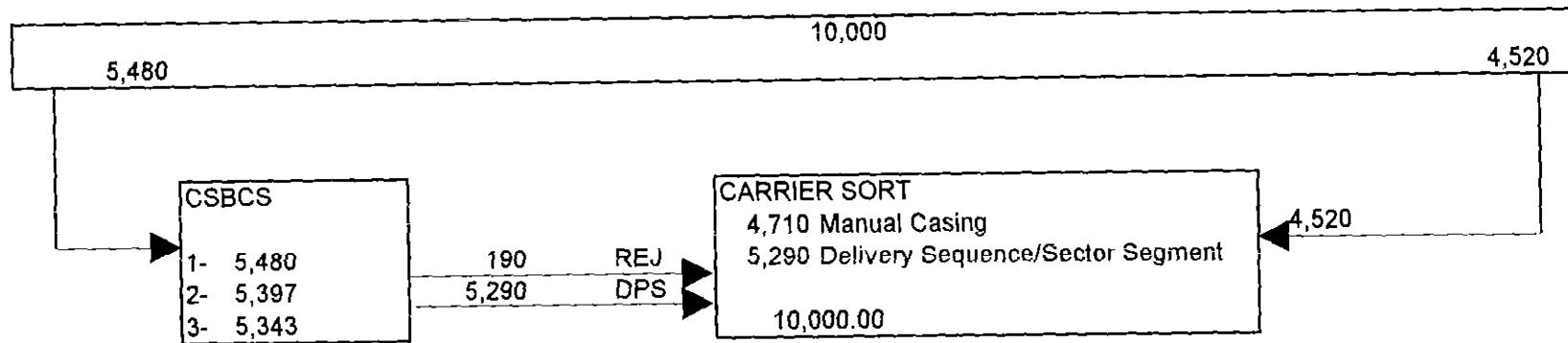
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Column [6] = Column [4] * (premium pay factor page 42 - 1)

Column [7] = (Column [4] * Column [5] page 42) + Column [6]

Column [8] = Column [7] * Column [1] mail flow / 10,000

Standard (A) Nonprofit ECR Automation Basic Letters



Test Year Standard (A) Nonprofit Upgradable Tray Basic Letters Cost Summary

	[1] Mix of Handlings	[2] Pieces per Hour	[3] Wage Rate	[4] Direct Labor Cents/Piece	[5] Piggyback Factor	[6] Premium Pay Adj.	[7] Operation Unit Cost	[8] Modeled Unit Cost
Outgoing Primary								
Manual	165	812	\$25.445	3.1336	1.372	-0.1316	4.1677	0.0689
MLOCR	4,879	7,350	\$25.445	0.3462	2.095	-0.0145	0.7107	0.3467
RBCS Images Processed	2,196	816	\$14.919	1.8293	1.450	-0.0768	1.7525	0.3849
LMLM	157	4,985	\$25.445	0.5104	1.450	-0.0214	0.7187	0.0113
BCS-OSS	2,144	11,984	\$25.445	0.2123	1.719	-0.0089	0.3561	0.0764
MPBCS	234	8,393	\$25.445	0.3032	1.719	-0.0127	0.5084	0.0119
Outgoing Secondary								
Manual	77	691	\$25.445	3.6823	1.372	-0.1547	4.8975	0.0377
MPBCS	1,041	8,393	\$25.445	0.3032	1.719	-0.0127	0.5084	0.0529
AADC Distribution								
Manual	280	759	\$25.445	3.3524	1.372	-0.1408	4.4587	0.1247
MLOCR	4,236	7,350	\$25.445	0.3462	2.095	-0.0145	0.7107	0.3011
RBCS Images Processed	1,907	816	\$14.919	1.8293	1.450	-0.0768	1.7525	0.3342
LMLM	136	4,985	\$25.445	0.5104	1.450	-0.0214	0.7187	0.0098
BCS-OSS	1,862	11,984	\$25.445	0.2123	1.719	-0.0089	0.3561	0.0663
MPBCS	1,074	8,393	\$25.445	0.3032	1.719	-0.0127	0.5084	0.0546
SCF Operations								
Manual	466	896	\$25.445	2.8398	1.372	-0.1193	3.7770	0.1760
MLOCR	1,019	7,350	\$25.445	0.3462	2.095	-0.0145	0.7107	0.0725
RBCS Images Processed	408	816	\$14.919	1.8293	1.450	-0.0768	1.7525	0.0716
LMLM	29	4,985	\$25.445	0.5104	1.450	-0.0214	0.7187	0.0021
BCS-OSS	399	11,984	\$25.445	0.2123	1.719	-0.0089	0.3561	0.0142
MPBCS	1,874	8,393	\$25.445	0.3032	1.719	-0.0127	0.5084	0.0953
Incoming Primary								
Manual	264	562	\$25.445	4.5276	1.372	-0.1902	6.0217	0.1591
MLOCR	0	7,350	\$25.445	0.3462	2.095	-0.0145	0.7107	0.0000
RBCS Images Processed	0	816	\$14.919	1.8293	1.450	-0.0768	1.7525	0.0000
LMLM	0	4,985	\$25.445	0.5104	1.450	-0.0214	0.7187	0.0000
BCS-OSS	0	11,984	\$25.445	0.2123	1.719	-0.0089	0.3561	0.0000
MPBCS	1,346	8,393	\$25.445	0.3032	1.719	-0.0127	0.5084	0.0684
Incoming Secondary								
Manual MODs Sites	1,799	646	\$25.45	3.9389	1.372	-0.1654	5.2387	0.9424
Manual Non-Auto Sites	1,369	1,143	\$25.45	2.2261	1.372	-0.0935	2.9607	0.4054
MPBCS	2,112	6,633	\$25.45	0.3836	1.719	-0.0161	0.6433	0.1359
DBCS First-Pass	5,466	7,467	\$25.45	0.3408	2.434	-0.0143	0.8151	0.4455
DBCS Second-Pass	5,193	7,467	\$25.45	0.3408	2.434	-0.0143	0.8151	0.4232
CSBCS First-Pass	1,228	17,124	\$25.45	0.1486	1.948	-0.0062	0.2832	0.0348
CSBCS Second-Pass	1,210	17,124	\$25.45	0.1486	1.948	-0.0062	0.2832	0.0343
CSBCS Third-Pass	1,198	17,124	\$25.45	0.1486	1.948	-0.0062	0.2832	0.0339
Other								
Acceptance/Verification	10,000						0.2664	0.2664
Sort to P. O. Boxes:								
DPS	494	2,341	\$25.45	1.0868	1.366	-0.0456	1.4389	0.0711
Non-DPS	313	1,171	\$25.45	2.1735	1.366	-0.0913	2.8777	0.0902
%DPS	61.19%							

Figures in Columns [1], [2], [3], and [5] are reported in subsequent pages in this Appendix.

Column [4] = 1/Column [2] page 43 * Column [3] page 42

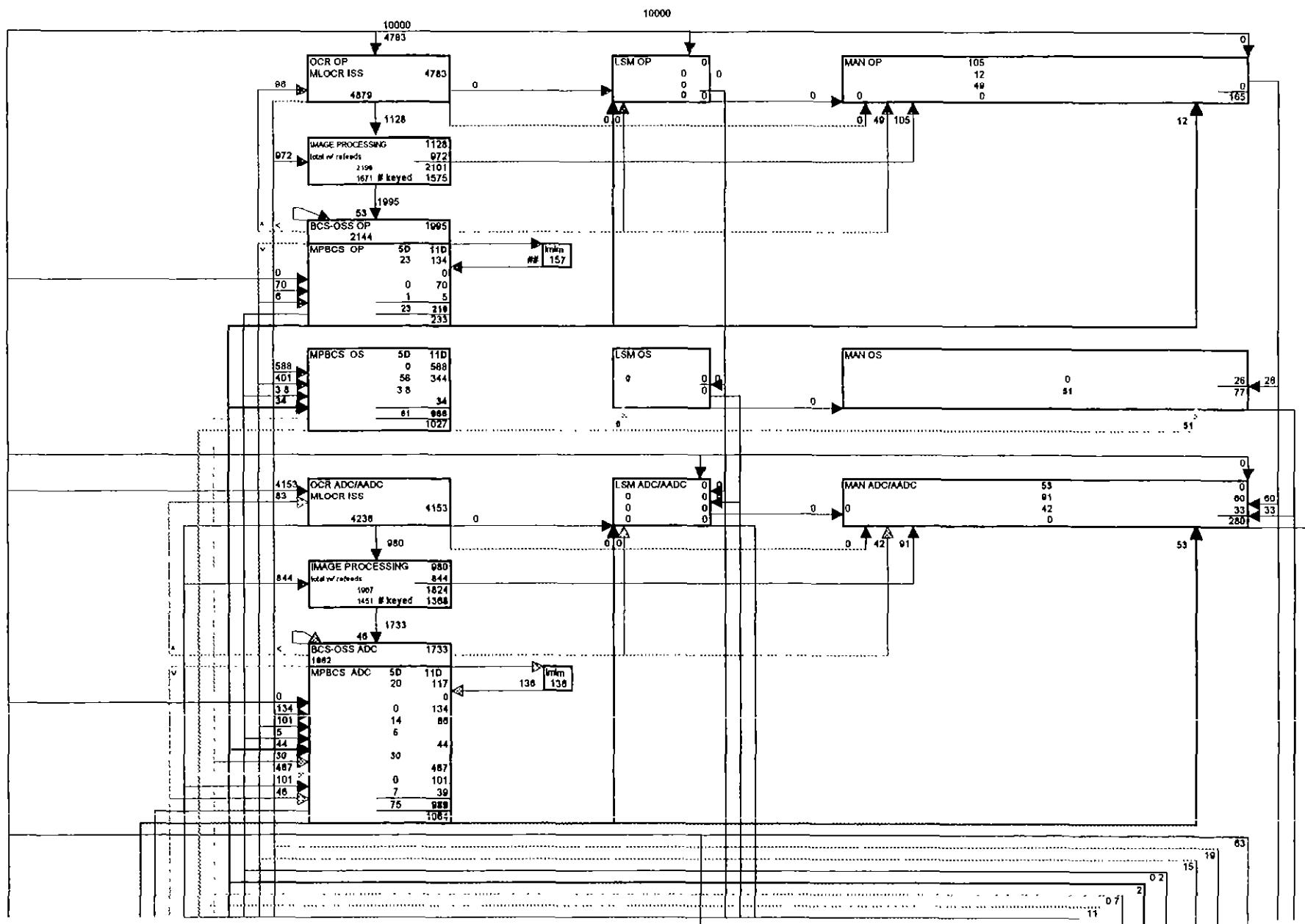
Column [6] = Column [4] * (premium pay factor page 42 - 1)

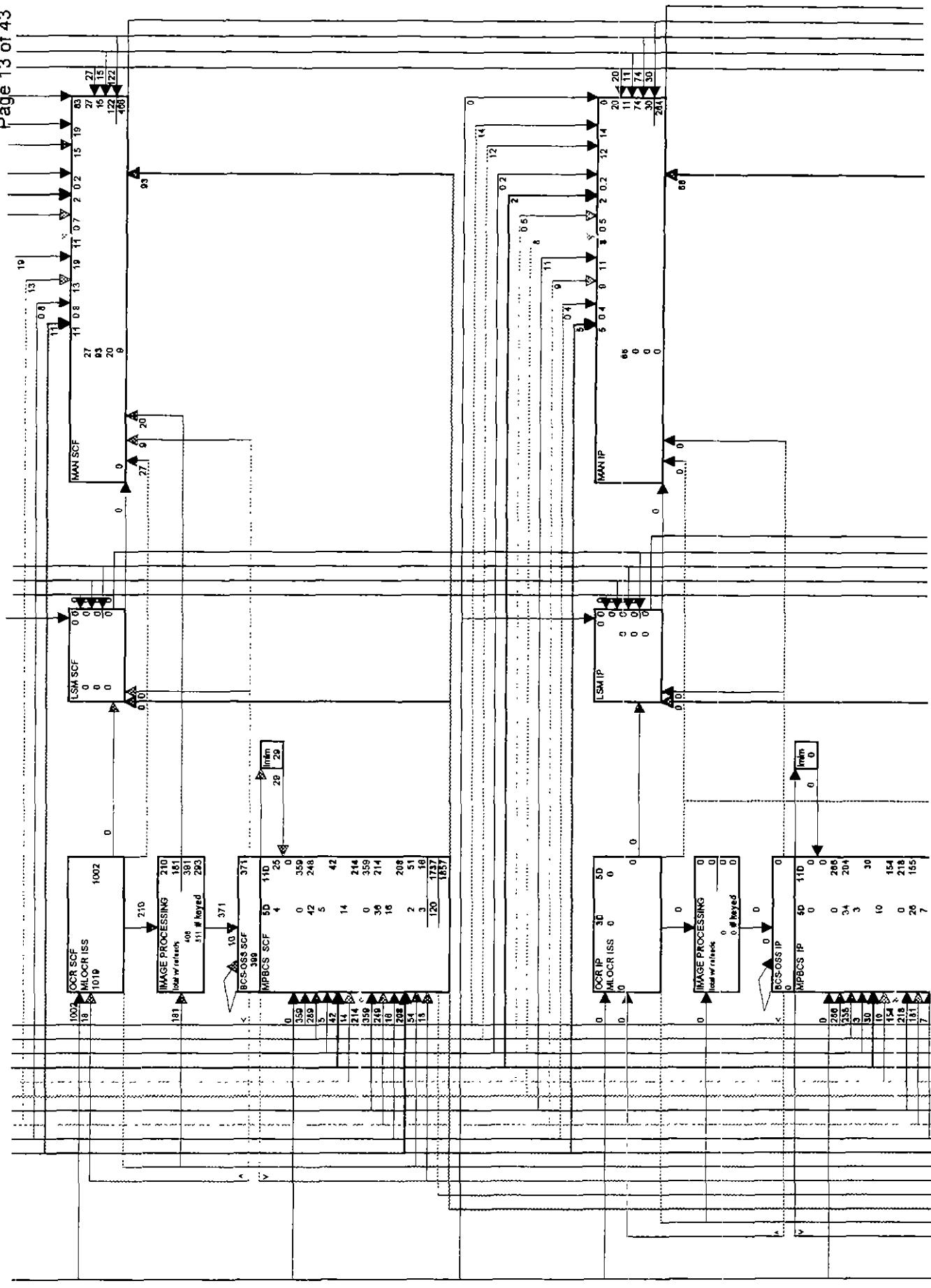
Column [7] = (Column [4] * Column [5] page 42) + Column [6]

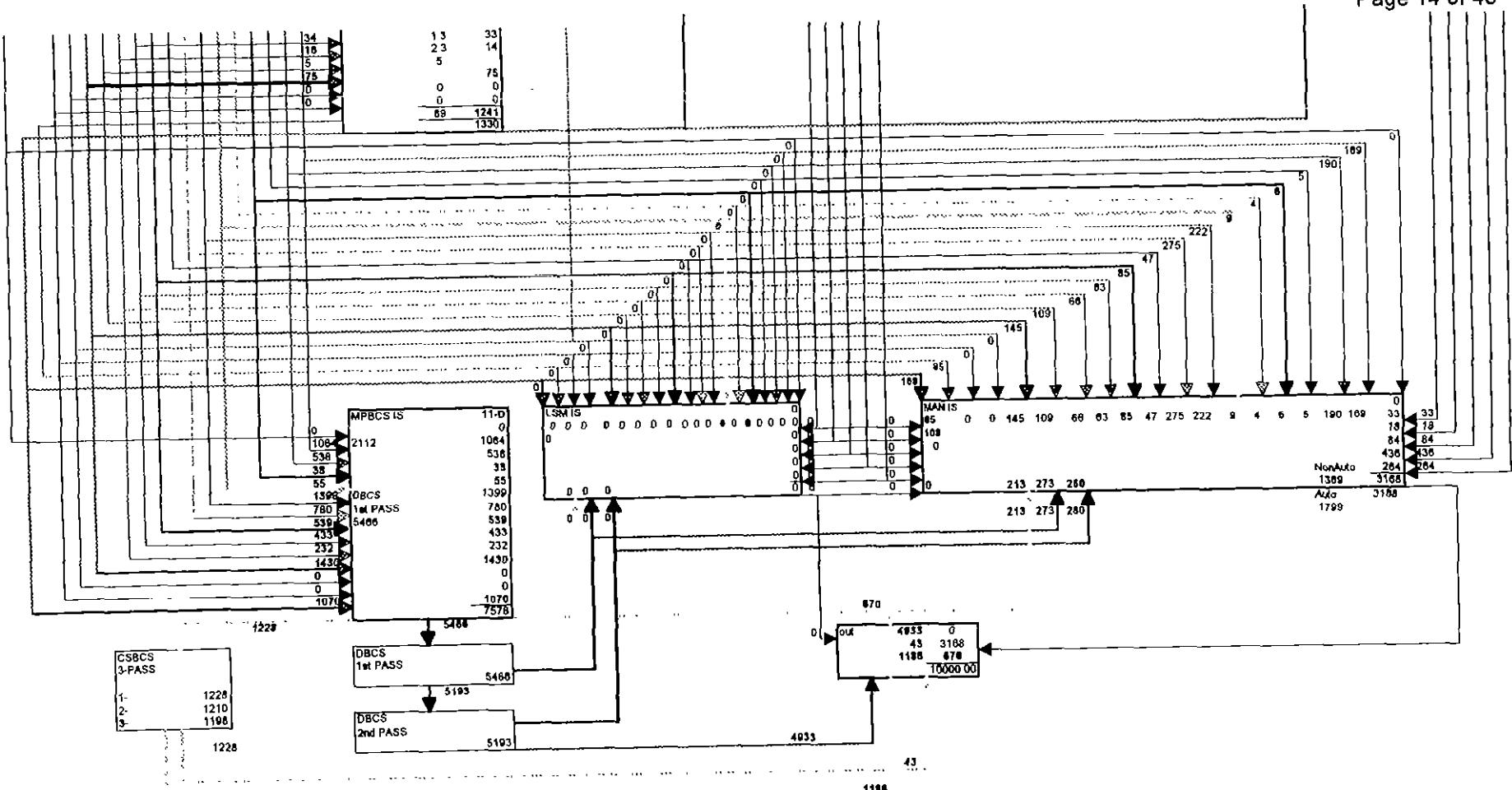
Column [8] = Column [7] * Column [1] mail flow / 10,000

MODEL COST	5.4234
PROPORTIONAL ADJ. <small>Exhibit USPS-29B</small>	0.8118
FIXED ADJUSTMENT <small>Exhibit USPS-29B</small>	0.5854
TOTAL UNIT COST	4.9878

Standard (A) Nonprofit Upgradable Tray Basic Letters







Test Year Standard (A) Nonprofit Upgradable Tray 3/5-Digit Presort Letters Cost Summary

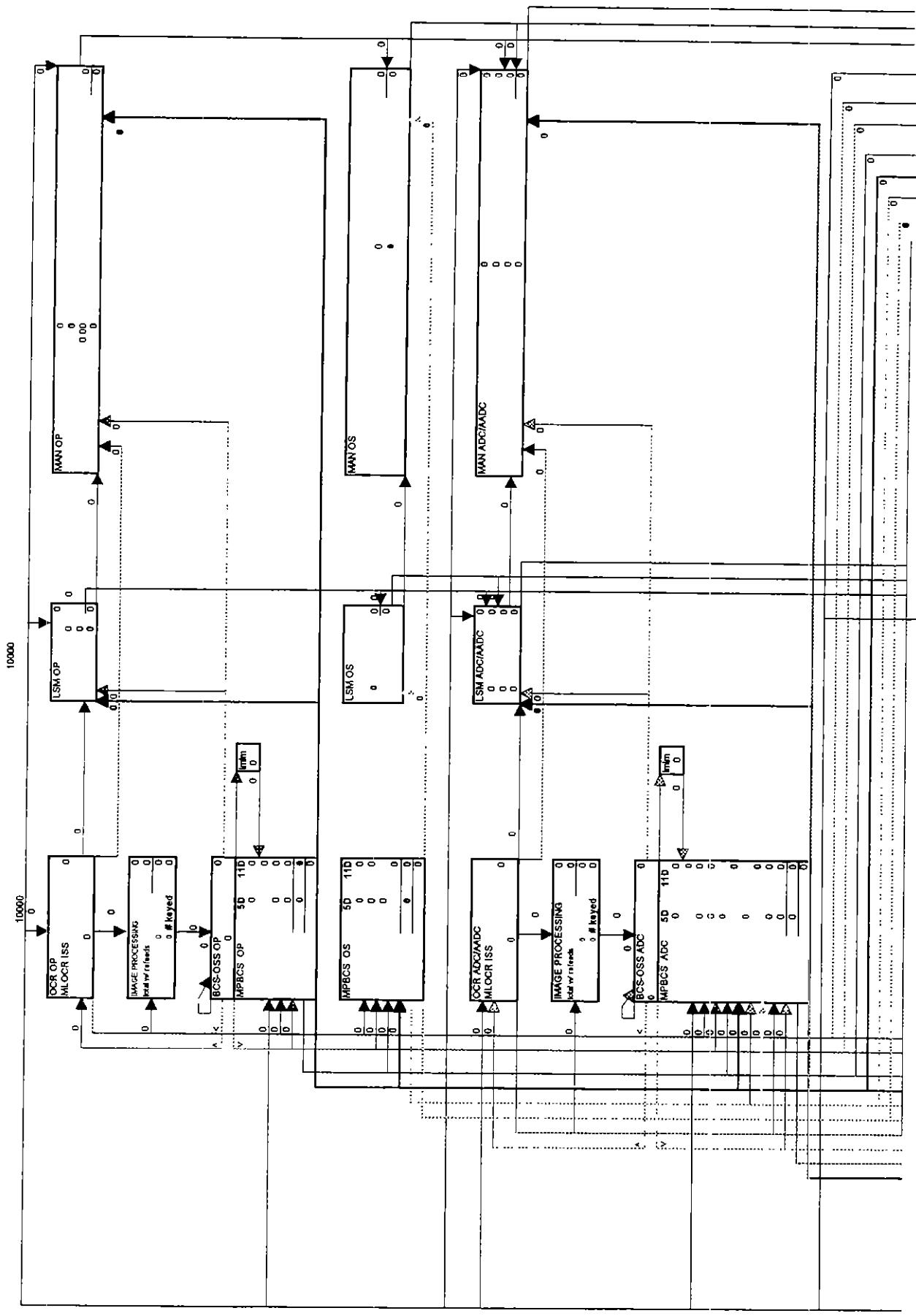
	[1] Mix of Handlings	[2] Pieces per Hour	[3] Wage Rate	[4] Direct Labor Cents/Piece	[5] Piggyback Factor	[6] Premium Pay Adj.	[7] Operation Unit Cost	[8] Modeled Unit Cost
<u>Outgoing Primary</u>								
Manual	0	812	\$25.445	3.1336	1.372	-0.1316	4.1677	0.0000
MLOCR	0	7,350	\$25.445	0.3462	2.095	-0.0145	0.7107	0.0000
RBCS Images Processed	0	816	\$14.919	1.8293	1.450	-0.0768	1.7525	0.0000
LMLM	0	4,985	\$25.445	0.5104	1.450	-0.0214	0.7187	0.0000
BCS-OSS	0	11,984	\$25.445	0.2123	1.719	-0.0089	0.3561	0.0000
MPBCS	0	8,393	\$25.445	0.3032	1.719	-0.0127	0.5084	0.0000
<u>Outgoing Secondary</u>								
Manual	0	691	\$25.445	3.6823	1.372	-0.1547	4.8975	0.0000
MPBCS	0	8,393	\$25.445	0.3032	1.719	-0.0127	0.5084	0.0000
<u>AADC Distribution</u>								
Manual	0	759	\$25.445	3.3524	1.372	-0.1408	4.4587	0.0000
MLOCR	0	7,350	\$25.445	0.3462	2.095	-0.0145	0.7107	0.0000
RBCS Images Processed	0	816	\$14.919	1.8293	1.450	-0.0768	1.7525	0.0000
LMLM	0	4,985	\$25.445	0.5104	1.450	-0.0214	0.7187	0.0000
BCS-OSS	0	11,984	\$25.445	0.2123	1.719	-0.0089	0.3561	0.0000
MPBCS	0	8,393	\$25.445	0.3032	1.719	-0.0127	0.5084	0.0000
<u>SCF Operations</u>								
Manual	0	896	\$25.445	2.8398	1.372	-0.1193	3.7770	0.0000
MLOCR	0	7,350	\$25.445	0.3462	2.095	-0.0145	0.7107	0.0000
RBCS Images Processed	0	816	\$14.919	1.8293	1.450	-0.0768	1.7525	0.0000
LMLM	0	4,985	\$25.445	0.5104	1.450	-0.0214	0.7187	0.0000
BCS-OSS	0	11,984	\$25.445	0.2123	1.719	-0.0089	0.3561	0.0000
MPBCS	0	8,393	\$25.445	0.3032	1.719	-0.0127	0.5084	0.0000
<u>Incoming Primary</u>								
Manual	761	562	\$25.445	4.5276	1.372	-0.1902	6.0217	0.4580
MLOCR	9,313	7,350	\$25.445	0.3462	2.095	-0.0145	0.7107	0.6619
RBCS Images Processed	3,269	816	\$14.919	1.8293	1.450	-0.0768	1.7525	0.5729
LMLM	193	4,985	\$25.445	0.5104	1.450	-0.0214	0.7187	0.0139
BCS-OSS	3,164	11,984	\$25.445	0.2123	1.719	-0.0089	0.3561	0.1127
MPBCS	777	8,393	\$25.445	0.3032	1.719	-0.0127	0.5084	0.0395
<u>Incoming Secondary</u>								
Manual MODs Sites	1,641	646	\$25.445	3.9389	1.372	-0.1654	5.2387	0.8596
Manual Non-Auto Sites	1,453	1,143	\$25.445	2.2261	1.372	-0.0935	2.9607	0.4302
MPBCS	2,135	6,633	\$25.445	0.3836	1.719	-0.0161	0.6433	0.1374
DBCS First-Pass	5,525	7,467	\$25.445	0.3408	2.434	-0.0143	0.8151	0.4504
DBCS Second-Pass	5,249	7,467	\$25.445	0.3408	2.434	-0.0143	0.8151	0.4279
CSBCS First-Pass	1,242	17,124	\$25.445	0.1486	1.948	-0.0062	0.2832	0.0352
CSBCS Second-Pass	1,223	17,124	\$25.445	0.1486	1.948	-0.0062	0.2832	0.0346
CSBCS Third-Pass	1,211	17,124	\$25.445	0.1486	1.948	-0.0062	0.2832	0.0343
<u>Other</u>								
Acceptance/Verification	10,000						0.2664	0.2664
Sort to P. O. Boxes:								
DPS	499	2,341	\$25.445	1.0868	1.366	-0.0456	1.4389	0.0718
Non-DPS	308	1,171	\$25.445	2.1735	1.366	-0.0913	2.8777	0.0886
%DPS		61.85%						

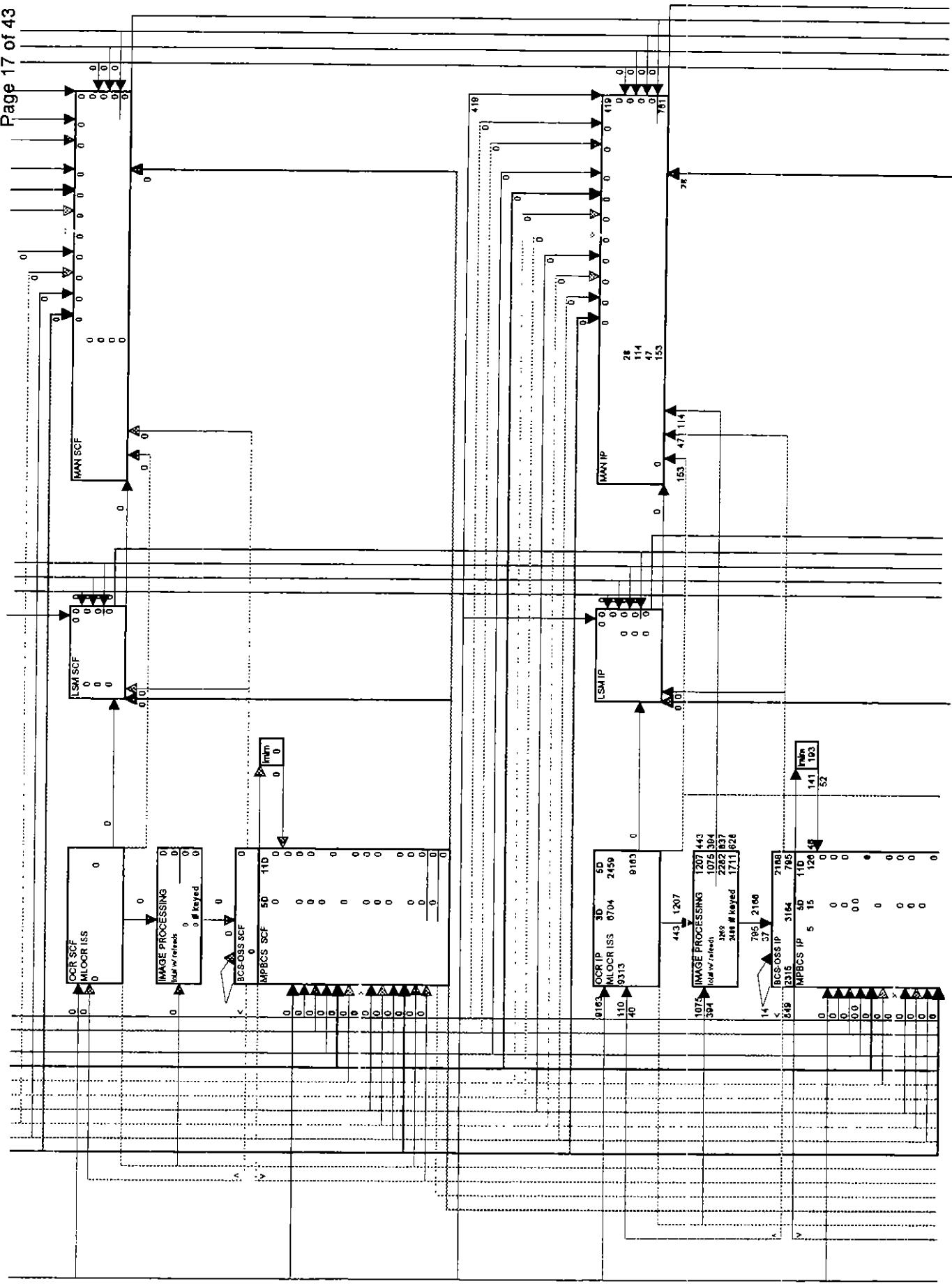
Figures in Columns [1], [2], [3], and [5] are reported in subsequent pages in this Appendix.

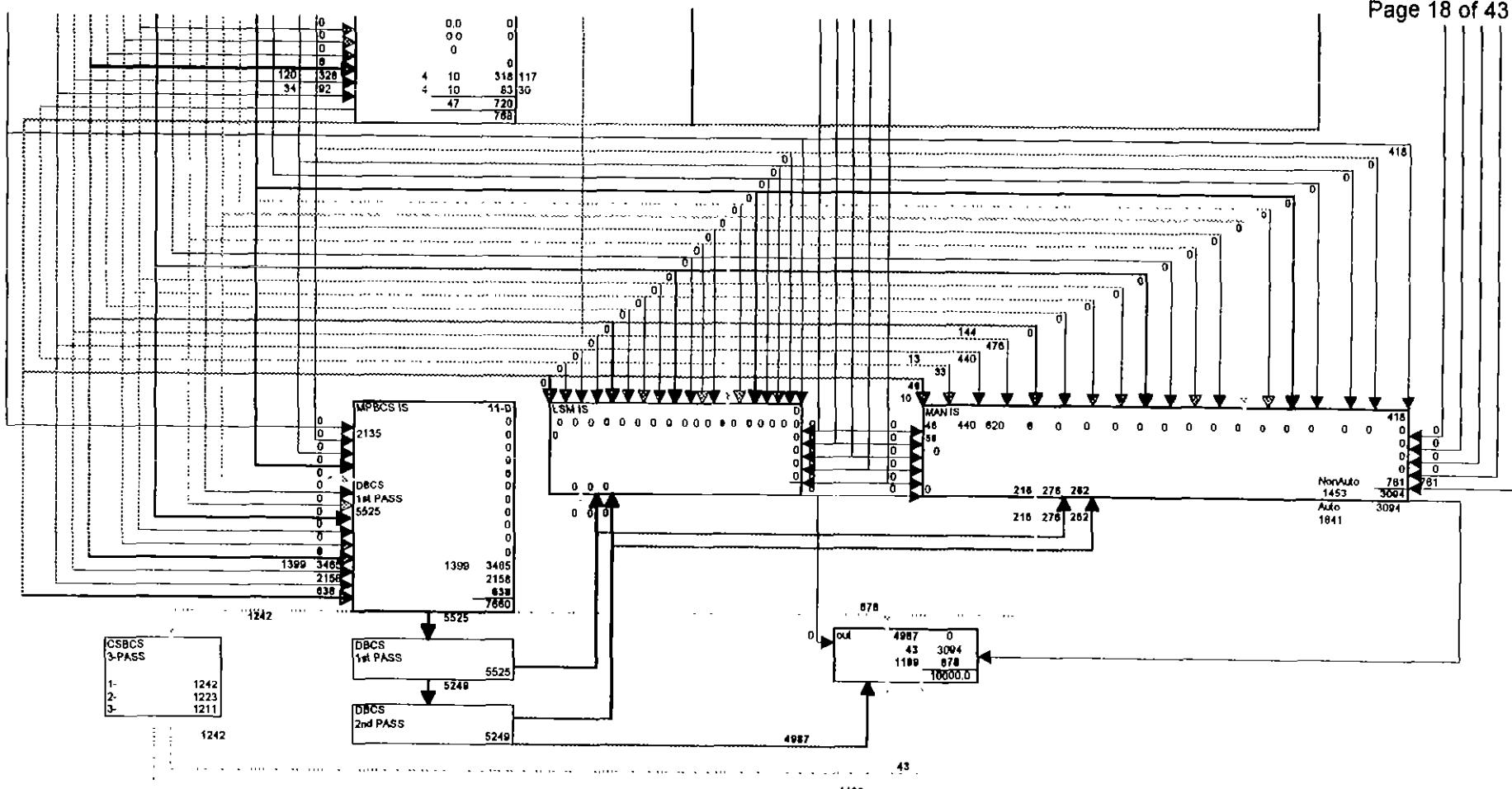
Column [4] = 1/Column [2] page 43 * Column [3] page 42Column [6] = Column [4] * (premium pay factor page 42 - 1)Column [7] = (Column [4] * Column [5] page 42) + Column [6]Column [8] = Column [7] * Column [1] mail flow / 10,000

MODEL COST	4.6952
PROPORTIONAL ADJ. <small>Exhibit USPS-29B</small>	0.8118
FIXED ADJUSTMENT <small>Exhibit USPS-29B</small>	0.5854
TOTAL UNIT COST	4.3967

Standard (A) Nonprofit Upgradable Tray 3/5-Digit Postnet Letters







Test Year Standard (A) Nonprofit Upgradable Packages in "Non-OCR Upgradable" Trays Basic Letters Cost Summary

	[1] Mix of Handlings	[2] Pieces per Hour	[3] Wage Rate	[4] Direct Labor Cents/Piece	[5] Piggyback Factor	[6] Premium Pay Adj.	[7] Operation Unit Cost	[8] Modeled Unit Cost
Outgoing Primary								
Manual	229	812	\$25.445	3.1336	1.372	-0.1316	4.1677	0.0953
MLOCR	6,742	7,350	\$25.445	0.3462	2.095	-0.0145	0.7107	0.4791
RBCS Images Processed	3,035	816	\$14.919	1.8293	1.450	-0.0768	1.7525	0.5318
LMLM	217	4,985	\$25.445	0.5104	1.450	-0.0214	0.7187	0.0156
BCS-OSS	2,963	11,984	\$25.445	0.2123	1.719	-0.0089	0.3561	0.1055
MPBCS	323	8,393	\$25.445	0.3032	1.719	-0.0127	0.5084	0.0164
Outgoing Secondary								
Manual	106	691	\$25.445	3.6823	1.372	-0.1547	4.8975	0.0521
MPBCS	1,438	8,393	\$25.445	0.3032	1.719	-0.0127	0.5084	0.0731
AADC Distribution								
Manual	250	759	\$25.445	3.3524	1.372	-0.1408	4.4587	0.1117
MLOCR	1,954	7,350	\$25.445	0.3462	2.095	-0.0145	0.7107	0.1389
RBCS Images Processed	880	816	\$14.919	1.8293	1.450	-0.0768	1.7525	0.1542
LMLM	63	4,985	\$25.445	0.5104	1.450	-0.0214	0.7187	0.0045
BCS-OSS	859	11,984	\$25.445	0.2123	1.719	-0.0089	0.3561	0.0306
MPBCS	1,221	8,393	\$25.445	0.3032	1.719	-0.0127	0.5084	0.0621
SCF Operations								
Manual	409	896	\$25.445	2.8398	1.372	-0.1193	3.7770	0.1544
MLOCR	470	7,350	\$25.445	0.3462	2.095	-0.0145	0.7107	0.0334
RBCS Images Processed	188	816	\$14.919	1.8293	1.450	-0.0768	1.7525	0.0330
LMLM	13	4,985	\$25.445	0.5104	1.450	-0.0214	0.7187	0.0010
BCS-OSS	184	11,984	\$25.445	0.2123	1.719	-0.0089	0.3561	0.0065
MPBCS	1,875	8,393	\$25.445	0.3032	1.719	-0.0127	0.5084	0.0953
Incoming Primary								
Manual	358	562	\$25.445	4.5276	1.372	-0.1902	6.0217	0.2157
MLOCR	923	7,350	\$25.445	0.3462	2.095	-0.0145	0.7107	0.0656
RBCS Images Processed	370	816	\$14.919	1.8293	1.450	-0.0768	1.7525	0.0648
LMLM	26	4,985	\$25.445	0.5104	1.450	-0.0214	0.7187	0.0019
BCS-OSS	361	11,984	\$25.445	0.2123	1.719	-0.0089	0.3561	0.0129
MPBCS	1,468	8,393	\$25.445	0.3032	1.719	-0.0127	0.5084	0.0746
Incoming Secondary								
Manual MODs Sites	1,828	646	\$25.445	3.9389	1.372	-0.1654	5.2387	0.9576
Manual Non-Auto Sites	1,383	1,143	\$25.445	2.2261	1.372	-0.0935	2.9607	0.4095
MPBCS	2,099	6,633	\$25.445	0.3836	1.719	-0.0161	0.6433	0.1350
DBCS First-Pass	5,432	7,467	\$25.445	0.3408	2.434	-0.0143	0.8151	0.4427
DBCS Second-Pass	5,160	7,467	\$25.445	0.3408	2.434	-0.0143	0.8151	0.4206
CSBCS First-Pass	1,221	17,124	\$25.445	0.1486	1.943	-0.0062	0.2832	0.0346
CSBCS Second-Pass	1,202	17,124	\$25.445	0.1486	1.943	-0.0062	0.2832	0.0341
CSBCS Third-Pass	1,190	17,124	\$25.445	0.1486	1.943	-0.0062	0.2832	0.0337
Other								
Acceptance/Verification	10,000						0.2664	0.2664
<i>Sort to P. O. Boxes:</i>								
DPS	491	2,341	\$25.445	1.0868	1.366	-0.0456	1.4389	0.0706
Non-DPS	316	1,171	\$25.445	2.1735	1.366	-0.0913	2.8777	0.0911
Bundle Sorting Basic	10,000						0.1157	0.1157
%DPS	60.80%							

Figures in Columns [1], [2], [3], and [5] are reported in subsequent pages in this Appendix.

Column [4] = 1/Column [2] ^{page 43} * Column [3] ^{page 42}

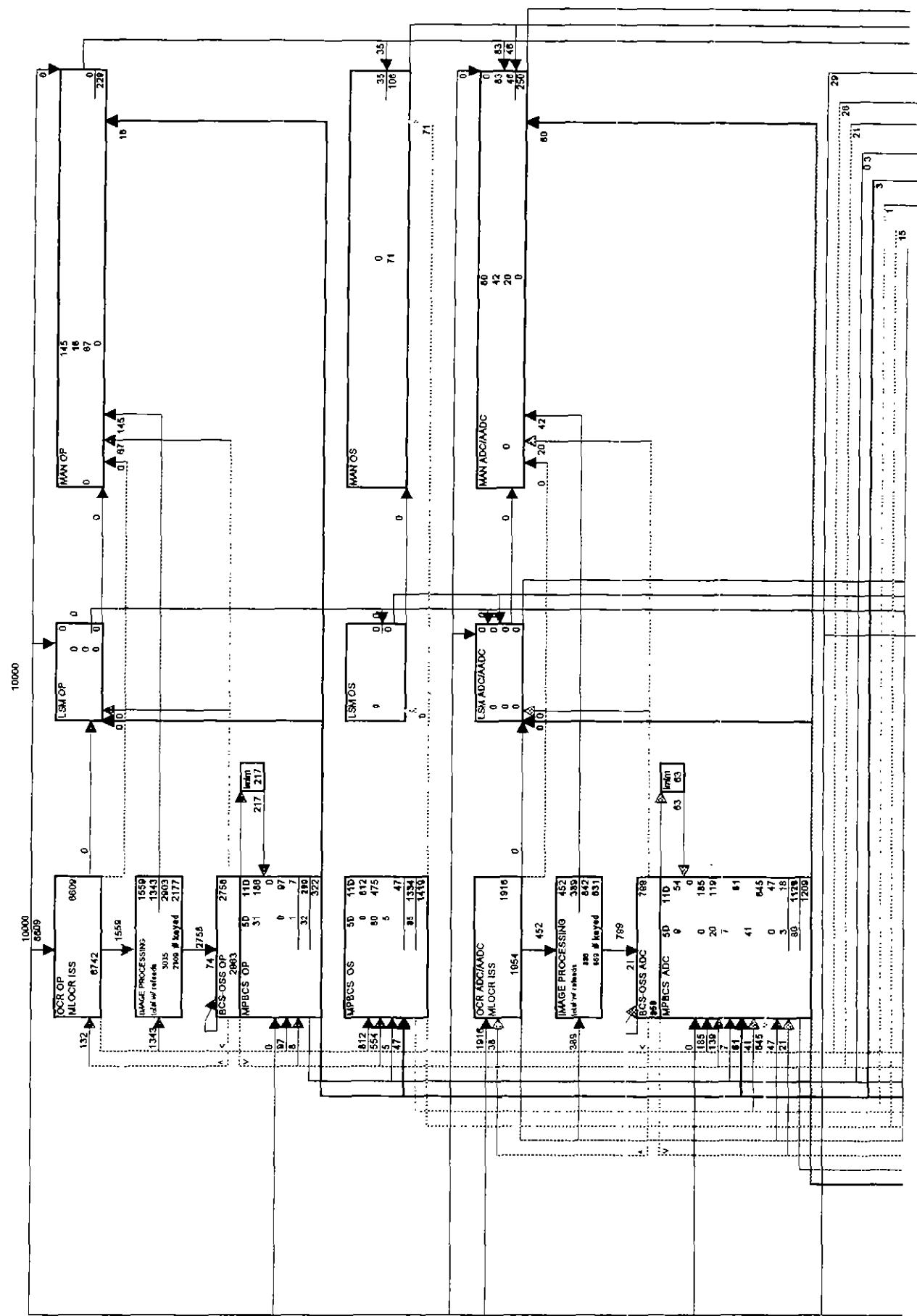
Column [6] = Column [4] * (premium pay factor ^{page 42} - 1)

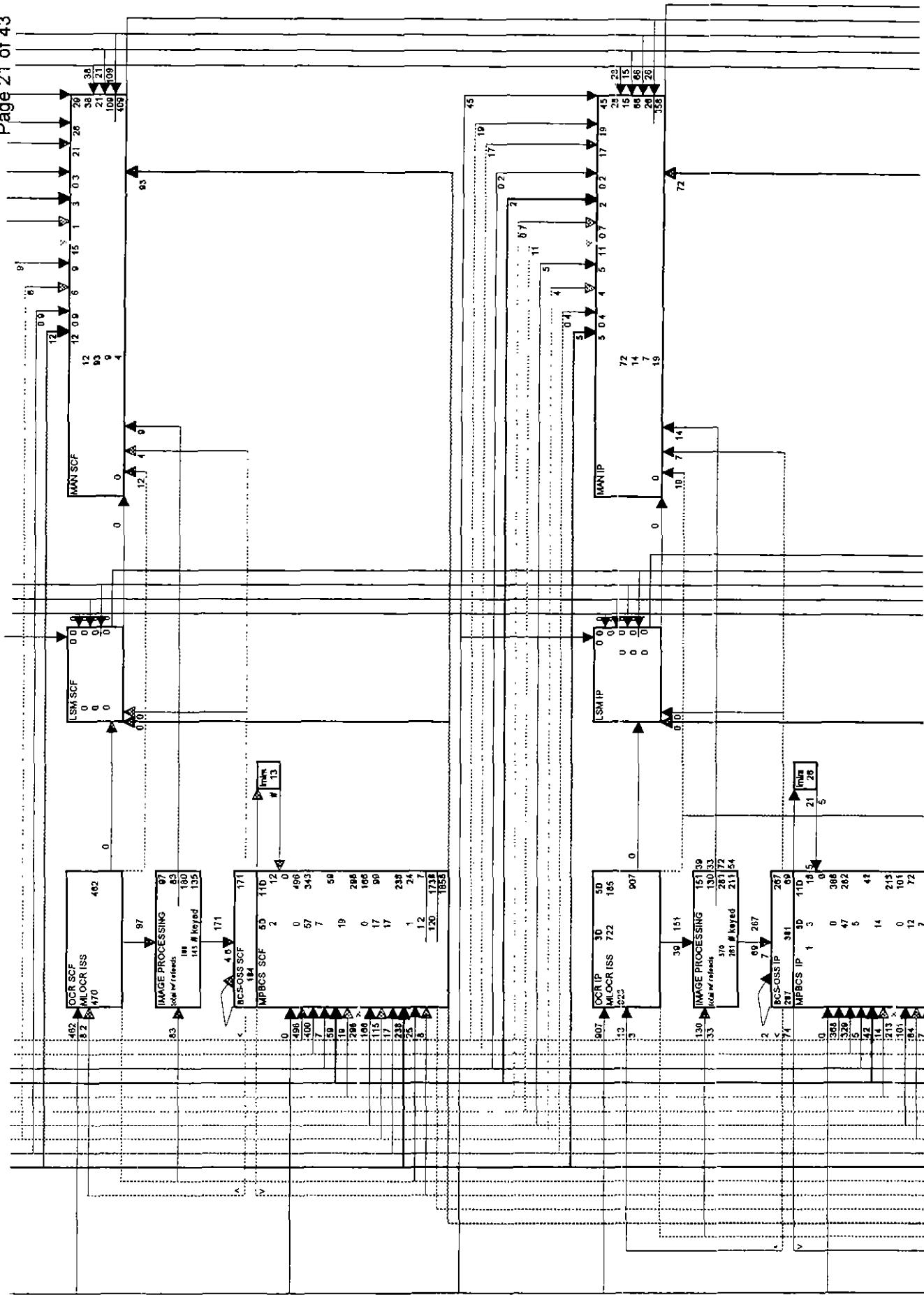
Column [7] = (Column [4] * Column [5] ^{page 42}) + Column [6]

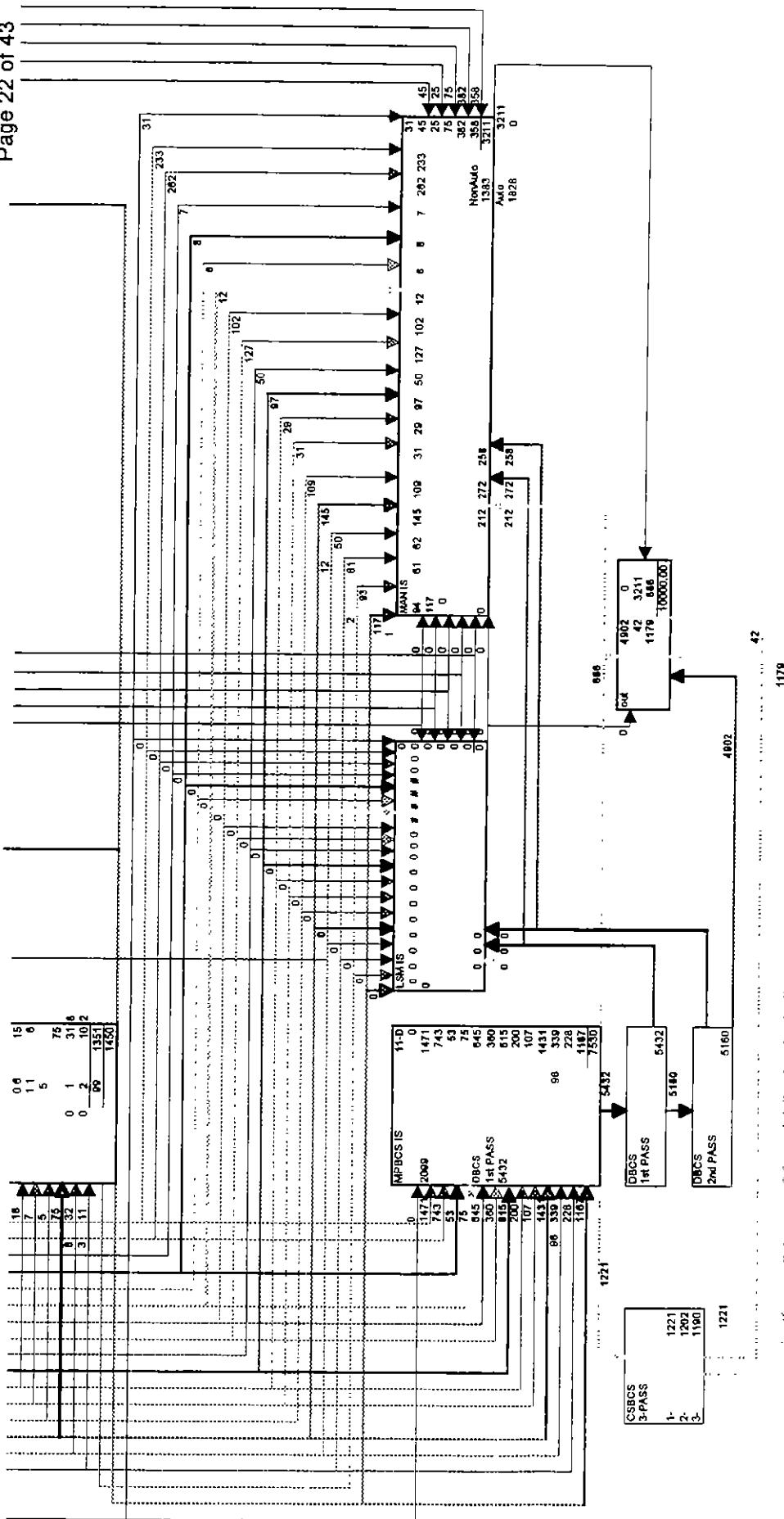
Column [8] = Column [7] * Column [1] ^{mail flow} / 10,000

MODEL COST	5.6416
PROPORTIONAL ADJ.	Exhibit USPS-29B 0.8118
FIXED ADJUSTMENT	Exhibit USPS-29B 0.5854
TOTAL UNIT COST	5.1650

Standard (A) Nonprofit Upgradable Package Basic Letters







Test Year Standard (A) Nonprofit Upgradable Packages in "Non-OCR Upgradable" Trays 3/5 Presort Letters Cost Summary

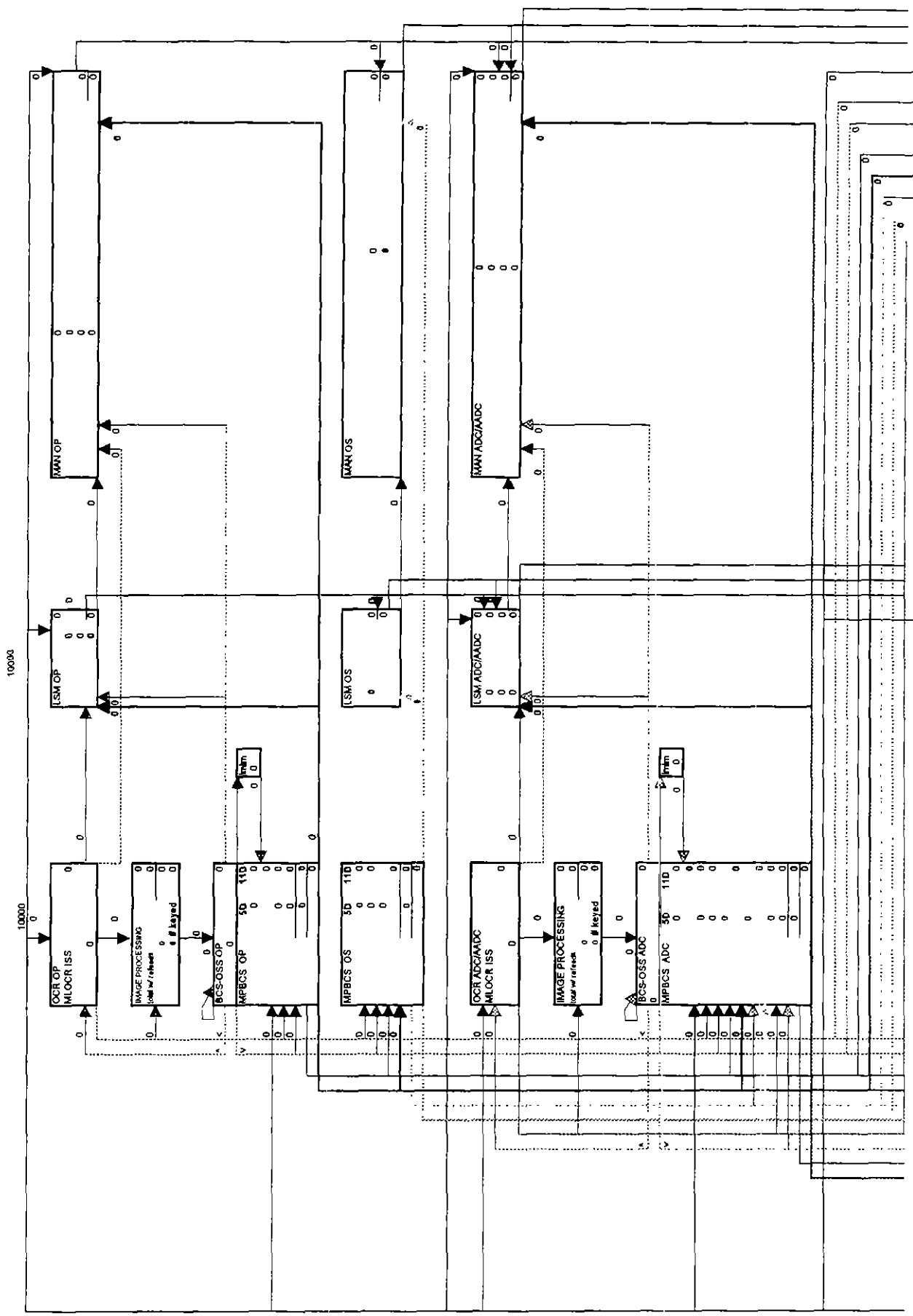
	[1] Mix of Handlings	[2] Pieces per Hour	[3] Wage Rate	[4] Direct Labor Cents/Piece	[5] Piggyback Factor	[6] Premium Pay Adj.	[7] Operation Unit Cost	[8] Modeled Unit Cost
<u>Outgoing Primary</u>								
Manual	0	812	\$25.445	3.1336	1.3720	-0.131612	4.1677	0.0000
MLOCR	0	7,350	\$25.445	0.3462	2.0950	-0.014540	0.7107	0.0000
RBCS Images Processed	0	816	\$14.919	1.8293	1.4500	-0.076831	1.7525	0.0000
LMLM	0	4,985	\$25.445	0.5104	1.4500	-0.021438	0.7187	0.0000
BCS-OSS	0	11,984	\$25.445	0.2123	1.7190	-0.008918	0.3561	0.0000
MPBCS	0	8,393	\$25.445	0.3032	1.7190	-0.012733	0.5084	0.0000
<u>Outgoing Secondary</u>								
Manual	0	691	\$25.445	3.6823	1.3720	-0.154658	4.8975	0.0000
MPBCS	0	8,393	\$25.445	0.3032	1.7190	-0.012733	0.5084	0.0000
<u>AADC Distribution</u>								
Manual	0	759	\$25.445	3.3524	1.3720	-0.140802	4.4587	0.0000
MLOCR	0	7,350	\$25.445	0.3462	2.0950	-0.014540	0.7107	0.0000
RBCS Images Processed	0	816	\$14.919	1.8293	1.4500	-0.076831	1.7525	0.0000
LMLM	0	4,985	\$25.445	0.5104	1.4500	-0.021438	0.7187	0.0000
BCS-OSS	0	11,984	\$25.445	0.2123	1.7190	-0.008918	0.3561	0.0000
MPBCS	0	8,393	\$25.445	0.3032	1.7190	-0.012733	0.5084	0.0000
<u>SCF Operations</u>								
Manual	0	896	\$25.445	2.8398	1.3720	-0.119273	3.7770	0.0000
MLOCR	0	7,350	\$25.445	0.3462	2.0950	-0.014540	0.7107	0.0000
RBCS Images Processed	0	816	\$14.919	1.8293	1.4500	-0.076831	1.7525	0.0000
LMLM	0	4,985	\$25.445	0.5104	1.4500	-0.021438	0.7187	0.0000
BCS-OSS	0	11,984	\$25.445	0.2123	1.7190	-0.008918	0.3561	0.0000
MPBCS	0	8,393	\$25.445	0.3032	1.7190	-0.012733	0.5084	0.0000
<u>Incoming Primary</u>								
Manual	532	562	\$25.445	4.5276	1.3720	-0.190158	6.0217	0.3206
MLOCR	9,126	7,350	\$25.445	0.3462	2.0950	-0.014540	0.7107	0.6486
RBCS Images Processed	3,203	816	\$14.919	1.8293	1.4500	-0.076831	1.7525	0.5614
LMLM	189	4,985	\$25.445	0.5104	1.4500	-0.021438	0.7187	0.0136
BCS-OSS	3,100	11,984	\$25.445	0.2123	1.7190	-0.008918	0.3561	0.1104
MPBCS	761	8,393	\$25.445	0.3032	1.7190	-0.012733	0.5084	0.0387
<u>Incoming Secondary</u>								
Manual MODs Sites	1,641	646	\$25.445	3.9389	1.3720	-0.165432	5.2387	0.8596
Manual Non-Auto Sites	1,453	1,143	\$25.445	2.2261	1.3720	-0.093496	2.9607	0.4302
MPBCS	2,135	6,633	\$25.445	0.3836	1.7190	-0.016112	0.6433	0.1374
DBCS First-Pass	5,525	7,467	\$25.445	0.3408	2.4340	-0.014312	0.8151	0.4504
DBCS Second-Pass	5,249	7,467	\$25.445	0.3408	2.4340	-0.014312	0.8151	0.4279
CSBCS First-Pass	1,242	17,124	\$25.445	0.1486	1.9480	-0.006241	0.2832	0.0352
CSBCS Second-Pass	1,223	17,124	\$25.445	0.1486	1.9480	-0.006241	0.2832	0.0346
CSBCS Third-Pass	1,211	17,124	\$25.445	0.1486	1.9480	-0.006241	0.2832	0.0343
<u>Other</u>								
Acceptance/Verification	10,000						0.2664	0.2664
Sort to P. O. Boxes:								
DPS	499	2,341	\$25.445	1.0868	1.3660	-0.045644	1.4389	0.0718
Non-DPS	308	1,171	\$25.445	2.1735	1.3660	-0.091287	2.8777	0.0886
Bundle Sorting Basic	10,000						0.4198	0.4198
%DPS	61.85%							

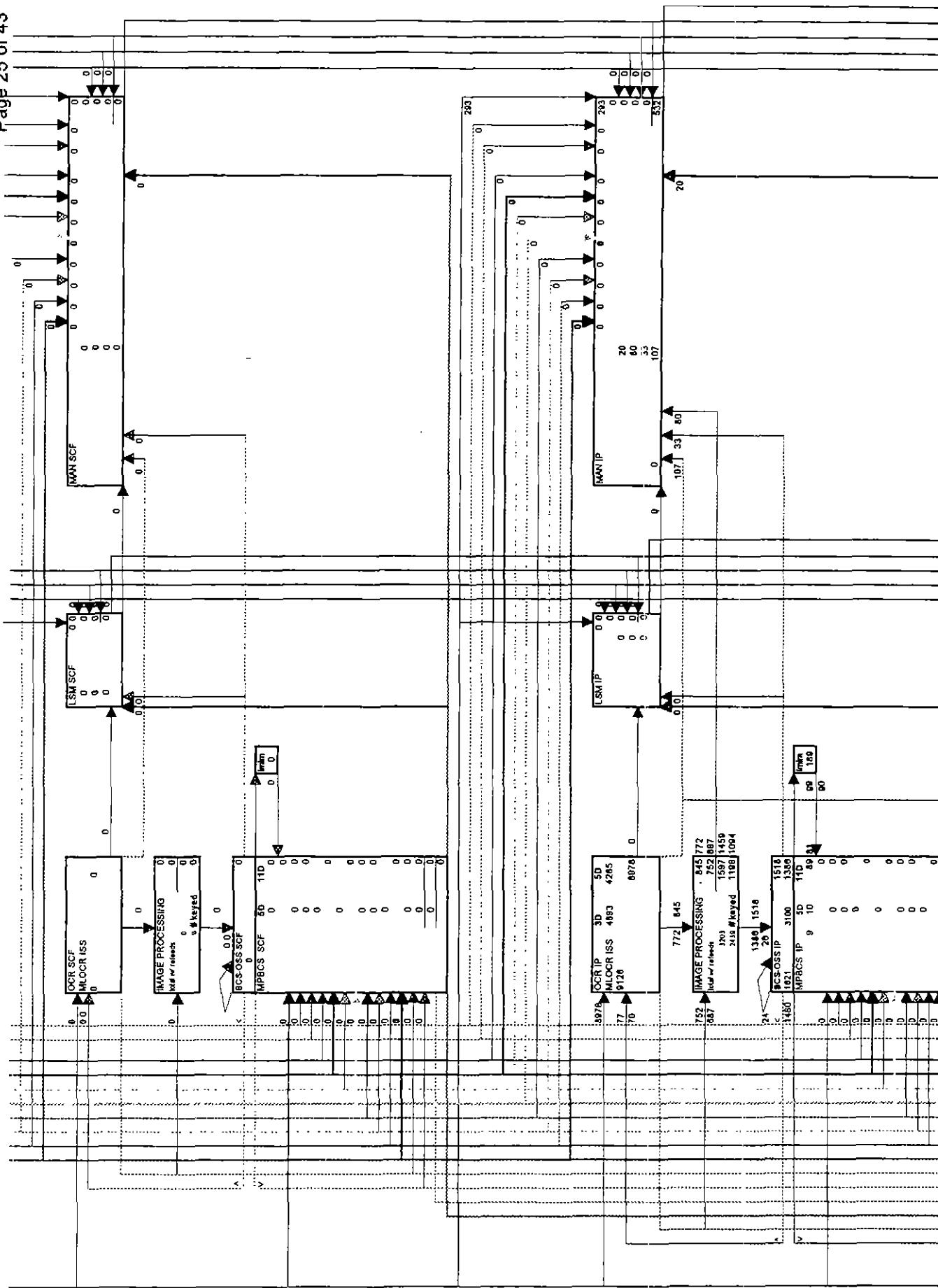
Figures in Columns [1], [2], [3], and [5] are reported in subsequent pages in this Appendix.

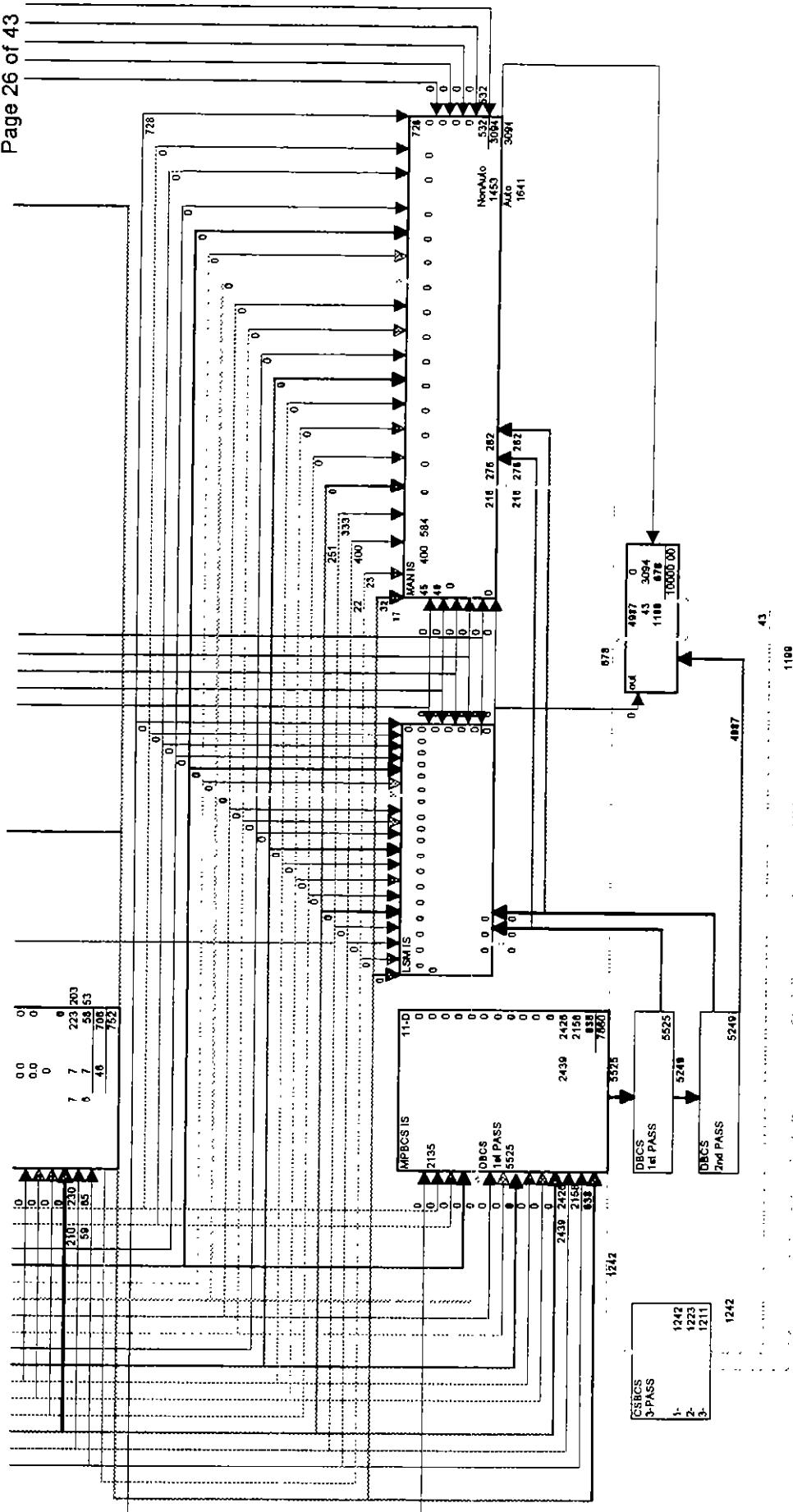
Column [4] = 1/Column [2] ^{page 43} * Column [3] ^{page 42}Column [6] = Column [4] * (premium pay factor ^{page 42} - 1)Column [7] = (Column [4] * Column [5] ^{page 42}) + Column [6]Column [8] = Column [7] * Column [1] ^{mail flow} / 10,000

MODEL COST	4.9493
PROPORTIONAL ADJ.	Exhibit USPS-29B 0.8118
FIXED ADJUSTMENT	Exhibit USPS-29B 0.5854
TOTAL UNIT COST	4.6030

Standard (A) Nonprofit Upgradable Packages in "Non-OCR Upgradable" Trays 3/5 Presort Letters







Test Year Standard (A) Nonprofit Non-OCR Upgradable Basic Letters Cost Summary

	[1] Mix of Handlings	[2] Pieces per Hour	[3] Wage Rate	[4] Direct Labor Cents/Piece	[5] Piggyback Factor	[6] Premium Pay Adj	[7] Operation Unit Cost	[8] Modeled Unit Cost
Outgoing Primary								
Manual	1,454	812	\$25.445	3.1336	1.372	-0.1316	4.1677	0.606
MLOCR	797	7,350	\$25.445	0.3462	2.095	-0.0145	0.7107	0.057
RBCS Images Processed	441	816	\$14.919	1.8293	1.450	-0.0768	1.7525	0.077
LMLM	57	4,985	\$25.445	0.5104	1.450	-0.0214	0.7187	0.004
BCS-OSS	430	11,984	\$25.445	0.2123	1.719	-0.0089	0.3561	0.015
MPBCS	67	8,393	\$25.445	0.3032	1.719	-0.0127	0.5084	0.003
Outgoing Secondary								
Manual	233	691	\$25.445	3.6823	1.372	-0.1547	4.8975	0.114
MPBCS	161	8,393	\$25.445	0.3032	1.719	-0.0127	0.5084	0.008
ADC Distribution								
Manual	2,437	759	\$25.445	3.3524	1.372	-0.1408	4.4587	1.087
MLOCR	988	7,350	\$25.445	0.3462	2.095	-0.0145	0.7107	0.070
RBCS Images Processed	546	816	\$14.919	1.8293	1.450	-0.0768	1.7525	0.096
LMLM	70	4,985	\$25.445	0.5104	1.450	-0.0214	0.7187	0.005
BCS-OSS	533	11,984	\$25.445	0.2123	1.719	-0.0089	0.3561	0.019
MPBCS	229	8,393	\$25.445	0.3032	1.719	-0.0127	0.5084	0.012
SCF Operations								
Manual	1,865	896	\$25.445	2.8398	1.372	-0.1193	3.7770	0.704
MLOCR	237	7,350	\$25.445	0.3462	2.095	-0.0145	0.7107	0.017
RBCS Images Processed	117	816	\$14.919	1.8293	1.450	-0.0768	1.7525	0.021
LMLM	15	4,985	\$25.445	0.5104	1.450	-0.0214	0.7187	0.001
BCS-OSS	114	11,984	\$25.445	0.2123	1.719	-0.0089	0.3561	0.004
MPBCS	358	8,393	\$25.445	0.3032	1.719	-0.0127	0.5084	0.018
Incoming Primary								
Manual	3,615	562	\$25.445	4.5276	1.372	-0.1902	6.0217	2.177
MLOCR	1,499	7,350	\$25.445	0.3462	2.095	-0.0145	0.7107	0.107
RBCS Images Processed	739	816	\$14.919	1.8293	1.450	-0.0768	1.7525	0.129
LMLM	95	4,985	\$25.445	0.5104	1.450	-0.0214	0.7187	0.007
BCS-OSS	721	11,984	\$25.445	0.2123	1.719	-0.0089	0.3561	0.026
MPBCS	424	8,393	\$25.445	0.3032	1.719	-0.0127	0.5084	0.022
Incoming Secondary								
Manual All Sites	4,407	646	\$25.445	3.9389	1.372	-0.1654	5.2387	2.309
Manual MODs Sites	3,285	1,143	\$25.445	2.2261	1.372	-0.0935	2.9607	0.973
MPBCS	714	6,633	\$25.445	0.3836	1.719	-0.0161	0.6433	0.046
DBCS First-Pass	1,847	7,467	\$25.445	0.3408	2.434	-0.0143	0.8151	0.151
DBCS Second-Pass	1,755	7,467	\$25.445	0.3408	2.434	-0.0143	0.8151	0.143
CSBCS First-Pass	415	17,124	\$25.445	0.1486	1.948	-0.0062	0.2832	0.012
CSBCS Second-Pass	409	17,124	\$25.445	0.1486	1.948	-0.0062	0.2832	0.012
CSBCS Third-Pass	405	17,124	\$25.445	0.1486	1.948	-0.0062	0.2832	0.011
Other								
Acceptance/Verification	10,000						0.2664	0.266
<i>Sort to P. O. Boxes:</i>								
DPS	167	2,341	\$25.445	1.0868	1.366	-0.045644	1.4389	0.024
Non-DPS	640	1,171	\$25.445	2.1735	1.366	-0.091287	2.8777	0.184
Bundle Sorting Basic	10,000						1.6668	1.6667
%DPS	20.68%							

Figures in Columns [1], [2], [3], and [5] are reported in subsequent pages in this Appendix.

Column [4] = 1/Column [2] _{page 43} * Column [3] _{page 42}

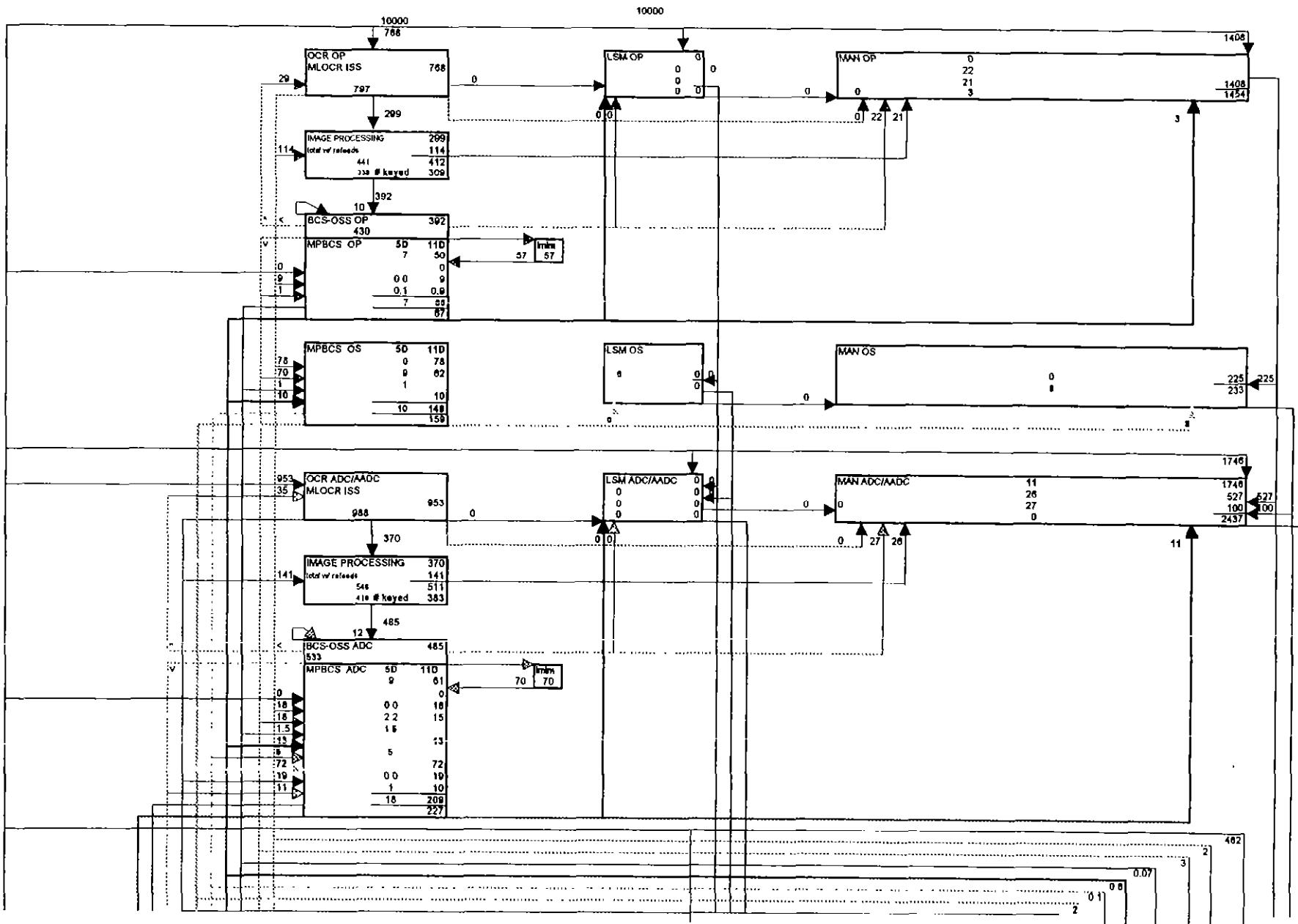
Column [6] = Column [4] * (premium pay factor _{page 42 - 1})

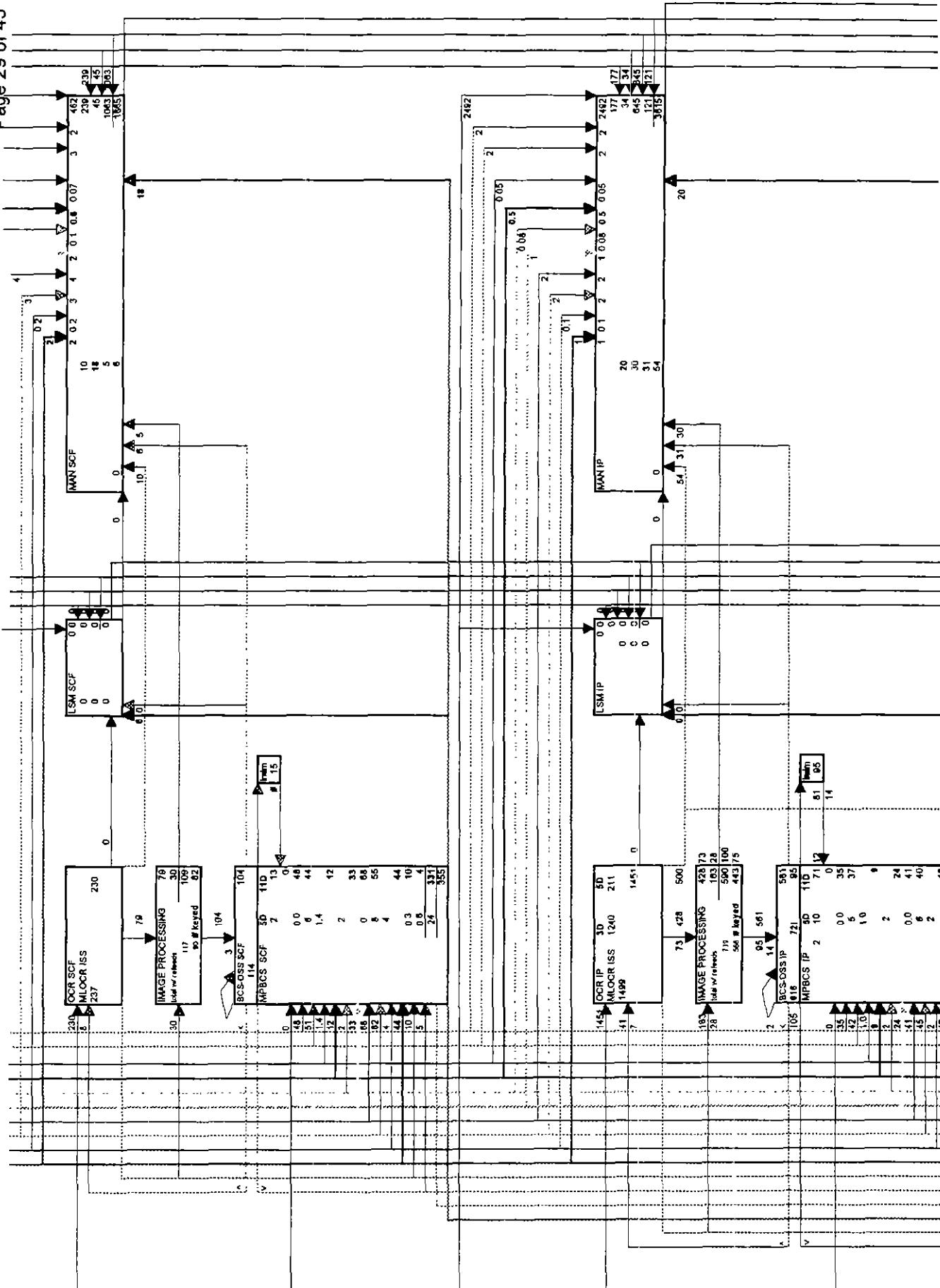
Column [7] = (Column [4] * Column [5] _{page 42}) + Column [6]

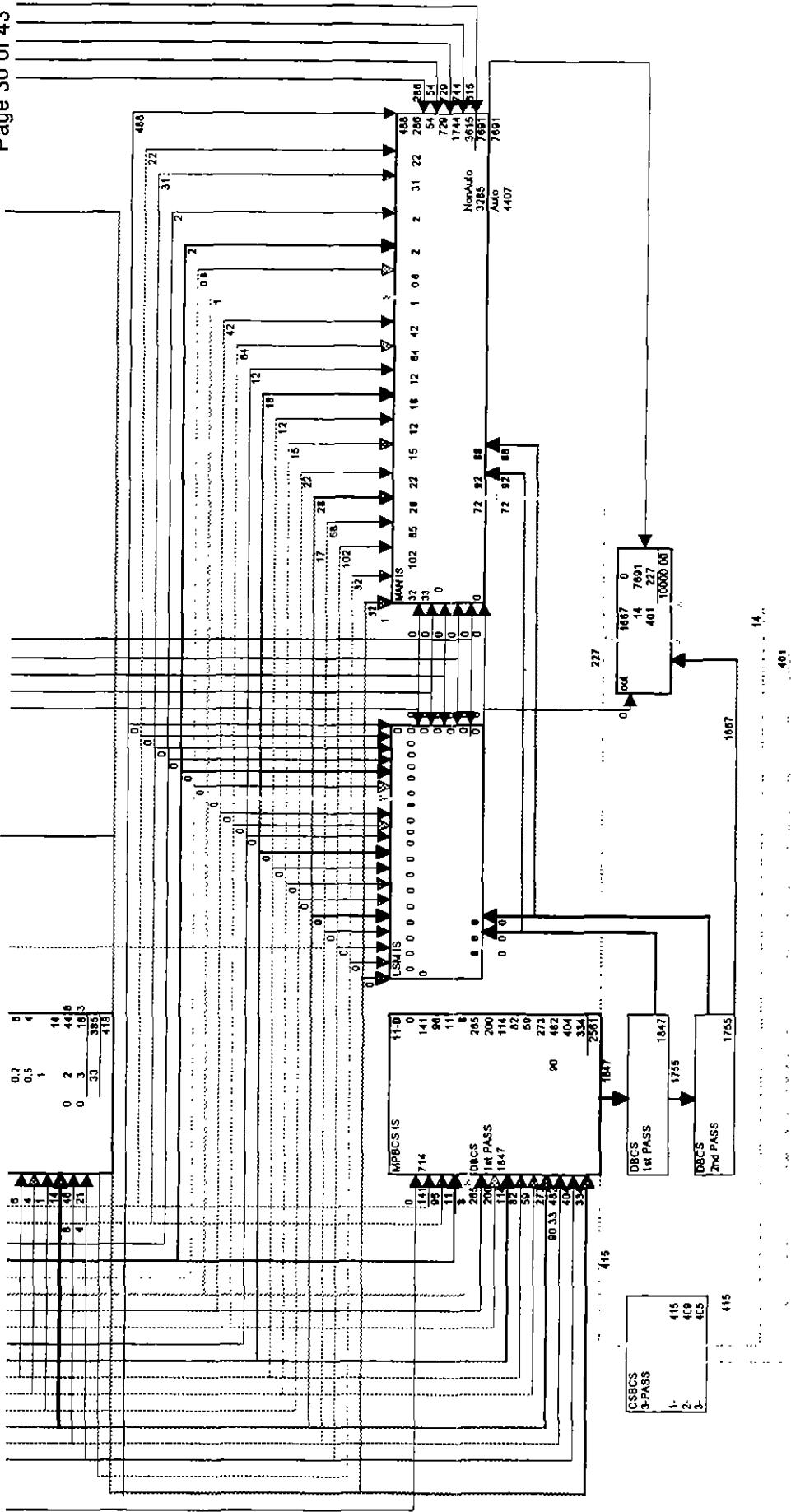
Column [8] = Column [7] * Column [1] _{mail flow} / 10,000

MODEL COST	11.2018
PROPORTIONAL ADJ. _{Exhibit USPS-29B}	0.8118
FIXED ADJUSTMENT _{Exhibit USPS-29B}	0.5854
TOTAL UNIT COST	9.6785

Standard (A) Nonprofit Non-OCR Upgradable Basic Letters







Test Year Standard (A) Nonprofit Non-OCR Upgradable 3/5-Digit Presort Letters Cost Summary

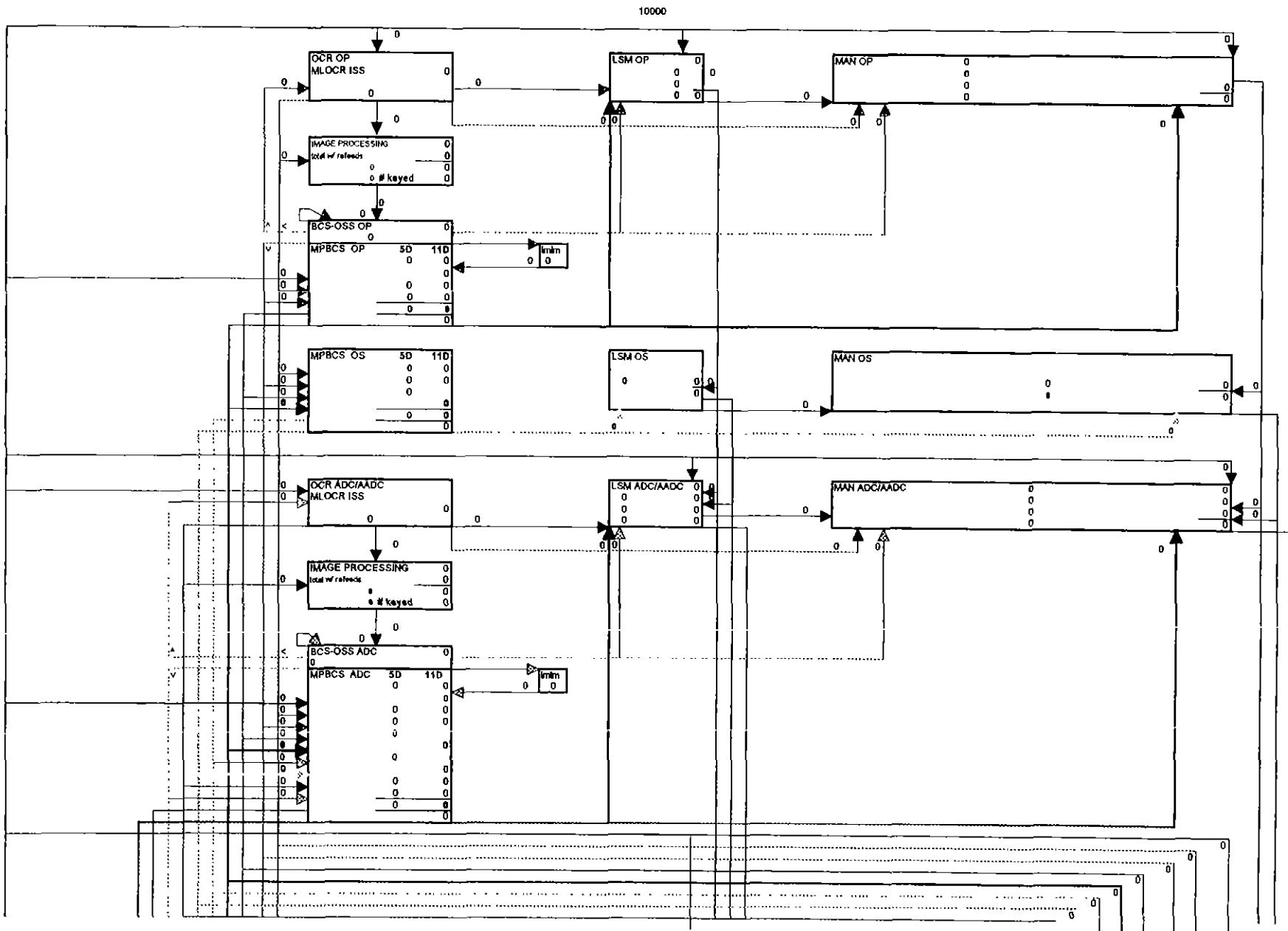
	[1] Mix of Handleings	[2] Pieces per Hour	[3] Wage Rate	[4] Direct Labor Cents/Piece	[5] Piggyback Factor	[6] Premium Pay Adj.	[7] Operation Unit Cost	[8] Modeled Unit Cost
Outgoing Primary								
Manual	0	812	\$25.445	3.1336	1.372	-0.1316	4.1677	0.0000
MLOCR	0	7,350	\$25.445	0.3462	2.095	-0.0145	0.7107	0.0000
RBCS Images Processed	0	816	\$14.919	1.8293	1.450	-0.0768	1.7525	0.0000
LMLM	0	4,985	\$25.445	0.5104	1.450	-0.0214	0.7187	0.0000
BCS-OSS	0	11,984	\$25.445	0.2123	1.719	-0.0089	0.3561	0.0000
MPBCS	0	8,393	\$25.445	0.3032	1.719	-0.0127	0.5084	0.0000
Outgoing Secondary								
Manual	0	691	\$25.445	3.6823	1.372	-0.1547	4.8975	0.0000
MPBCS	0	8,393	\$25.445	0.3032	1.719	-0.0127	0.5084	0.0000
ADC Distribution								
Manual	0	759	\$25.445	3.3524	1.372	-0.1408	4.4587	0.0000
MLOCR	0	7,350	\$25.445	0.3462	2.095	-0.0145	0.7107	0.0000
RBCS Images Processed	0	816	\$14.919	1.8293	1.450	-0.0768	1.7525	0.0000
LMLM	0	4,985	\$25.445	0.5104	1.450	-0.0214	0.7187	0.0000
BCS-OSS	0	11,984	\$25.445	0.2123	1.719	-0.0089	0.3561	0.0000
MPBCS	0	8,393	\$25.445	0.3032	1.719	-0.0127	0.5084	0.0000
SCF Operations								
Manual	0	896	\$25.445	2.8398	1.372	-0.1193	3.7770	0.0000
MLOCR	0	7,350	\$25.445	0.3462	2.095	-0.0145	0.7107	0.0000
RBCS Images Processed	0	816	\$14.919	1.8293	1.450	-0.0768	1.7525	0.0000
LMLM	0	4,985	\$25.445	0.5104	1.450	-0.0214	0.7187	0.0000
BCS-OSS	0	11,984	\$25.445	0.2123	1.719	-0.0089	0.3561	0.0000
MPBCS	0	8,393	\$25.445	0.3032	1.719	-0.0127	0.5084	0.0000
Incoming Primary								
Manual	2,132	562	\$25.445	4.5276	1.372	-0.1902	6.0217	1.2839
MLOCR	3,212	7,350	\$25.445	0.3462	2.095	-0.0145	0.7107	0.2283
RBCS Images Processed	1,422	816	\$14.919	1.8293	1.450	-0.0768	1.7525	0.2493
LMLM	225	4,985	\$25.445	0.5104	1.450	-0.0214	0.7187	0.0162
BCS-OSS	1,373	11,984	\$25.445	0.2123	1.719	-0.0089	0.3561	0.0489
MPBCS	403	8,393	\$25.445	0.3032	1.719	-0.0127	0.5084	0.0205
Incoming Secondary								
Manual MODs Sites	4,515	646	\$25.445	3.9389	1.372	-0.1654	5.2387	2.3654
Manual Non-Auto Sites	3,135	1,143	\$25.445	2.2261	1.372	-0.0935	2.9607	0.9282
MPBCS	726	6,633	\$25.445	0.3836	1.719	-0.0161	0.6433	0.0467
DBCS First-Pass	1,880	7,467	\$25.445	0.3408	2.434	-0.0143	0.8151	0.1532
DBCS Second-Pass	1,786	7,467	\$25.445	0.3408	2.434	-0.0143	0.8151	0.1456
CSBCS First-Pass	423	17,124	\$25.445	0.1486	1.948	-0.0062	0.2832	0.0120
CSBCS Second-Pass	416	17,124	\$25.445	0.1486	1.948	-0.0062	0.2832	0.0118
CSBCS Third-Pass	412	17,124	\$25.445	0.1486	1.948	-0.0062	0.2832	0.0117
Other								
Acceptance/Verification	10,000						0.2664	0.2664
<i>Sort to P. O. Boxes:</i>								
DPS	170	2,341	\$25.445	1.0868	1.366	-0.0456	1.4389	0.0244
Non-DPS	637	1,171	\$25.445	2.1735	1.366	-0.0913	2.8777	0.1834
Bundle Sorting Basic	10,000						0.8147	0.8147
%DPS	21.05%							

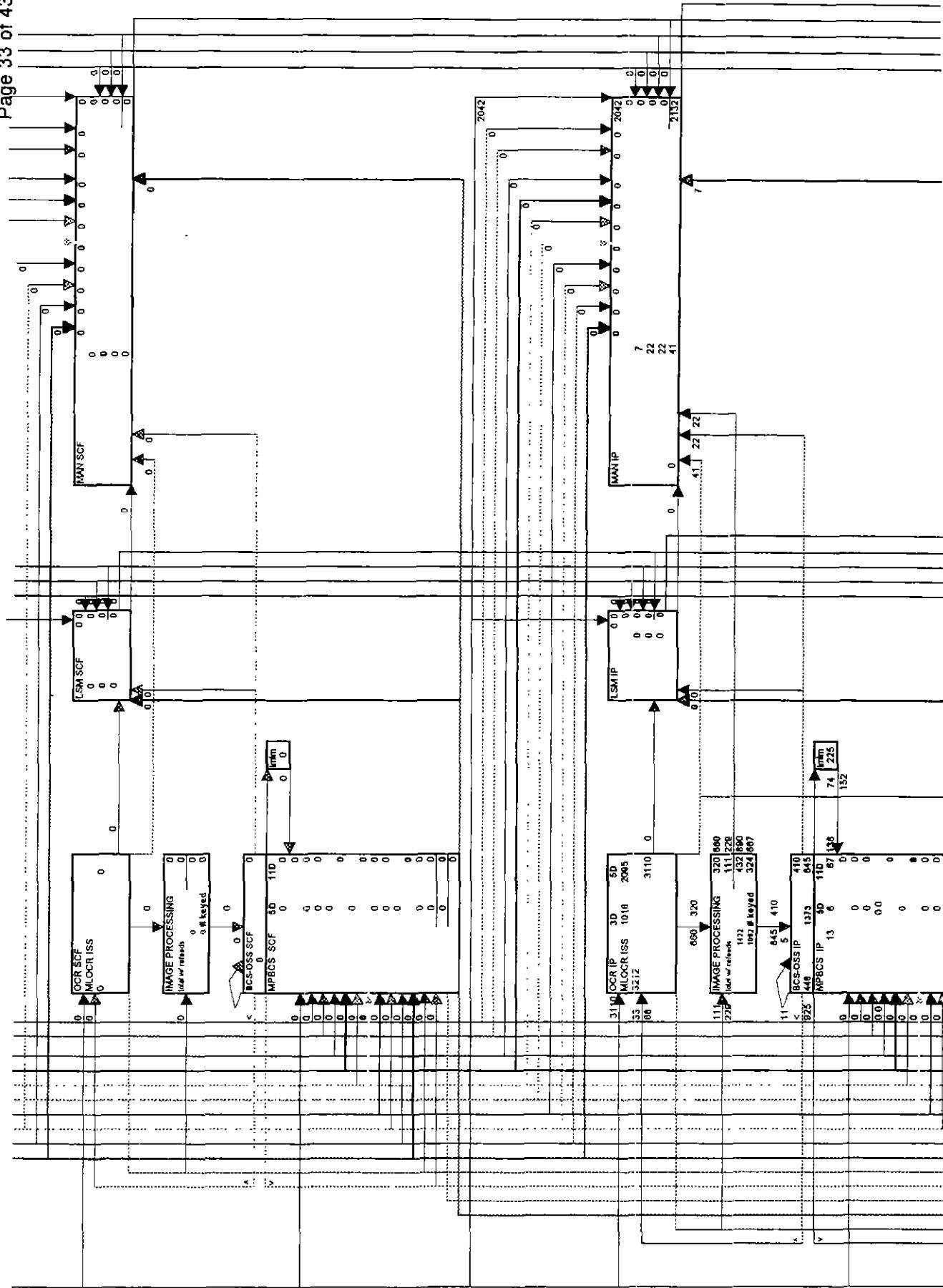
Figures in Columns [1], [2], [3], and [5] are reported in subsequent pages in this Appendix.

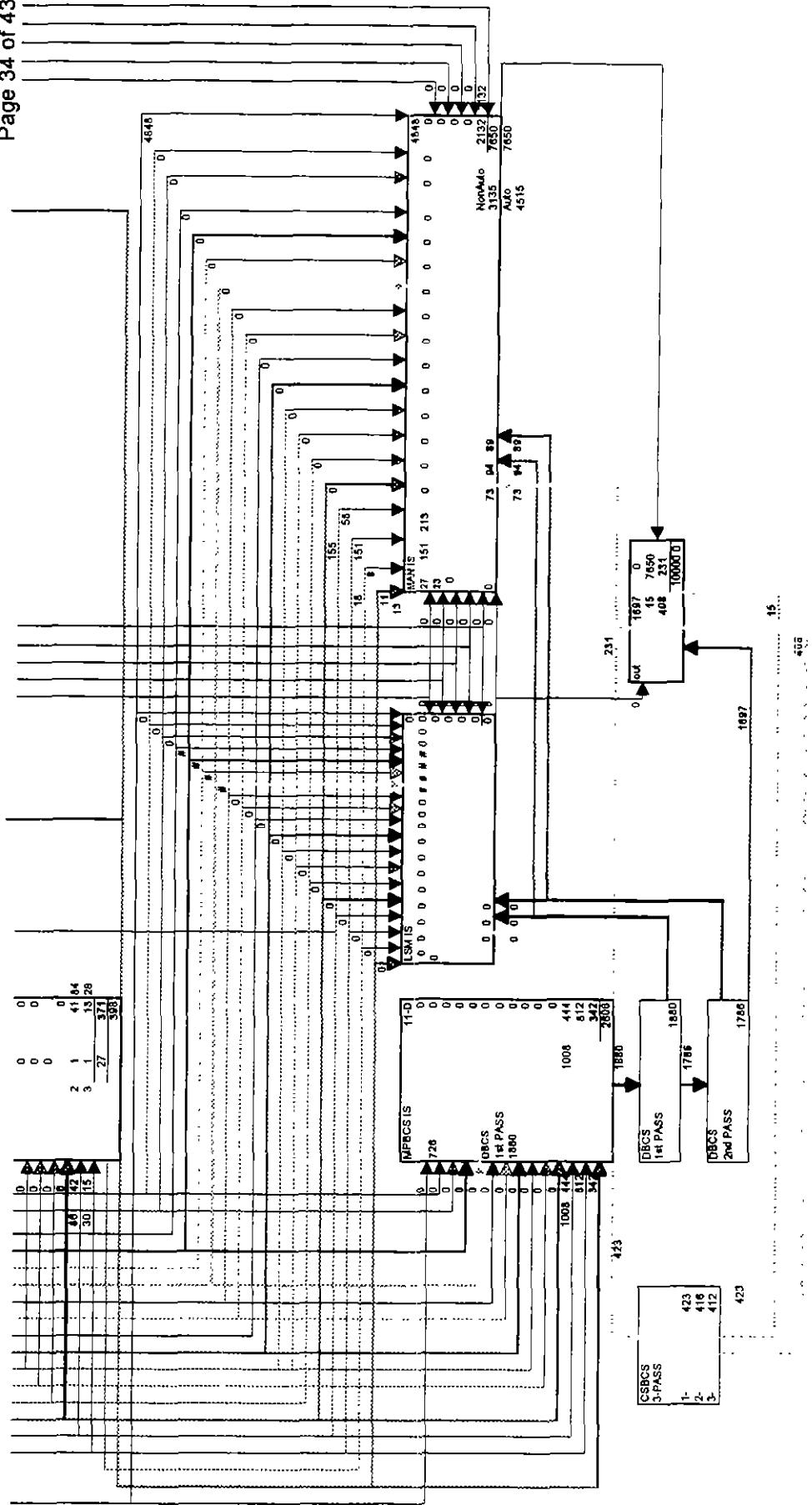
Column [4] = 1/Column [2] page 43 * Column [3] page 42Column [6] = Column [4] * (premium pay factor page 42 - 1)Column [7] = (Column [4] * Column [5] page 42) + Column [6]Column [8] = Column [7] * Column [1] mail flow / 10,000

MODEL COST	6.8105
PROPORTIONAL ADJ. <small>Exhibit USPS-29B</small>	0.8118
FIXED ADJUSTMENT <small>Exhibit USPS-29B</small>	0.5854
TOTAL UNIT COST	6.1138

Standard (A) Nonprofit Non-OCR Upgradable 3/5-Digit Presort Letters







Standard (A) Nonprofit Entry Point Profile

13.95%	Automation And Upgradable Trays (no bundles)		
	Basic	52.93%	3/5
	%	%	%
OP	47.83%	0.00%	
AADC	41.53%	0.00%	
SCF	10.64%	0.00%	
IP	0.00%	71.23%	
IS(IP-OCR)	0.00%	24.59%	
IS	0.00%	4.18%	
Total	100.00%	100.00%	
25.20%	Non-OCR Trays (bundles) but does not fail Upgradable criteria		
	Basic	40.94%	3/5
	%	%	%
OP	66.09%	0.00%	
ADC	19.16%	0.00%	
SCF	4.91%	0.00%	
IP	7.67%	49.86%	
IS(IP-OCR)	1.85%	42.85%	
IS	0.31%	7.28%	
Total	100.00%	100.00%	
60.84%	Non-OCR Trays (bundles) and fails Upgradable criteria		
	Basic	40.94%	3/5
	%	%	%
OP	21.77%	0.00%	
ADC	26.99%	0.00%	
SCF	6.92%	0.00%	
IP	37.33%	30.58%	
IS(IP-OCR)	2.11%	20.95%	
IS	4.88%	48.48%	
Total	100.00%	100.00%	
% Machinable	35.30%	35.30%	

These tables use tables C1 and C2 on page 37 of this appendix in performing calculations. For methodology, see Appendix IV of USPS-T-5 in Docket No. MC96-2.

Standard (A) Nonprofit Mail Characteristic Percentages

From page 37 of this appendix (USPS LR-H-195).

Upgradable in Non-OCR Trays

Container	Total	Mixed ADC	Total Pieces			Percent	
			ADC	3-Digit	5-Digit	Not Used	% basic
Mixed ADC	20.35%	7.51%	4.85%	5.97%	2.02%	100%	30.79%
ADC	10.44%		2.51%	6.19%	1.75%	62%	% presort
3-Digit	50.25%			18.00%	32.25%	51%	69.21%
5-Digit	18.96%				18.96%		
Subtotal	100.00%	7.51%	7.36%	30.16%	54.97%		

Non-Upgradable in Non-OCR Trays

Container	Total	Mixed ADC	Total Pieces			Percent	
			ADC	3-Digit	5-Digit	Not Used	% basic
Mixed ADC	27.31%	7.61%	9.34%	8.90%	1.47%	0.0%	34.97%
ADC	7.65%		2.52%	4.15%	0.98%	0.0%	% presort
3-Digit	46.82%			19.88%	26.94%	0.0%	65.03%
5-Digit	18.21%				18.21%		
Subtotal	100.00%	7.61%	11.86%	32.94%	47.60%		
Grand Total	100.00%	7.54%	8.67%	30.97%	52.81%		

Table A
Standard (A) Nonprofit
Automation and Nonautomation-Upgradable Letters
Total Pieces by Tray Level

Tray Level	Pieces	Percent
MAADC	568,455,384	47.8%
AADC	620,059,305	41.5%
% SCF = AADC	20.40%	10.6%
Total	1,188,514,689	100.0%

Table B
Standard (A) Nonprofit
Nonautomation-Upgradable Letters
Total Pieces by Tray Type

Tray Level	Pieces	Percent
3-Digit	167,687,345	71.2%
5-Digit	67,728,570	28.8%
Basic	264,697,666	52.9%
Upgr no packages	500,113,581	14.0%
Upgr in Packages	903,248,920	25.2%
Total Upgr	1,403,362,501	39.2%
Non-OCR Mach	769,718,703	
Non-Machinable	1,410,787,538	
Total Non-OCR	2,180,506,241	60.8%
Total Non-Auto	3,583,868,742	

Table C3
Standard (A) Nonprofit Nonautomation Letters
Percent Machinable and Nonmachinable of Nonupgradable Pieces

Machinable	35.3%
Nonmachinable	64.7%

Table C1
Standard (A) Nonprofit Nonautomation Letters Failing Upgradable Standards
Total Pieces and Pieces per Package,
by Package and Tray Level

Tray Level	Total Pieces				Package Level
	MADC	ADC	3-Digit	5-Digit	
MADC	163,783,766	105,783,103	130,100,503	44,048,757	443,716,129
ADC	-	54,632,740	134,897,224	38,097,777	227,627,741
3-Digit	-	-	392,582,523	703,123,845	1,095,706,368
5-Digit	-	-	-	413,456,003	413,456,003
Total	163,783,766	160,415,843	657,580,250	1,198,726,382	2,180,506,241

Table C2
Standard (A) Nonprofit Not Failing Upgradable Nonautomation Letters
Total Pieces and Pieces per Package,
by Package and Tray Level

Tray Level	Total Pieces				Package Level
	MADC	ADC	3-Digit	5-Digit	
MADC	68,752,875	84,339,223	80,365,749	13,242,394	246,700,241
ADC	-	22,759,687	37,522,582	8,851,907	69,134,176
3-Digit	-	-	179,606,535	243,326,712	422,933,247
5-Digit	-	-	-	164,481,256	164,481,256
Grand Total	68,752,875	107,098,910	297,494,866	429,902,269	903,248,920
					3,083,755,161

* SOURCE: Information from USPS LR-H-195.

TEST YEAR STANDARD (A) NONPROFIT LETTER AUTOMATION COVERAGE FACTORS
FROM USPS LR-H-128

CATEGORY	OTHER	ECR
1 % MLOCR 3D ORIGINATING	100.00%	
2 % MPBCS/DBCS 3D ORIGINATING	100.00%	
3 % MPBCS/DBCS DESTINATING	95.06%	97.40%
4 % MLOCR 3D DESTINATING	94.12%	96.84%
5 % AUTO INC/SEC TOTAL GIVEN BCS 3D DESTINATION	90.81%	95.55%
6 % DPS GIVEN BCS 3D DESTINATION	81.87%	88.13%
7 % DPS OR SEC/SEG OF AUTO IS GIVEN BCS 3D DEST.	90.16%	92.23%
8 % RBCS 3D ORIGINATING	100.00%	
9 % RBCS 3D DESTINATING	88.77%	93.60%
10 % NON-ELIGIBLE AUTO CAR. ROUTE DESTINATING	62.26%	68.67%
11 % DBCS VOLUME SHARE OF DPS	80.00%	80.00%
12 % CSBCS VOLUME SHARE OF DPS	20.00%	20.00%
13 % BCS ORIGINATING MINUS BCS DESTINATING	4.94%	
14 % MLOCR ORIGINATING MINUS BCS DESTINATING	5.15%	
15 % PERCENT SORTED TO P.O. BOX	8.07%	1.63%
16 %		
17 % LSM INC/SEC GIVEN TOTAL NON-AUTO INC/SEC	0.00%	

COVERAGE FACTORS (continued)

MLOCR 3D ORIGINATING	Line Reference to page 38. 100.00% line 1
MLOCR 3D DESTINATING	94.12% line 4
RBCS Origin Coverage Factor	100.00% line 8
RBCS Destination Coverage Factor	88.77% line 9
RBCS Leakage Factor	5.00%
BCS Origin Coverage (Automation Basic Model)	100.00% see line 2
BCS Destination Coverage Factor Given BCS Origin	95.06% see (1 - line 13)
BCS 3D Destinating	95.06% see line 3
Percent Receiving Automated Incoming Secondary Given That Mail is Destinating at Automated Facilities (use in basic & 3-D)	90.81% see line 5
Percent of Automated Incoming Secondary Sorted to Delivery Sequencing Machines	90.16% see line 7
DBCS Volume Share of DPS	80.00% see line 11
CSBCS Volume Share of DPS	20.00% see line 12
CSBCS Share of Auto Carrier Route Eligible	54.80% see (line6*line3*line12)/(line10)

Standard (A) Accept Rates from Special Studies and MODS

Automation Accept and Upgrade Rate Special Study (USPS LR-H-130)

	Accept	Upgrade	Encode		
MLOCR & ISS Basic Non-Automation Compatible	61.15%	75.82%	46.37%		
MLOCR & ISS Basic Automation Compatible	76.41%	73.40%	56.08%		
MLOCR & ISS 3/5 Presort Non-Automation Compatible	64.48%	80.87%	52.15%		
MLOCR & ISS 3/5 Presort Automation Compatible	79.71%	77.35%	61.66%		
MPBCS - OSS Basic Non-Automation Compatible	72.86%	87.65%	63.86%		
MPBCS - OSS Basic Automation Compatible	83.47%	85.64%	71.48%		
MPBCS - OSS 3/5 Presort Non-Automation Compatible	70.12%	91.19%	63.94%		
MPBCS - OSS 3/5 Presort Automation Compatible	85.53%	89.65%	76.67%		
MPBCS - OSS Rejects to:	OCR-ISS	LMLM	BCS-OSS	LSM	MAN
Basic Non-Automation Compatible	7.28%	14.44%	2.54%	0.00%	2.88%
Basic Automation Compatible	4.79%	7.86%	2.67%	0.00%	1.21%
3/5 Presort Non-Automation Compatible	8.06%	17.97%	1.33%	0.00%	2.52%
3/5 Presort Automation Compatible	5.07%	6.51%	1.72%	0.00%	1.18%

FY96 MODS Accept Rates (USPS LR-H-113)

BCS	Accept Rate
OP	95.0%
OS	95.0%
MMP	95.0%
SCF	95.0%
IP	95.0%
IS	89.9%

DBCS

First Pass	95.0%
Second Pass	95.0%

Accept Rates used in Appendix I page 82 of USPS-T-5 in Docket No. MC96-2

	Accept Rate
Remote Computer Read	25.00%

CSBCS

First Pass	98.50%
Second & Third Pass	99.00%

Letter Densities

From Docket No. MC96-2 USPS-T-5 Appendix I at page 83. (AADC/ADC formerly referred to as MMP).

MLOCR/ISS	OP (BCS)	OS	AADC/ADC	SCF	IP	IS	
831&881 OP	2.62%	21.92%	5.00%	14.07%	10.44%	45.96%	100.00%
832 OS		17.70%	18.17%	50.14%	8.01%	5.98%	100.00%
833 MMP			4.35%	16.23%	9.85%	69.58%	100.00%
834 SCF				9.15%	5.88%	84.97%	100.00%
835 IP					7.69%	92.31%	100.00%

MPBCS/DBCS**	OP	OS	AADC/ADC	SCF	IP	IS	
871&891 OP	0.32%	17.15%	22.17%	22.42%	16.05%	22.22%	100.32%
872 OS		1.35%	50.91%	24.55%	17.64%	6.90%	101.35%
873 MMP			0.96%	23.35%	10.23%	66.42%	100.96%
874 SCF*				0.92%	4.53%	95.47%	100.92%
875 IP					1.21%	100.00%	101.21%

*diagonal allocated 100% to IS

MPBCS-OSS	OP(BCS)	OS	AADC/ADC	SCF	IP	IS	
971 OP	0.33%	22.42%	5.62%	17.01%	14.00%	40.62%	100.00%
972 OS		20.79%	13.22%	38.81%	16.77%	10.42%	100.00%
973 MMP			2.95%	16.88%	12.28%	67.89%	100.00%
974 SCF				5.50%	4.86%	89.64%	100.00%
975 IP					4.66%	95.34%	100.00%

LSM**	OP	OS	AADC/ADC	SCF	IP	IS	
081 OP	0.00%	0.98%	25.57%	11.14%	9.34%	52.97%	100.00%
082 OS		0.00%	27.94%	4.98%	7.99%	59.10%	100.00%
083 MMP			2.26%	10.29%	3.82%	85.89%	102.26%
084 SCF*				3.09%	4.03%	95.97%	103.09%
085 IP					2.78%	100.00%	102.78%

*diagonal allocated 100% to IS

MANUAL	OP	OS	AADC/ADC	SCF	IP	IS	
	OP		15.48%	36.22%	16.42%	12.18%	19.70%
	OS		42.85%	19.43%	14.41%	23.31%	100.00%
	MMP			43.63%	26.47%	29.90%	100.00%
	SCF				6.47%	93.53%	100.00%
	IP					100.00%	100.00%

** Bold numbers indicate second handlings (i.e., flows to same machine/ same level) and are captured in the cost summary page. Numbers off the diagonal are normalized to 100% and used in the flows.

PIGGYBACK FACTORS, WAGE RATES & PREMIUM PAY FACTORS

<u>Operation</u>	USPS LR-H-146	USPS LR-H-77	Description Name (Cost Pool)
	Wage Rate	Piggyback	
Manual	\$25.45	1.372	mods 14 manl
MLOCR	\$25.45	2.095	mods 11 ocr/
RBCS	\$14.92	1.450	mods 15 ld'15
LMLM	\$25.45	1.450	mods 15 ld'15
BCS-OSS	\$25.45	1.719	mods 11 bcs/ disaggregated MPBCS
MPBCS	\$25.45	1.719	mods 11 bcs/ disaggregated MPBCS
DBCS First-Pass	\$25.45	2.434	mods 11 bcs/ disaggregated DBCS
CSBCS First-Pass	\$25.45	1.948	mods 11 bcs/ disaggregated CSBCS
<i>Sort to P. O. Boxes:</i>			
DPS	\$25.45	1.366	mods 44 LD44 (P.O. Box distribution)
Non-DPS or SS	\$25.45	1.366	mods 44 LD44 (P.O. Box distribution)

USPS LR-H-77
Premium Pay Factors
RR 0.9580
ECR 0.9600

Productivities

See Library Reference H-113

	Operation Numbers	PPH
<u>Non-Incoming Secondary</u>		
MLOCR	831-835, 841-845, 851-855, 881-885	7,350
RBCS	816	
LMLM	776	4,985
MPBCS-OSS	971-975	11,984
MPBCS/DBCS	871-875, 891-895	8,393
<u>Incoming Secondary</u>		
MPBCS	876, 877, 878, 879, 896, 897, 898, 899	6,633
DBCS DPS	914, 915, 918, 919	7,467
CSBCS ¹		17,124
<u>Manual Productivities</u>		
Manual OP (Bulk Business Mail)	045-049	812
Manual OS	040-042	691
Manual Managed Mail (State)	043	759
Manual SCF	044	896
Manual IP	150-159	562
Manual MODs Sites	160-169	646
Manual Non-Automated Sites ²		1,143
<u>Sort to P.O. Box Productivities</u>		
DPS ³		2,341
Non-DPS ⁴		1,171

¹Docket No. MC96-2, USPS-T-5 Appendix I (pph=19,038) * Realization Factor of 85%

²Docket No. MC96-2, USPS-T-5 Appendix I (pph = 911) * Volume Variability of 79.7%

³Docket No. MC96-2, USPS-T-5 Appendix I (pph = 1,920) * Volume Variability of 82%

⁴Docket No. MC96-2, USPS-T-5 Appendix I (pph = 960) * Volume Variability of 82%

***Standard (A) Nonprofit
Letter Bundle Sorting Model***

Appendix IV

Standard (A) Nonprofit Bundle Sorting Costs -- Productivities and Other Inputs

Clerk and Mail Handler Wage Rate TY98 \$25.445 1/
Premium Pay Adjustment Factor 0.9580 2/

	[1] Bundles per Hour	[2] Labor Cost per Bundle (cents)	[3] Piggyback Factors	[4] Total Cost per Bundle (cents)
Pouch Rack Bundle Sorting	199	12.8085	1.600	19.9556
Tray Opening Unit / Bundle Sorting	160	15.9299	1.600	24.8187
SPBS Bundle Sorting	392	6.4929	1.708	10.8171

1/ USPS LR-H-146

2/ USPS LR-H-146

Column [1]: Docket No. MC95-1, Exhibit USPS-T-5C (Degen)

Column [2]: (FY98 Wage Rate(1/) * 100) / Column [1]

Column [3]: USPS LR-H-77

Column [4]: Column [2] * Column [3] + (Premium Pay Adj.(2/) - 1)* Column [2]

**Standard (A) Nonprofit Bundle Sorting Costs -- Number of Sorts and Costs
by Bundle Type and Type of Sort**

	[1] Mixed AADC to AADC	[2] AADC to 3D	[3] 3D to 5D	[4] Final Operation
5-Digit Bundles				
Number of Sorts	1/ 0.50	0.80	1.30	
% Pouch Rack	1/ 100.00%	50.00%	17.67%	
% Sort to Tray	1/ 0.00%	50.00%	82.33%	
%SPBS	1/ 0.00%	0.00%	0.00%	
Cost per Bundle Sort (cents)	2/ 9.9778	17.9097	31.1473	
3-Digit Bundles				
Number of Sorts	1/ 0.50	1.00		0.50
% Pouch Rack	1/ 100.00%	50.00%		0.00%
% Sort to Tray	1/ 0.00%	50.00%		100.00%
%SPBS	1/ 0.00%	0.00%		0.00%
Cost per Bundle Sort (cents)	2/ 9.9778	22.3871		12.4094
AADC Bundles				
Number of Sorts	1/ 1.00			1.00
% Pouch Rack	1/ 100.00%			0.00%
% Sort to Tray	1/ 0.00%			100.00%
%SPBS	1/ 0.00%			0.00%
Cost per Bundle Sort (cents)	2/ 19.9556			24.8187
Residual Bundles				
Number of Sorts	1/			1.00
% Pouch Rack	1/			0.00%
% Sort to Tray	1/			100.00%
%SPBS	1/			0.00%
Cost per Bundle Sort (cents)	2/			24.8187

1/ Docket No. MC95-1, USPS-T-10 (Smith) 3D to 5D % Pouch Rack = (% Not Recieving Automated Inc. Sec.) / (% of Bundles Used)

2/ Number of Sorts * ((% Pouch Rack * Pouch Rack Cost3/) + (% Sort to Tray * Sort to Tray Cost3/) + (% SPBS * SPBS Cost3/))

3/ USPS-T-29, Appendix IV page 1.

Costs for Bundle Sorting by Bundle and Tray Presort Levels For Bundle Sorted Bundles

	[1] Final Operation	[2] Mixed AADC to AADC	[3] AADC to 3D	[4] 3D to 5D Non-Bar	[5] Total Cost Non-Bar
Full 5D Trays	0.0000	0.0000	0.0000	0.0000	0.0000
Full 3D Trays	0.0000	0.0000	0.0000	0.0000	0.0000
Full AADC Trays	0.0000	0.0000	0.0000	0.0000	0.0000
Full Residual Trays	0.0000	0.0000	0.0000	0.0000	0.0000
5D Bundles in 3D Trays	0.0000	0.0000	0.0000	31.1473	31.1473
3D Bundles in 3D Trays	12.4094	0.0000	0.0000	0.0000	12.4094
5D Bundles in AADC Trays	0.0000	0.0000	17.9097	31.1473	49.0570
3D Bundles in AADC Trays	12.4094	0.0000	22.3871	0.0000	34.7965
AADC Bundles in AADC Trays	24.8187	0.0000	0.0000	0.0000	24.8187
5D Bundles in Residual Trays	0.0000	9.9778	17.9097	31.1473	59.0348
3D Bundles in Residual Trays	12.4094	9.9778	22.3871	0.0000	44.7743
AADC Bundles in Residual Trays	24.8187	19.9556	0.0000	0.0000	44.7743
Residual Bundles in Residual Trays	24.8187	0.0000	0.0000	0.0000	24.8187

Column [1]: USPS-T-29, Appendix IV at page 2, Column [4]

Column [2]: USPS-T-29, Appendix IV at page 2, Column [1]

Column [3]: USPS-T-29, Appendix IV at page 2, Column [2]

Column [4]: USPS-T-29, Appendix IV at page 2, Column [3]

Column [5]: Column [1] + Column [2] + Column [3] + Column [4]

**Standard (A) Nonprofit Bundle Sorting Costs -- "Bundle Breaking" Percentages
Percentage of Bundles Broken without Bundle Sorting by Tray and Bundle Type**

From Docket No. MC96-2, witness Daniel's (USPS-T-5) Appendix II at page 13.

	[1] Percent of Total Bundles Not Used	[2] Percent of AC Bundles Not Used	[3] Weighted Avg. Percent AC	[4] Percent of Non-AC Bundles Not Used
Non-Barcoded				
5D Bundles in 3D Containers	22.6	51.2%	44%	0%
Bundles in State Containers	27.3	61.8%	44%	0%
Bundles in Mixed State Containers	54.5	100.0%	44%	0%

Standard (A) Nonprofit Bundle Sorting Costs: Cost for Bundle Sorting by Bundle and Container Type

Nonbarcoded Upgradable Packages in Non-OCR Upgradable Basic Trays

Trays	[1] Volume	[2] Percent of Mail	[3] Percent of AC Bundle Not Used	[4] Bundle Sort Cost	[5] Pieces per Package	[6] Total Cost per Piece
5D Bundles in AADC Trays	8,851,907	2.8	61.8	49.0570	16.9	0.0310
3D Bundles in AADC Trays	37,522,582	11.9	61.8	34.7965	24.1	0.0655
AADC Bundles in AADC Trays	22,759,687	7.2	61.8	24.8187	35.5	0.0192
5D Bundles in Residual Trays	13,242,394	4.2	100.0	59.0348	15.9	0.0000
3D Bundles in Residual Trays	80,365,749	25.4	100.0	44.7743	20.4	0.0000
AADC Bundles in Residual Trays	84,339,223	26.7	100.0	44.7743	18.9	0.0000
Residual Bundles in Residual Trays	68,752,875	21.8	100.0	24.8187	29.8	0.0000
TOTAL VOLUME	315,834,417	1/				
TOTAL COST PER PIECE					0.1157	2/

Nonbarcoded Upgradable Packages in Non-OCR Upgradable 3/5-Digit Presort Trays

Trays	[1] Volume	[2] Percent of Mail	[3] Percent of Bundle Not Used	[4] Bundle Sort Cost	[5] Pieces per Package	[6] Total Cost per Piece
5D Bundles in 3D Trays	243,326,712	57.5	51.2	31.1473	26.7	0.3276
3D Bundles in 3D Trays	179,606,535	42.5	51.2	12.4094	27.9	0.0922
TOTAL VOLUME	422,933,247					
TOTAL COST PER PIECE					0.4198	2/

1/ Sum of Column [1]

2/ Sum of Column [6]

Column [1]: USPS LR-H-195

Column [2]: (Column [1] / TOTAL VOLUME(1/)) * 100

Column [3]: USPS-T-29, Appendix IV at 4, Column [2]

Column [4]: USPS-T-29, Appendix IV at 3, Column [5]

Column [5]: USPS LR-H-195

Column [6]: (Column [4] / Column [5]) * 1/ - (Column [3] / 100) * (Column [5] / 100)

Standard (A) Nonprofit Bundle Sorting Costs: Cost for Bundle Sorting by Bundle and Container Type

Non-Upgradable Non-Barcoded Basic

	[1] Volume	[2] Percent of Mail	[3] Percent of Bundle Not Used	[4] Bundle Sort Cost	[5] Pieces per Package	[6] Total Cost per Piece
Trays						
5D Bundles in AADC Trays	38,097,777	5.7	0.00	49.0570	17.6	0.1582
3D Bundles in AADC Trays	134,897,224	20.1	0.00	34.7965	28.5	0.2453
AADC Bundles in AADC Trays	54,632,740	8.1	0.00	24.8187	25.9	0.0780
5D Bundles in Residual Trays	44,048,757	6.6	0.00	59.0348	23.0	0.1684
3D Bundles in Residual Trays	130,100,503	19.4	0.00	44.7743	21.5	0.4036
AADC Bundles in Residual Trays	105,783,103	15.8	0.00	44.7743	18.1	0.3898
Residual Bundles in Residual Trays	163,783,766	24.4	0.00	24.8187	26.8	0.2259
TOTAL VOLUME	671,343,870	1/				
TOTAL COST PER PIECE					1.6692	<u>2/</u>

Non-Upgradable Non-Barcoded 3/5-Digit Presort

	[1] Volume	[2] Percent of Mail	[3] Percent of Bundle Not Used	[4] Bundle Sort Cost	[5] Pieces per Package	[6] Total Cost per Piece
Trays						
5D Bundles in 3D Trays	703,123,845	64.17	0.00	31.1473	30.9	0.6473
3D Bundles in 3D Trays	392,582,523	35.83	0.00	12.4094	25.3	0.1756
TOTAL VOLUME	1,095,706,368	1/				
TOTAL COST PER PIECE					0.8229	<u>2/</u>

1/ Sum of Column [1]

2/ Sum of Column [6]

Column [1]: USPS LR-H-195

Column [2]: (Column [1] / TOTAL VOLUME(1/)) * 100

Column [3]: USPS-T-29, Appendix IV at 4, Column [4]

Column [4]: USPS-T-29, Appendix IV at 3, Column [5]

Column [5]: USPS LR-H-195

Column [6]: (Column [4] / Column [5]) * (1 - (Column [3] / 100)) * (Column [2] / 100)

Nonprofit Bundle Sorting Results

Unit Cost

Non-Barcoded Upgradable: USPS-T-29, Appendix IV at 5

Basic	0.1157
3/5	0.4198

Non-Barcoded Non-Upgradable: USPS-T-29, Appendix IV at 6

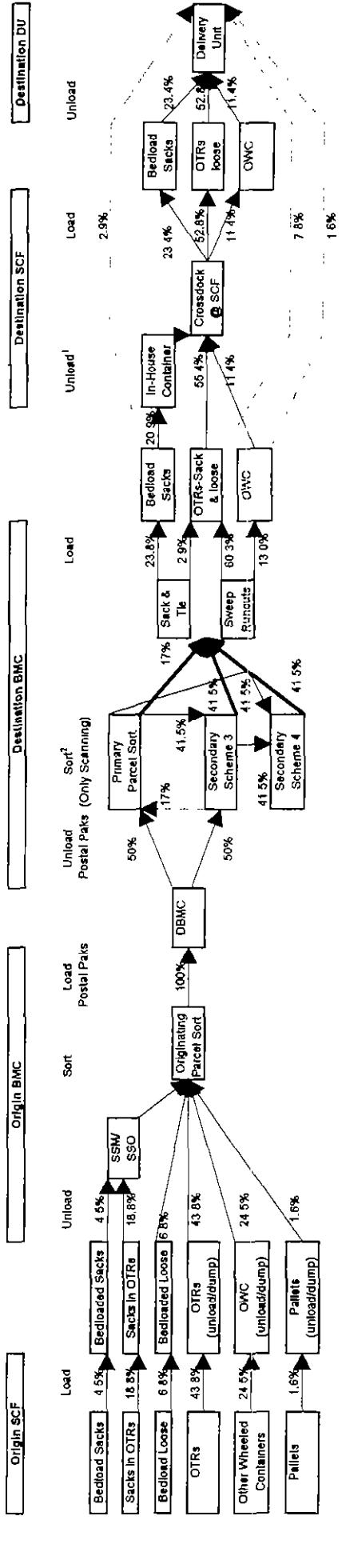
Basic	1.6692
3/5	0.8229

***Parcel Post
Mail Processing Cost Models***

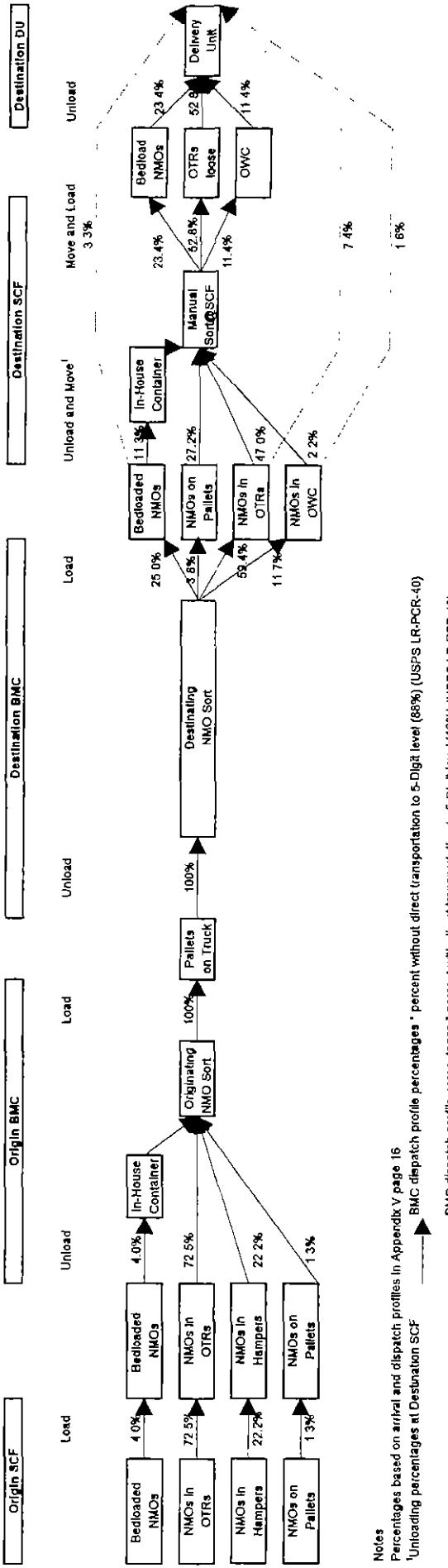
Appendix V

Inter-BMC Nonmachinable Surcharge Cost Development Summary

Machinable Nonpresort Inter-BMC Mail Flow



Nonmachinable Nonpresort Inter-BMC Mail Flow



Notes:

Percentages based on arrival and dispatch profiles in Appendix V page 16
Unloading percentages at Destination SCF

BMC dispatch profile percentages - percent without direct transportation to 5-Digit level (88%) (USPS LR-PCR-40)

BMC dispatch profile percentages - percent with direct transportation to 5-Digit level (12%) (USPS LR-PCR-40)

¹Intra-BMC postal sort diagram for mail flows #7 and nine 5-Digit areas

Barcoded Machinable Nonpresort Inter-BMC Model Cost Summary

	[1]	[2]	[3]	[4]	[5]	[6]
	# handlings	units/hr	conversion	piggyback	\$ per oper. ¹	\$ per facility ²
Origin SCF						0.0763
Unload Containers ¹	1.0000				0.0268	0.0268
Bedload Sacks	0.0450	325.8	5.8	1.84	0.0248	0.0011
Bedload loose	0.0680	315.3	1	1.84	0.1488	0.0101
Load Sacks in OTRs	0.1880	18.6	93.0	1.84	0.0272	0.0051
Load Loose in OTRs	0.4380	18.6	78.4	1.84	0.0322	0.0141
Load OWCs	0.2450	18.6	33.3	1.84	0.0758	0.0186
Load Pallets	0.0160	23.9	75.3	1.84	0.0260	0.0004
Origin BMC						0.2090
Unload Bedload Sack	0.0450	333.8	5.8	2.13	0.0279	0.0013
Unload Bedload Loose	0.0680	1111.6	1.0	2.13	0.0486	0.0033
Unload Sacks in OTR	0.1880	37.2	93.0	2.13	0.0156	0.0029
Unload loose in OTR	0.4380	37.2	78.4	2.13	0.0185	0.0081
Unload Other Wheeled Cont.	0.2450	37.2	33.3	2.13	0.0437	0.0107
Unload Pallet	0.0160	21.9	75.3	2.13	0.0328	0.0005
Dump OTR of sacks	0.1880	11.9	93.0	1.69	0.0387	0.0073
Dump OTR of loose	0.4380	11.9	78.4	1.69	0.0458	0.0201
Dump Other Wheeled Cont.	0.2450	11.9	33.3	1.69	0.1079	0.0264
Dump Pallet	0.0160	11.9	75.3	1.69	0.0477	0.0008
Sack Sorter	0.2330	456.6	5.8	2.41	0.0232	0.0054
Sack shakeout	0.2330	133.7	5.8	1.69	0.0553	0.0129
O. Primary (scan)	1.0000	1433.3	1.0	2.03	0.0360	0.0360
Sweep Runouts P.Pak	1.0000	10.0	101.0	2.03	0.0509	0.0509
Load Postal Pak	1.0000	23.9	101.0	2.13	0.0224	0.0224
Destination BMC						0.2524
Unload Postal Pak	1.0000	21.9	101.0	2.13	0.0245	0.0245
Dump Postal Pak	1.0000	11.9	101.0	1.69	0.0356	0.0356
D. Primary (scan)	0.5850	1433.3	1.0	2.03	0.0360	0.0211
Secondary (scan)	1.1225	1433.3	1.0	2.03	0.0360	0.0404
Sweep Runouts OTR	0.7327	10.0	78.4	1.69	0.0546	0.0400
Sack and Tie	0.2673	231.9	1.0	1.69	0.1851	0.0495
Bedload Sacks	0.2384	325.8	5.8	2.13	0.0286	0.0068
Load OTRs w/ sacks	0.0289	18.6	93.0	2.13	0.0313	0.0009
Load OTRs w/ loose	0.6025	18.6	78.4	2.13	0.0371	0.0224
Load Hampers/OWC	0.1302	18.6	33.3	2.13	0.0874	0.0114
Destination SCF						0.1097
Unload Bedload Sacks ¹	0.2091	275.1	5.8	1.84	0.0294	0.0061
Unload Sacks in OTR	0.0253	37.2	93.0	1.84	0.0136	0.0003
Unload loose in OTR	0.5284	37.2	78.4	1.84	0.0161	0.0085
Unload OWC	0.1142	37.2	33.3	1.84	0.0379	0.0043
Crossdock Bedload Sacks ¹	0.2091	12.6	39.2	1.84	0.0953	0.0199
Crossdock Sacks in OTR	0.0253	12.6	93.0	1.84	0.0402	0.0010
Crossdock loose in OTR	0.5284	12.6	78.4	1.84	0.0476	0.0252
Crossdock OWC	0.1142	12.6	33.3	1.84	0.1121	0.0128
Bedload Sacks	0.2344	325.8	5.8	1.84	0.0248	0.0058
Load OTRs w/ loose	0.5284	18.6	78.4	1.84	0.0322	0.0170
Load Hampers/OWC	0.1142	18.6	33.3	1.84	0.0758	0.0087
Destination Delivery Unit						0.0340
Unload Bedload Sacks ¹	0.2673	275.1	5.8	1.84	0.0294	0.0078
Unload loose in OTR	0.6025	37.2	78.4	1.84	0.0161	0.0097
Unload OWC	0.1302	37.2	33.3	1.84	0.0379	0.0049
Dump Sacks	0.2673	187.5	5.8	1.84	0.0431	0.0115
TOTAL	2.7075				Model Cost	\$0.6813
					Model Weight_{LR-H-135}	13.5%
					Wtd Modeled Cost	\$0.0922

Source of Inputs: Appendix V page 15-16.

Column [5] = TY Wage Rate (\$25.445) * (Column [4]) / ((Column [2]) * (Column [3]))

Column [6] = (Column [1] * Column [5])/10000

¹Unload Containers cost at OSCF uses the average cost of unloading containers at Origin BMC as proxy.

Nonbarcoded Machinable Nonpresort Inter-BMC Model Cost Summary

	[1] # handlings	[2] units/hr	[3] conversion	[4] piggyback	[5] \$ per oper. ¹	[6] \$ per facility ²
Origin SCF						0.0763
Unload Containers ¹	1.0000				0.0268	0.0268
Bedload Sacks	0.0450	325.8	5.8	1.84	0.0248	0.0011
Bedload loose	0.0680	315.3	1	1.84	0.1488	0.0101
Load Sacks in OTRs	0.1880	18.6	93.0	1.84	0.0272	0.0051
Load Loose in OTRs	0.4380	18.6	78.4	1.84	0.0322	0.0141
Load OWCs	0.2450	18.6	33.3	1.84	0.0758	0.0186
Load Pallets	0.0160	23.9	75.3	1.84	0.0260	0.0004
Origin BMC						0.2306
Unload Bedload Sack	0.0450	333.8	5.8	2.13	0.0279	0.0013
Unload Bedload Loose	0.0680	1111.6	1.0	2.13	0.0486	0.0033
Unload Sacks in OTR	0.1880	37.2	93.0	2.13	0.0156	0.0029
Unload loose in OTR	0.4380	37.2	78.4	2.13	0.0185	0.0081
Unload Other Wheeled Cont.	0.2450	37.2	33.3	2.13	0.0437	0.0107
Unload Pallet	0.0160	21.9	75.3	2.13	0.0328	0.0005
Dump OTR of sacks	0.1880	11.9	93.0	1.69	0.0387	0.0073
Dump OTR of loose	0.4380	11.9	78.4	1.69	0.0458	0.0201
Dump Other Wheeled Cont.	0.2450	11.9	33.3	1.69	0.1079	0.0264
Dump Pallet	0.0160	11.9	75.3	1.69	0.0477	0.0008
Sack Sorter	0.2330	456.6	5.8	2.41	0.0232	0.0054
Sack shakeout	0.2330	133.7	5.8	1.69	0.0553	0.0129
O. Primary (key)	1.0000	895.6	1.0	2.03	0.0576	0.0576
Sweep Runouts P.Pak	1.0000	10.0	101.0	2.03	0.0509	0.0509
Load Postal Pak	1.0000	23.9	101.0	2.13	0.0224	0.0224
Destination BMC						0.2524
Unload Postal Pak	1.0000	21.9	101.0	2.13	0.0245	0.0245
Dump Postal Pak	1.0000	11.9	101.0	1.69	0.0356	0.0356
D. Primary (scan)	0.5850	1433.3	1.0	2.03	0.0360	0.0211
Secondary (scan)	1.1225	1433.3	1.0	2.03	0.0360	0.0404
Sweep Runouts OTR	0.7327	10.0	78.4	1.69	0.0546	0.0400
Sack and Tie	0.2673	231.9	1.0	1.69	0.1851	0.0495
Bedload Sacks	0.2384	325.8	5.8	2.13	0.0286	0.0068
Load OTRs w/ sacks	0.0289	18.6	93.0	2.13	0.0313	0.0009
Load OTRs w/ loose	0.6025	18.6	78.4	2.13	0.0371	0.0224
Load Hampers/OWC	0.1302	18.6	33.3	2.13	0.0874	0.0114
Destination SCF						0.1097
Unload Bedload Sacks ¹	0.2091	275.1	5.8	1.84	0.0294	0.0061
Unload Sacks in OTR	0.0253	37.2	93.0	1.84	0.0136	0.0003
Unload loose in OTR	0.5284	37.2	78.4	1.84	0.0161	0.0085
Unload OWC	0.1142	37.2	33.3	1.84	0.0379	0.0043
Crossdock Bedload Sacks ¹	0.2091	12.6	39.2	1.84	0.0953	0.0199
Crossdock Sacks in OTR	0.0253	12.6	93.0	1.84	0.0402	0.0010
Crossdock loose in OTR	0.5284	12.6	78.4	1.84	0.0476	0.0252
Crossdock OWC	0.1142	12.6	33.3	1.84	0.1121	0.0128
Bedload Sacks	0.2344	325.8	5.8	1.84	0.0248	0.0058
Load OTRs w/ loose	0.5284	18.6	78.4	1.84	0.0322	0.0170
Load Hampers/OWC	0.1142	18.6	33.3	1.84	0.0758	0.0087
Destination Delivery Unit						0.0340
Unload Bedload Sacks ¹	0.2673	275.1	5.8	1.84	0.0294	0.0078
Unload loose in OTR	0.6025	37.2	78.4	1.84	0.0161	0.0097
Unload OWC	0.1302	37.2	33.3	1.84	0.0379	0.0049
Dump Sacks	0.2673	187.5	5.8	1.84	0.0431	0.0115
TOTAL	2 7075					

Model Cost	\$0.7029
Model Weight_{LR-H-135}	15.4%
Wtd Modeled Cost	\$0.1086

Source of Inputs: Appendix V page 15-16.

Column [5] = TY Wage Rate (\$25.445) * (Column [4]) / ((Column [2]) * (Column [3]))

Column [6] = (Column [1] * Column [5])/10000

¹Unload Containers cost at OSCF uses the average cost of unloading containers at Origin BMC as proxy.

Nonmachinable Nonpresort Inter-BMC Model Cost Summary

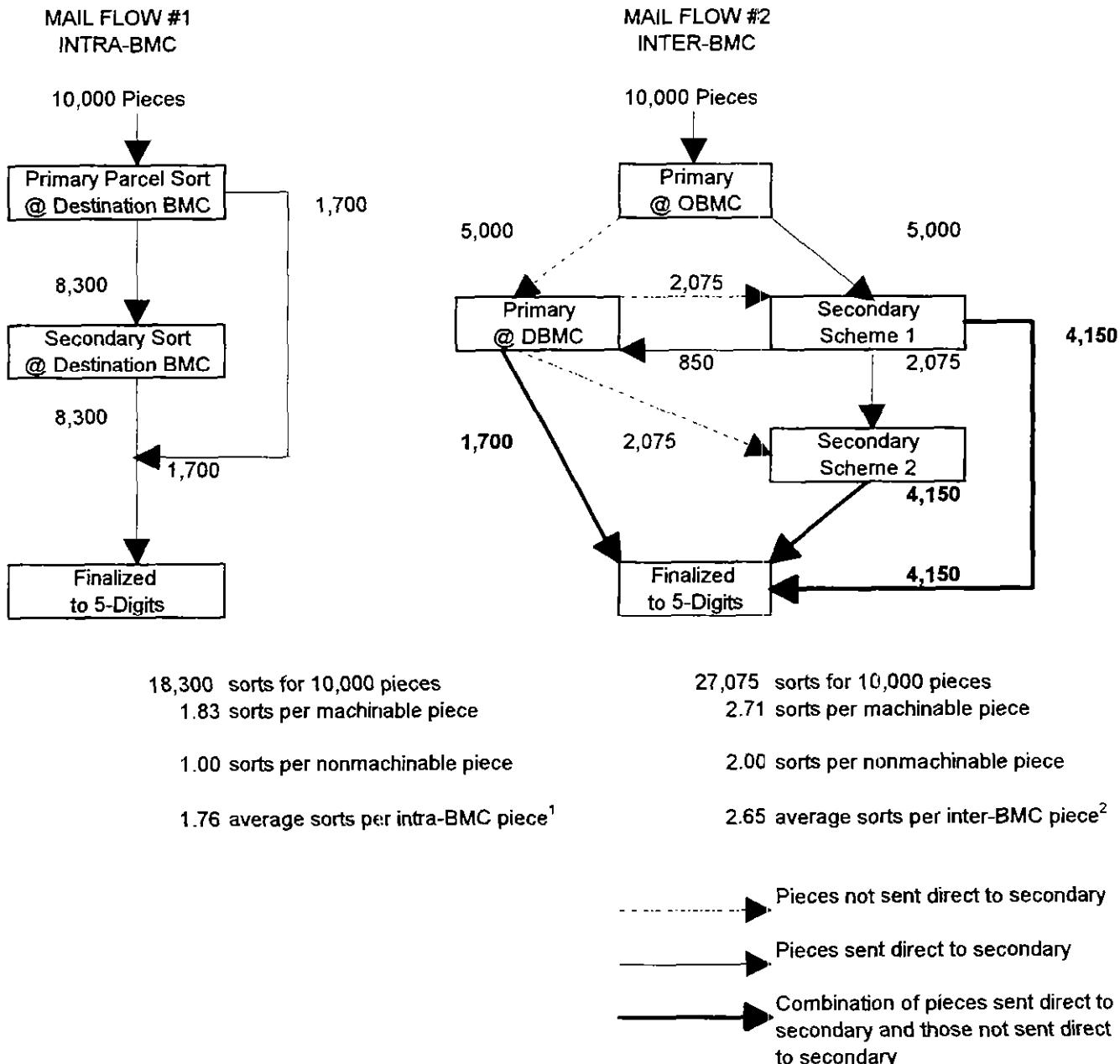
	[1] # handlings	[2] units/hr	[3] conversion	[4] piggyback	[5] \$ per oper. ¹	[6] \$ per facility ²
Origin SCF						0.1771
Unload Containers ¹	1.0000				0.0678	0.0678
Bedload NMOs	0.0400	315.3	1.0	1.84	0.1488	0.0060
Load NMOs in OTRs	0.7250	18.6	30.8	1.84	0.0819	0.0594
Load NMOs in OWCs	0.2220	18.6	13.1	1.84	0.1928	0.0428
Load NMOs on Pallets	0.0130	23.9	22.3	1.84	0.0878	0.0011
Origin BMC						0.4175
Unload Bedloaded NMOs	0.0400	288.0	1.0	2.13	0.1877	0.0075
Unload NMOs in OTRs	0.7250	37.2	30.8	2.13	0.0472	0.0342
Unload NMOs in OWC	0.2220	37.2	13.1	2.13	0.1110	0.0247
Unload NMOs on Pallets	0.0130	21.9	22.3	2.13	0.1105	0.0014
O. Primary NMO Sort	1.0000	168.7	1.0	1.65	0.2485	0.2485
Load NMOs on Pallets	1.0000	23.9	22.3	2.13	0.1012	0.1012
Destination BMC						0.4713
Unload NMOs on Pallets	1.0000	21.9	22.3	2.13	0.1105	0.1105
D. Primary NMO Sort	1.0000	168.7	1.0	1.65	0.2485	0.2485
Bedload from IHC	0.1461	315.3	1.0	2.13	0.1715	0.0251
Load NMOs in OTRs	0.5444	18.6	30.8	2.13	0.0944	0.0514
Load NMOs on Pallet	0.2717	23.9	22.3	2.13	0.1012	0.0275
Load NMOs in OWC	0.0378	18.6	13.1	2.13	0.2222	0.0084
Destination SCF						0.3640
Unload Bedload to IHC	0.1132	275.1	1.0	1.84	0.1706	0.0193
Unload OTRs	0.4703	37.2	30.8	1.84	0.0410	0.0193
Unload Pallet	0.2717	21.9	22.3	1.84	0.0959	0.0260
Unload OWC	0.0217	37.2	13.1	1.84	0.0964	0.0021
Move IHC	0.1132	25.1	23.3	1.84	0.0803	0.0091
Move OTRs	0.4703	25.1	30.8	1.84	0.0606	0.0285
Move Pallet	0.2717	25.1	22.3	1.84	0.0835	0.0227
Move OWC	0.0217	25.1	13.1	1.84	0.1426	0.0031
Manual Sort	0.8770	514.6	1.0	1.54	0.0760	0.0666
Move IHC	0.2344	25.1	23.3	1.84	0.0803	0.0188
Move OTRs	0.5284	25.1	30.8	1.84	0.0606	0.0320
Move OWC	0.1142	25.1	13.1	1.84	0.1426	0.0163
Bedload NMOs	0.2344	315.3	1.0	1.84	0.1488	0.0349
Load OTRs w/ loose	0.5284	18.6	30.8	1.84	0.0819	0.0433
Load Hampers/OWC	0.1142	18.6	13.1	1.84	0.1928	0.0220
Destination Delivery Unit						0.0828
Unload Bedload NMOs	0.2673	275.1	1.0	1.84	0.1706	0.0456
Unload loose in OTR	0.6025	37.2	30.8	1.84	0.0410	0.0247
Unload OWC	0.1302	37.2	13.1	1.84	0.0964	0.0125
TOTAL	2.0000				Model Cost	\$1.5127
					Model Weight_{LR-H-135}	2.8%
					Wtd Modeled Cost	\$0.0420

Source of Inputs: Appendix V page 15-16

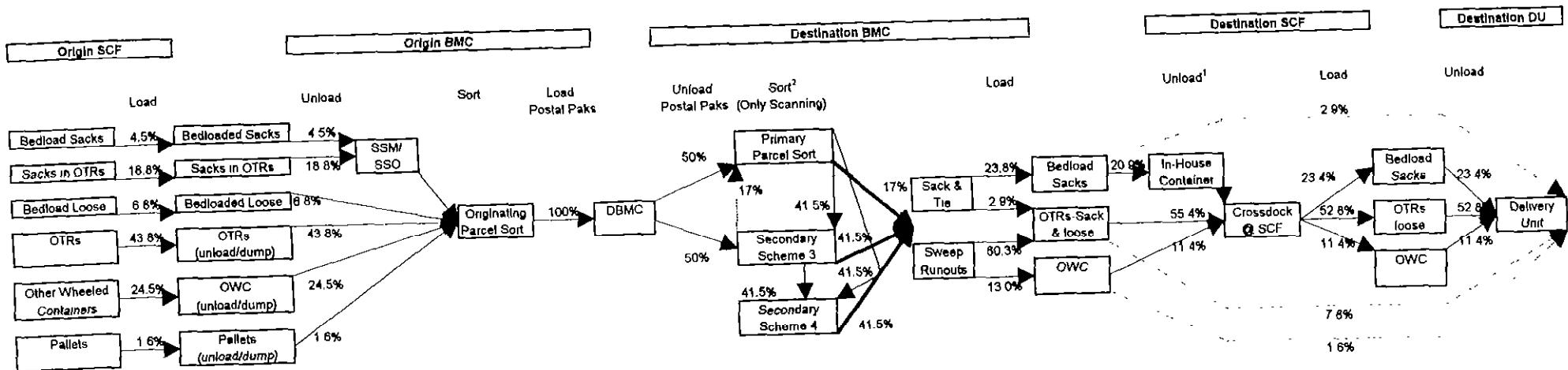
Column [5] = TY Wage Rate (\$25,445) * (Column [4]) / ((Column [2]) * (Column [3]))

Column [6] = (Column [1] * Column [5])/10000

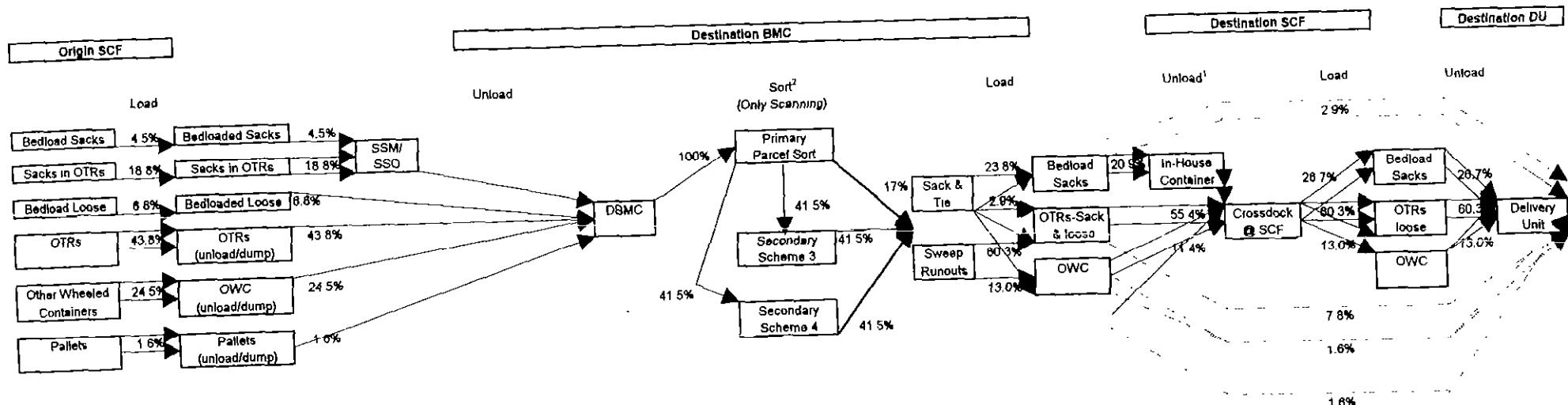
Parcel Sorting Machine Mail flow



Machinable Nonpresort Inter-BMC Mail Flow



Machinable Nonpresort Intra-BMC Mail Flow



Notes:
Percentages based on arrival and dispatch profiles on page 18 of this appendix

¹Unloading percentages at Destination SCF → BMC dispatch profile percentages * percent without direct transportation to 5-Digit level (88%) (USPS LR-PCR-40)

BMC dispatch profile percentages * percent with direct transportation to 5-Digit level (12%) (USPS LR-PCR-40)

²Inter-BMC PSM sort diagram in mail flow #2 on page 5 of this appendix

Barcoded Machinable Nonpresort Intra-BMC Model Cost Summary

	[1] # handlings	[2] units/hr	[3] conversion	[4] piggyback	[5] \$ per oper. ¹	[6] \$ per facility ²
Origin SCF						0.0763
Unload Containers ¹	1.0000				0.0268	0.0268
Bedload Sacks	0.0450	325.8	5.8	1.84	0.0248	0.0011
Bedload loose	0.0680	315.3	1	1.84	0.1488	0.0101
Load Sacks in OTRs	0.1880	18.6	93.0	1.84	0.0272	0.0051
Load Loose in OTRs	0.4380	18.6	78.4	1.84	0.0322	0.0141
Load OWCs	0.2450	18.6	33.3	1.84	0.0758	0.0186
Load Pallets	0.0160	23.9	75.3	1.84	0.0260	0.0004
Destination BMC						0.2964
Unload Bedload Sack	0.0450	333.8	5.8	2.13	0.0279	0.0013
Unload Bedload Loose	0.0680	1111.6	1.0	2.13	0.0486	0.0033
Unload Sacks in OTR	0.1880	37.2	93.0	2.13	0.0156	0.0029
Unload loose in OTR	0.4380	37.2	78.4	2.13	0.0185	0.0081
Unload Other Wheeled Cont.	0.2450	37.2	33.3	2.13	0.0437	0.0107
Unload Pallet	0.0160	21.9	75.3	2.13	0.0328	0.0005
Dump OTR of sacks	0.1880	11.9	93.0	1.69	0.0387	0.0073
Dump OTR of loose	0.4380	11.9	78.4	1.69	0.0458	0.0201
Dump Other Wheeled Cont.	0.2450	11.9	33.3	1.69	0.1079	0.0264
Dump Pallet	0.0160	11.9	75.3	1.69	0.0477	0.0008
Sack Sorter	0.2330	456.6	5.8	2.41	0.0232	0.0054
Sack shakeout	0.2330	133.7	5.8	1.69	0.0553	0.0129
O. Primary (scan)	1.0000	1433.3	1.0	2.03	0.0360	0.0360
Secondary (scan)	0.8300	1433.3	1.0	2.03	0.0360	0.0299
Sweep Runouts OTR	0.7327	10.0	78.4	1.69	0.0546	0.0400
Sack and Tie	0.2673	231.9	1.0	1.69	0.1851	0.0495
Bedload Sacks	0.2384	325.8	5.8	2.13	0.0286	0.0068
Load OTRs w/ sacks	0.0289	18.6	93.0	2.13	0.0313	0.0009
Load OTRs w/ loose	0.6025	18.6	78.4	2.13	0.0371	0.0224
Load Hampers/OWC	0.1302	18.6	33.3	2.13	0.0874	0.0114
Destination SCF						0.1097
Unload Bedload Sacks ¹	0.2091	275.1	5.8	1.84	0.0294	0.0061
Unload Sacks in OTR	0.0253	37.2	93.0	1.84	0.0136	0.0003
Unload loose in OTR	0.5284	37.2	78.4	1.84	0.0161	0.0085
Unload OWC	0.1142	37.2	33.3	1.84	0.0379	0.0043
Crossdock Bedload Sacks ¹	0.2091	12.6	39.2	1.84	0.0953	0.0199
Crossdock Sacks in OTR	0.0253	12.6	93.0	1.84	0.0402	0.0010
Crossdock loose in OTR	0.5284	12.6	78.4	1.84	0.0476	0.0252
Crossdock OWC	0.1142	12.6	33.3	1.84	0.1121	0.0128
Bedload Sacks	0.2344	325.8	5.8	1.84	0.0248	0.0058
Load OTRs w/ loose	0.5284	18.6	78.4	1.84	0.0322	0.0170
Load Hampers/OWC	0.1142	18.6	33.3	1.84	0.0758	0.0087
Destination Delivery Unit						0.0340
Unload Bedload Sacks ¹	0.2673	275.1	5.8	1.84	0.0294	0.0078
Unload loose in OTR	0.6025	37.2	78.4	1.84	0.0161	0.0097
Unload OWC	0.1302	37.2	33.3	1.84	0.0379	0.0049
Dump Sacks	0.2673	187.5	5.8	1.84	0.0431	0.0115
TOTAL	1.8300					

Model Cost	\$0.5164
Model Weight_{LR-H-135}	9.4%
Wtd Modeled Cost	\$0.0485

Source of Inputs: Appendix V page 15-16.

Column [5] = TY Wage Rate (\$25.445) * (Column [4]) / ((Column [2]) * (Column [3]))

Column [6] = (Column [1] * Column [5])/10000

¹Unload Containers cost at OSCF uses the average cost of unloading containers at Origin BMC as proxy.

Nonbarcoded Machinable Nonpresort Intra-BMC Model Cost Summary

	[1]	[2]	[3]	[4]	[5]	[6]
	# handlings	units/hr	conversion	piggyback	\$ per oper. ¹	\$ per facility ²
Origin SCF						0.0763
Unload Containers ¹	1.0000				0.0268	0.0268
Bedload Sacks	0.0450	325.8	5.8	1.84	0.0248	0.0011
Bedload loose	0.0680	315.3	1	1.84	0.1488	0.0101
Load Sacks in OTRs	0.1880	18.6	93.0	1.84	0.0272	0.0051
Load Loose in OTRs	0.4380	18.6	78.4	1.84	0.0322	0.0141
Load OWCs	0.2450	18.6	33.3	1.84	0.0758	0.0186
Load Pallets	0.0160	23.9	75.3	1.84	0.0260	0.0004
Destination BMC						0.3180
Unload Bedload Sack	0.0450	333.8	5.8	2.13	0.0279	0.0013
Unload Bedload Loose	0.0680	1111.6	1.0	2.13	0.0486	0.0033
Unload Sacks in OTR	0.1880	37.2	93.0	2.13	0.0156	0.0029
Unload loose in OTR	0.4380	37.2	78.4	2.13	0.0185	0.0081
Unload Other Wheeled Cont.	0.2450	37.2	33.3	2.13	0.0437	0.0107
Unload Pallet	0.0160	21.9	75.3	2.13	0.0328	0.0005
Dump OTR of sacks	0.1880	11.9	93.0	1.69	0.0387	0.0073
Dump OTR of loose	0.4380	11.9	78.4	1.69	0.0458	0.0201
Dump Other Wheeled Cont.	0.2450	11.9	33.3	1.69	0.1079	0.0264
Dump Pallet	0.0160	11.9	75.3	1.69	0.0477	0.0008
Sack Sorter	0.2330	456.6	5.8	2.41	0.0232	0.0054
Sack shakeout	0.2330	133.7	5.8	1.69	0.0553	0.0129
O. Primary (key)	1.0000	895.6	1.0	2.03	0.0576	0.0576
Secondary (scan)	0.8300	1433.3	1.0	2.03	0.0360	0.0299
Sweep Runouts OTR	0.7327	10.0	78.4	1.69	0.0546	0.0400
Sack and Tie	0.2673	231.9	1.0	1.69	0.1851	0.0495
Bedload Sacks	0.2384	325.8	5.8	2.13	0.0286	0.0068
Load OTRs w/ sacks	0.0289	18.6	93.0	2.13	0.0313	0.0009
Load OTRs w/ loose	0.6025	18.6	78.4	2.13	0.0371	0.0224
Load Hampers/OWC	0.1302	18.6	33.3	2.13	0.0874	0.0114
Destination SCF						0.1097
Unload Bedload Sacks ¹	0.2091	275.1	5.8	1.84	0.0294	0.0061
Unload Sacks in OTR	0.0253	37.2	93.0	1.84	0.0136	0.0003
Unload loose in OTR	0.5284	37.2	78.4	1.84	0.0161	0.0085
Unload OWC	0.1142	37.2	33.3	1.84	0.0379	0.0043
Crossdock Bedload Sacks ¹	0.2091	12.6	39.2	1.84	0.0953	0.0199
Crossdock Sacks in OTR	0.0253	12.6	93.0	1.84	0.0402	0.0010
Crossdock loose in OTR	0.5284	12.6	78.4	1.84	0.0476	0.0252
Crossdock OWC	0.1142	12.6	33.3	1.84	0.1121	0.0128
Bedload Sacks	0.2344	325.8	5.8	1.84	0.0248	0.0058
Load OTRs w/ loose	0.5284	18.6	78.4	1.84	0.0322	0.0170
Load Hampers/OWC	0.1142	18.6	33.3	1.84	0.0758	0.0087
Destination Delivery Unit						0.0340
Unload Bedload Sacks ¹	0.2673	275.1	5.8	1.84	0.0294	0.0078
Unload loose in OTR	0.6025	37.2	78.4	1.84	0.0161	0.0097
Unload OWC	0.1302	37.2	33.3	1.84	0.0379	0.0049
Dump Sacks	0.2673	187.5	5.8	1.84	0.0431	0.0115
TOTAL	1.8300					

Model Cost	\$0.5380
Model Weight_{LR-H-135}	10.7%
Wtd Modeled Cost	\$0.0577

Source of Inputs Appendix V page 15-16.

Column [5] = TY Wage Rate (\$25,445) * (Column [4]) / ((Column [2]) * (Column [3]))

Column [6] = (Column [1] * Column [5])/10000

¹Unload Containers cost at OSCF uses the average cost of unloading containers at Origin BMC as proxy.

Nonmachinable Nonpresort Intra-BMC Model Cost Summary

	[1] # handlings	[2] units/hr	[3] conversion	[4] piggyback	[5] \$ per oper. ¹	[6] \$ per facility ²
Origin SCF						0.1771
Unload Containers ¹	1.0000				0.0678	0.0678
Bedload NMOs	0.0400	315.3	1.0	1.84	0.1488	0.0060
Load NMOs in OTRs	0.7250	18.6	30.8	1.84	0.0819	0.0594
Load NMOs in OWCs	0.2220	18.6	13.1	1.84	0.1928	0.0428
Load NMOs on Pallets	0.0130	23.9	22.3	1.84	0.0878	0.0011
Destination BMC						0.4286
Unload Bedloaded NMOs	0.0400	288.0	1.0	2.13	0.1877	0.0075
Unload NMOs in OTRs	0.7250	37.2	30.8	2.13	0.0472	0.0342
Unload NMOs in OWC	0.2220	37.2	13.1	2.13	0.1110	0.0247
Unload NMOs on Pallets	0.0130	21.9	22.3	2.13	0.1105	0.0014
D. Primary NMO Sort	1.0000	168.7	1.0	1.65	0.2485	0.2485
Bedload from IHC	0.1461	315.3	1.0	2.13	0.1715	0.0251
Load NMOs in OTRs	0.5444	18.6	30.8	2.13	0.0944	0.0514
Load NMOs on Pallet	0.2717	23.9	22.3	2.13	0.1012	0.0275
Load NMOs in OWC	0.0378	18.6	13.1	2.13	0.2222	0.0084
Destination SCF						0.3640
Unload Bedload to IHC	0.1132	275.1	1.0	1.84	0.1706	0.0193
Unload OTRs	0.4703	37.2	30.8	1.84	0.0410	0.0193
Unload Pallet	0.2717	21.9	22.3	1.84	0.0959	0.0260
Unload OWC	0.0217	37.2	13.1	1.84	0.0964	0.0021
Move IHC	0.1132	25.1	23.3	1.84	0.0803	0.0091
Move OTRs	0.4703	25.1	30.8	1.84	0.0606	0.0285
Move Pallet	0.2717	25.1	22.3	1.84	0.0835	0.0227
Move OWC	0.0217	25.1	13.1	1.84	0.1426	0.0031
Manual Sort	0.8770	514.6	1.0	1.54	0.0760	0.0666
Move IHC	0.2344	25.1	23.3	1.84	0.0803	0.0188
Move OTRs	0.5284	25.1	30.8	1.84	0.0606	0.0320
Move OWC	0.1142	25.1	13.1	1.84	0.1426	0.0163
Bedload NMOs	0.2344	315.3	1.0	1.84	0.1488	0.0349
Load OTRs w/ loose	0.5284	18.6	30.8	1.84	0.0819	0.0433
Load Hampers/OWC	0.1142	18.6	13.1	1.84	0.1928	0.0220
Destination Delivery Unit						0.0828
Unload Bedload NMOs	0.2673	275.1	1.0	1.84	0.1706	0.0456
Unload loose in OTR	0.6025	37.2	30.8	1.84	0.0410	0.0247
Unload OWC	0.1302	37.2	13.1	1.84	0.0964	0.0125
TOTAL	1.0000					
					Model Cost	\$1.0526
					Model Weight_{LR-H-135}	1.9%
					Wtd Modeled Cost	\$0.0202

Source of inputs: Appendix V page 15-16

Column [5] = TY Wage Rate (\$25,445) * (Column [4]) / ((Column [2]) * (Column [3]))

Column [6] = (Column [1] * Column [5])/10000

Barcoded Machinable DBMC Model Cost Summary*

	[1] # handlings	[2] units/hr	[3] conversion	[4] piggyback	[5] \$ per oper. ¹	[6] \$ per facility ²
Destination BMC						0.2454
Unload Bedload Loose	1.0000	1111.6	1.0	2.13	0.0486	0.0486
O. Primary (key)	1.0000	1433.3	1.0	2.03	0.0360	0.0360
Secondary (scan)	0.8300	1433.3	1.0	2.03	0.0360	0.0299
Sweep Runouts OTR	0.7327	10.0	78.4	1.69	0.0546	0.0400
Sack and Tie	0.2673	231.9	1.0	1.69	0.1851	0.0495
Bedload Sacks	0.2384	325.8	5.8	2.13	0.0286	0.0068
Load OTRs w/ sacks	0.0289	18.6	93.0	2.13	0.0313	0.0009
Load OTRs w/ loose	0.6025	18.6	78.4	2.13	0.0371	0.0224
Load Hampers/OWC	0.1302	18.6	33.3	2.13	0.0874	0.0114
Destination SCF						0.1097
Unload Bedload Sacks1	0.2091	275.1	5.8	1.84	0.0294	0.0061
Unload Sacks in OTR	0.0253	37.2	93.0	1.84	0.0136	0.0003
Unload loose in OTR	0.5284	37.2	78.4	1.84	0.0161	0.0085
Unload OWC	0.1142	37.2	33.3	1.84	0.0379	0.0043
Crossdock Bedload Sacks1	0.2091	12.6	39.2	1.84	0.0953	0.0199
Crossdock Sacks in OTR	0.0253	12.6	93.0	1.84	0.0402	0.0010
Crossdock loose in OTR	0.5284	12.6	78.4	1.84	0.0476	0.0252
Crossdock OWC	0.1142	12.6	33.3	1.84	0.1121	0.0128
Bedload Sacks	0.2344	325.8	5.8	1.84	0.0248	0.0058
Load OTRs w/ loose	0.5284	18.6	78.4	1.84	0.0322	0.0170
Load Hampers/OWC	0.1142	18.6	33.3	1.84	0.0758	0.0087
Destination Delivery Unit						0.0340
Unload Bedload Sacks1	0.2673	275.1	5.8	1.84	0.0294	0.0078
Unload loose in OTR	0.6025	37.2	78.4	1.84	0.0161	0.0097
Unload OWC	0.1302	37.2	33.3	1.84	0.0379	0.0049
Dump Sacks	0.2673	187.5	5.8	1.84	0.0431	0.0115
TOTAL	1.8300					
				Model Cost	\$0.3891	
				Model Weight_{LR-H-135}	38.7%	
				Wtd Modeled Cost	\$0.1506	

Source of Inputs: Appendix V page 15-16.

Column [5] = TY Wage Rate (\$25.445) * (Column [4]) / ((Column [2]) * (Column [3]))

Column [6] = (Column [1] * Column [5])/10000

*DBMC model costs are calculated in this testimony for the sole purpose of comparing an average Parcel Post model cost to the CRA parcel post mail processing cost pools in order to calculate the CRA proportional adjustment factor.

Nonbarcoded Machinable DBMC Model Cost Summary*

	[1] # handlings	[2] units/hr	[3] conversion	[4] piggyback	[5] \$ per oper. ¹	[6] \$ per facility ²
Destination BMC						0.2670
Unload Bedload Loose	1.0000	1111.6	1.0	2.13	0.0486	0.0486
O. Primary (key)	1.0000	895.6	1.0	2.03	0.0576	0.0576
Secondary (scan)	0.8300	1433.3	1.0	2.03	0.0360	0.0299
Sweep Runouts OTR	0.7327	10.0	78.4	1.69	0.0546	0.0400
Sack and Tie	0.2673	231.9	1.0	1.69	0.1851	0.0495
Bedload Sacks	0.2384	325.8	5.8	2.13	0.0286	0.0068
Load OTRs w/ sacks	0.0289	18.6	93.0	2.13	0.0313	0.0009
Load OTRs w/ loose	0.6025	18.6	78.4	2.13	0.0371	0.0224
Load Hampers/OWC	0.1302	18.6	33.3	2.13	0.0874	0.0114
Destination SCF						0.1097
Unload Bedload Sacks1	0.2091	275.1	5.8	1.84	0.0294	0.0061
Unload Sacks in OTR	0.0253	37.2	93.0	1.84	0.0136	0.0003
Unload loose in OTR	0.5284	37.2	78.4	1.84	0.0161	0.0085
Unload OWC	0.1142	37.2	33.3	1.84	0.0379	0.0043
Crossdock Bedload Sacks1	0.2091	12.6	39.2	1.84	0.0953	0.0199
Crossdock Sacks in OTR	0.0253	12.6	93.0	1.84	0.0402	0.0010
Crossdock loose in OTR	0.5284	12.6	78.4	1.84	0.0476	0.0252
Crossdock OWC	0.1142	12.6	33.3	1.84	0.1121	0.0128
Bedload Sacks	0.2344	325.8	5.8	1.84	0.0248	0.0058
Load OTRs w/ loose	0.5284	18.6	78.4	1.84	0.0322	0.0170
Load Hampers/OWC	0.1142	18.6	33.3	1.84	0.0758	0.0087
Destination Delivery Unit						0.0340
Unload Bedload Sacks1	0.2673	275.1	5.8	1.84	0.0294	0.0078
Unload loose in OTR	0.6025	37.2	78.4	1.84	0.0161	0.0097
Unload OWC	0.1302	37.2	33.3	1.84	0.0379	0.0049
Dump Sacks	0.2673	187.5	5.8	1.84	0.0431	0.0115
TOTAL	1.8300				Model Cost	\$0.4107
					Model Weight_{LR-H-135}	4.3%
					Wtd Modeled Cost	\$0.0175

Source of Inputs: Appendix V page 15-16.

Column [5] = TY Wage Rate (\$25.445) * (Column [4]) / ((Column [2]) * (Column [3]))

Column [6] = (Column [1] * Column [5])/10000

*DBMC model costs are calculated in this testimony for the sole purpose of comparing an average Parcel Post model cost to the CRA parcel post mail processing cost pools in order to calculate the CRA proportional adjustment factor.

Nonmachinable DBMC Model Cost Summary*

	[1] # handlings	[2] units/hr	[3] conversion	[4] piggyback	[5] \$ per oper. ¹	[6] \$ per facility ²
Destination BMC						0.5486
Unload Bedloaded NMOs	1.0000	288.0	1.0	2.13	0.1877	0.1877
D. Primary NMO Sort	1.0000	168.7	1.0	1.65	0.2485	0.2485
Bedload from IHC	0.1461	315.3	1.0	2.13	0.1715	0.0251
Load NMOs in OTRs	0.5444	18.6	30.8	2.13	0.0944	0.0514
Load NMOs on Pallet	0.2717	23.9	22.3	2.13	0.1012	0.0275
Load NMOs in OWC	0.0378	18.6	13.1	2.13	0.2222	0.0084
Destination SCF						0.3640
Unload Bedload to IHC	0.1132	275.1	1.0	1.84	0.1706	0.0193
Unload OTRs	0.4703	37.2	30.8	1.84	0.0410	0.0193
Unload Pallet	0.2717	21.9	22.3	1.84	0.0959	0.0260
Unload OWC	0.0217	37.2	13.1	1.84	0.0964	0.0021
Move IHC	0.1132	25.1	23.3	1.84	0.0803	0.0091
Move OTRs	0.4703	25.1	30.8	1.84	0.0606	0.0285
Move Pallet	0.2717	25.1	22.3	1.84	0.0835	0.0227
Move OWC	0.0217	25.1	13.1	1.84	0.1426	0.0031
Manual Sort	0.8770	514.6	1.0	1.54	0.0760	0.0666
Move IHC	0.2344	25.1	23.3	1.84	0.0803	0.0188
Move OTRs	0.5284	25.1	30.8	1.84	0.0606	0.0320
Move OWC	0.1142	25.1	13.1	1.84	0.1426	0.0163
Bedload NMOs	0.2344	315.3	1.0	1.84	0.1488	0.0349
Load OTRs w/ loose	0.5284	18.6	30.8	1.84	0.0819	0.0433
Load Hampers/OWC	0.1142	18.6	13.1	1.84	0.1928	0.0220
Destination Delivery Unit						0.0828
Unload Bedload NMOs	0.2673	275.1	1.0	1.84	0.1706	0.0456
Unload loose in OTR	0.6025	37.2	30.8	1.84	0.0410	0.0247
Unload OWC	0.1302	37.2	13.1	1.84	0.0964	0.0125
TOTAL	1.0000					
				Model Cost	\$0.9954	
				Model Weight_{LR-H-135}	3.2%	
				Wtd Modeled Cost	\$0.0322	

Source of Inputs: Appendix V page 15-16.

Column [5] = TY Wage Rate (\$25.445) * (Column [4]) / ((Column [2]) * (Column [3]))

Column [6] = (Column [1] * Column [5])/10000

*DBMC model costs are calculated in this testimony for the sole purpose of comparing an average Parcel Post model cost to the CRA parcel post mail processing cost pools in order to calculate the CRA proportional adjustment factor

Nonmachinable Nonpresort Inter-BMC Cost Development
Length plus Girth Between 108" and 130"

	[1] # handlings	[2] units/hr	[3] conversion	[4] piggyback	[5] \$ per oper. ¹	[6] \$ per facility ²
Origin SCF						0.7406
Unload Containers ¹	1.0000				0.2754	0.2754
Bedload NMOs	0.0400	315.3	1.0	1.84	0.1488	0.0060
Load NMOs in OTRs	0.7250	18.6	6.9	1.84	0.3641	0.2640
Load NMOs in OWCs	0.2220	18.6	2.9	1.84	0.8567	0.1902
Load NMOs on Pallets	0.0130	23.9	5.0	1.84	0.3902	0.0051
Origin BMC						0.9736
Unload Bedloaded NMOs	0.0400	288.0	1.0	2.13	0.1877	0.0075
Unload NMOs in OTRs	0.7250	37.2	6.9	2.13	0.2097	0.1520
Unload NMOs in OWC	0.2220	37.2	2.9	2.13	0.4934	0.1095
Unload NMOs on Pallets	0.0130	21.9	5.0	2.13	0.4909	0.0064
O. Primary NMO Sort	1.0000	168.7	1.0	1.65	0.2485	0.2485
Load NMOs on Pallets	1.0000	23.9	5.0	2.13	0.4496	0.4496
Destination BMC						1.1523
Unload NMOs on Pallets	1.0000	21.9	5.0	2.13	0.4909	0.4909
D. Primary NMO Sort	1.0000	168.7	1.0	1.65	0.2485	0.2485
Bedload from IHC	0.1461	315.3	1.0	2.13	0.1715	0.0251
Load NMOs in OTRs	0.5444	18.6	6.9	2.13	0.4196	0.2284
Load NMOs on Pallet	0.2717	23.9	5.0	2.13	0.4496	0.1222
Load NMOs in OWC	0.0378	18.6	2.9	2.13	0.9872	0.0373
Destination SCF						1.2015
Unload Bedload to IHC	0.1132	275.1	1.0	1.84	0.1706	0.0193
Unload OTRs	0.4703	37.2	6.9	1.84	0.1820	0.0856
Unload Pallet	0.2717	21.9	5.0	1.84	0.4260	0.1157
Unload OWC	0.0217	37.2	2.9	1.84	0.4281	0.0093
Move IHC	0.1132	25.1	5.2	1.84	0.3566	0.0404
Move OTRs	0.4703	25.1	6.9	1.84	0.2692	0.1266
Move Pallet	0.2717	25.1	5.0	1.84	0.3712	0.1009
Move OWC	0.0217	25.1	2.9	1.84	0.6335	0.0138
Manual Sort	0.8770	514.6	1.0	1.54	0.0760	0.0666
Move IHC	0.2344	25.1	5.2	1.84	0.3566	0.0836
Move OTRs	0.5284	25.1	6.9	1.84	0.2692	0.1423
Move OWC	0.1142	25.1	2.9	1.84	0.6335	0.0723
Bedload NMOs	0.2344	315.3	1.0	1.84	0.1488	0.0349
Load OTRs w/ loose	0.5284	18.6	6.9	1.84	0.3641	0.1924
Load Hampers/OWC	0.1142	18.6	2.9	1.84	0.8567	0.0978
Destination Delivery Unit						0.2110
Unload Bedload NMOs	0.2673	275.1	1.0	1.84	0.1706	0.0456
Unload loose in OTR	0.6025	37.2	6.9	1.84	0.1820	0.1096
Unload OWC	0.1302	37.2	2.9	1.84	0.4281	0.0557
TOTAL	2.0000				Model Cost	\$4.2789

Source of Inputs: Appendix V page 15-16

Column [5] = TY Wage Rate (\$25.445) * (Column [4]) / ((Column [2]) * (Column [3]))

Column [6] = (Column [1] * Column [5])/10000

¹Unload Containers cost at OSCF uses the average cost of unloading containers at Origin BMC as proxy.

Nonmachinable Nonpresort Inter-BMC Cost Development
Length plus Girth Between 108" and 130"

	[1] # handlings	[2] units/hr	[3] conversion	[4] piggyback	[5] \$ per oper. ¹	[6] \$ per facility ²
Origin SCF						0.7406
Unload Containers ¹	1.0000				0.2754	0.2754
Bedload NMOs	0.0400	315.3	1.0	1.84	0.1488	0.0060
Load NMOs in OTRs	0.7250	18.6	6.9	1.84	0.3641	0.2640
Load NMOs in OWCs	0.2220	18.6	2.9	1.84	0.8567	0.1902
Load NMOs on Pallets	0.0130	23.9	5.0	1.84	0.3902	0.0051
Destination BMC						0.9368
Unload Bedloaded NMOs	0.0400	288.0	1.0	2.13	0.1877	0.0075
Unload NMOs in OTRs	0.7250	37.2	6.9	2.13	0.2097	0.1520
Unload NMOs in OWC	0.2220	37.2	2.9	2.13	0.4934	0.1095
Unload NMOs on Pallets	0.0130	21.9	5.0	2.13	0.4909	0.0064
D. Primary NMO Sort	1.0000	168.7	1.0	1.65	0.2485	0.2485
Bedload from IHC	0.1461	315.3	1.0	2.13	0.1715	0.0251
Load NMOs in OTRs	0.5444	18.6	6.9	2.13	0.4196	0.2284
Load NMOs on Pallet	0.2717	23.9	5.0	2.13	0.4496	0.1222
Load NMOs in OWC	0.0378	18.6	2.9	2.13	0.9872	0.0373
Destination SCF						1.2015
Unload Bedload to IHC	0.1132	275.1	1.0	1.84	0.1706	0.0193
Unload OTRs	0.4703	37.2	6.9	1.84	0.1820	0.0856
Unload Pallet	0.2717	21.9	5.0	1.84	0.4260	0.1157
Unload OWC	0.0217	37.2	2.9	1.84	0.4281	0.0093
Move IHC	0.1132	25.1	5.2	1.84	0.3566	0.0404
Move OTRs	0.4703	25.1	6.9	1.84	0.2692	0.1266
Move Pallet	0.2717	25.1	5.0	1.84	0.3712	0.1009
Move OWC	0.0217	25.1	2.9	1.84	0.6335	0.0138
Manual Sort	0.8770	514.6	1.0	1.54	0.0760	0.0666
Move IHC	0.2344	25.1	5.2	1.84	0.3566	0.0836
Move OTRs	0.5284	25.1	6.9	1.84	0.2692	0.1423
Move OWC	0.1142	25.1	2.9	1.84	0.6335	0.0723
Bedload NMOs	0.2344	315.3	1.0	1.84	0.1488	0.0349
Load OTRs w/ loose	0.5284	18.6	6.9	1.84	0.3641	0.1924
Load Hampers/OWC	0.1142	18.6	2.9	1.84	0.8567	0.0978
Destination Delivery Unit						0.2110
Unload Bedload NMOs	0.2673	275.1	1.0	1.84	0.1706	0.0456
Unload loose in OTR	0.6025	37.2	6.9	1.84	0.1820	0.1096
Unload OWC	0.1302	37.2	2.9	1.84	0.4281	0.0557
TOTAL	1.0000				Model Cost	\$3.0899

Source of Inputs: Appendix V page 15-16.

Column [5] = TY Wage Rate (\$25.445) * (Column [4]) / ((Column [2]) * (Column [3]))

Column [6] = (Column [1] * Column [5])/10000

¹Unload Containers cost at OSCF uses the average cost of unloading containers at Origin BMC as proxy.

Productivities and Conversion Factors for Direct Labor Operations

	Units/Wkhr	Conversion Factors		3
	Marginal	Machinable	NMO	
UNLOADING				
Unload sacked machinable parcels to extended conveyor	333.8 1/	5.8	n/a	
Unload machinable parcels to extended conveyor	1111.6 1/	1.0	n/a	
Unload non-machinable parcels	288.0 1/	n/a	1.0	
Unload non-machinable parcels to IHC only (proxy for sacks)	275.1 1/	5.8	1.0	
Unload machinable parcels sacked in OTRs	37.2 1/	93.0	n/a	
Unload parcels loose in OTRs	37.2 1/	78.4	30.8	
Unload Wire Tainer/Hamper/APC (Other Wheeled Cont. - OWC)	37.2 1/	33.3	13.1	
Unload Pallets	21.9 1/	75.3	22.3	
Unload Postal Paks	21.9 1/	101.0	n/a	
Unload Gaylords (of BMC presorted parcels)	21.9 1/	104.5	n/a	
Unload Pallets (of BMC presorted NMOs)	21.9 1/	n/a	26.3	
DUMPING & SACK HANDLING				
Dump Sacks in OTRs	11.9 1/	93.0	n/a	
Dump OTRs (loose)	11.9 1/	78.4	30.8	
Dump Other Wheeled Containers (OWC)	11.9 1/	33.3	13.1	
Dump Pallets	11.9 1/	75.3	22.3	
Dump Postal Paks	11.9 1/	101.0	n/a	
Dump Gaylords	11.9 1/	104.5	n/a	
Sack shake out	133.7 1/	5.8	n/a	
Manually dump sacks	187.5 10/	5.8	n/a	
Sack sorter (FY96 PIRS)	456.6 2/	5.8	n/a	
PARCEL SORTING MACHINE DISTRIBUTION				
Key Rate Primary (FY93 PIRS)	895.6 2/	1.0	n/a	
Scan Rate Primary	1433.3 5/	1.0		
Secondary Rate (PIRS 96)	1433.3 2/	1.0	n/a	
NONMACHINABLE OUTSIDES DISTRIBUTION				
NMO Distribution (FY 96, PIRS)	168.7 2/	n/a	1.0	
NMO Distribution at SCFs (MODS FY 96)	514.6 2/	n/a	1.0	
OTHER OPERATIONS				
Tend container loader/sweep runouts (Origin BMC - Postal Pak)	10.0 1/	101.0	n/a	
Tend container loader/sweep runouts (Destinating BMC - OTR)	10.0 1/	78.4	n/a	
Crossdock BMC Presorted Pallets	12.6 1/	n/a	26.3	
Crossdock BMC Presorted Gaylords	12.6 1/	104.5	n/a	
Crossdock IHCs w/5-d sacks or NMOs	12.6 1/	39.2	23.3	
Sack and Tie	231.9 1/	1.0	n/a	
LOADING				
Bedload NMOs to van (proxy for machinables)	315.3 1/	1.0	1.0	
Bedload Sacked Machinables	325.8 1/	5.8	n/a	
Load loose parcels in OTRs to van	18.6 1/	78.4	30.8	
Load sacked machinables in OTRs to van	18.6 1/	93.0	n/a	
Load Other Wheeled Containers (OWC) to van	18.6 1/	33.3	13.1	
Load pallets to van	23.9 1/	75.3	22.3	
Load Postal Paks to van	23.9 1/	101.0	n/a	
Load Gaylord to van	23.9 1/	104.5	n/a	

Other Inputs

TY Clerk and Mail Handler Wage Rate	\$25.445 6/
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Mail Processing Operation Specific Piggyback Factors

Parcel Sorting Machine	2.027 7/
NMO Sorting at BMC	1.647 7/
NMO Sorting at SCF	1.536 7/
Other Operations at BMCs	1.687 7/
Sack Sorting Machine - BMC	2.414 7/
Platform Non-BMC	1.844 7/
Platform BMC	2.125 7/

Mail Flow Arrival and Dispatch Profiles

Machinable Parcels Arriving in Bedloaded Sacks at BMC	4.50% 4/
Machinable Parcels Arriving Bedloaded at BMC	6.80% 4/
Machinable Parcels Arriving sacked in OTRs at BMC	18.80% 4/
Machinable Parcels Arriving loose in OTRs at BMC	43.80% 4/
Machinable Parcels Arriving in Hampers/APC/OWC (OWC) at BMC	24.50% 4/
Machinable Parcels Arriving Palletized at BMC	1.60% 4/
Non-Machinable Parcels Arriving Bedloaded at BMC	4.00% 4/
Non-Machinable Parcels Arriving Palletized at BMC	1.30% 4/
Non-Machinable Parcels Arriving in OTR Containers at BMC	72.50% 4/
Non-Machinable Parcels Arriving in Hampers/APC/OWC (OWC) at BMC	22.20% 4/

Machinable Parcels Arriving in Postal Paks at Destination BMC (from Origin BMC)	100% 8/
NMOs Arriving Palletized at Destination BMC (from Origin BMC)	100% 8/

Machinable Parcels Dispatched in Bedloaded Sacks to Service Area	23.84% 1/
Machinable Parcels Dispatched loose in OTRs to Service Area	60.25% 1/
Machinable Parcels Dispatched sacked in OTRs to Service Area	2.89% 1/
Machinable Parcels Dispatched in Hampers/APC/OWC (OWC) to Service Area	13.02% 1/
Non-Machinable Parcels Dispatched Bedloaded to Plant	12.91% 1/
Non-Machinable Parcels Dispatched on Pallets to Plant	30.98% 1/
Non-Machinable Parcels Dispatched in OTRs to Plant	53.63% 1/
Non-Machinable Parcels Dispatched in Hampers/APC/OWC (OWC) to Plant	2.48% 1/
Non-Machinable Parcels Dispatched Bedloaded to Delivery Unit (proxy mach)	26.73% 1/
Non-Machinable Parcels Dispatched in OTRs to Delivery Unit (proxy mach)	60.25% 1/
Non-Machinable Parcels Dispatched in Hampers/APC/OWC (OWC) to Delivery Unit (proxy)	13.02% 1/

Mail Flow Operating Assumptions

Percent with direct transportation to destinatting delivery unit from BMC	12% 9/
Percent Sorted to 5-Digits by Primary Parcel Sorting Machine	17% 8/
Destinating BMCs will feed barcoded destinatting mail unfiltered to secondary	50% 8/
Probability that mail fed directly to nonspecific secondary will receive more than one sort	50% 8/

1/ USPS LR-H-132

6/ USPS LR-H-146

2/ National databases (PIRS and MODS)

7/ USPS LR-H-77

3/ Page 17 of this appendix.

8/ USPS-T-29 Section V.B.2.

4/ USPS LR-H-131

9/ USPS LR-PCR-40

5/ Productivity of Secondary as Proxy

10/Proxy based on Planning Guidelines (PGLs)

Conversion Factor Calculations

Container Type	[1] Outside Dim. Per Container	[2] Inside Dim. Per Container	[3] Cubic Feet Per Container	[4] Effective Cubic Capacity	[5] Capacity at Average Fullness	[6] Average % FULL
Machinable						
Pallet	48x40x48	48x40x48	53.3	88.6	75.3	85%
Postal Pak	48x40x69	46.5x38.5x69	71.5	118.8	101.0	85%
Gaylord	48x40x69	46.5x38.5x69	71.5	118.8	104.5	88%
NMOs						
Pallet	48x40x48	48x40x48	53.3	26.3	22.3	85%
Presorted Pallet	48x40x48	48x40x48	53.3	26.3	26.3	100%
In-house Container	65x41.5x36	65x41.5x36	55.5	27.4	23.3	85%
108"-130" on Pallet	48x40x48	48x40x48	53.3	5.9	5.0	85%
108"-130" in IHC	65x41.5x36	65x41.5x36	55.5	6.2	5.2	85%

	[7] Machinable	[8] Nonmachinable	[9] [10]	[11] 108"-130"	[12]	
Pieces Per Container	R84-1 FY82	R97-1 FY96	R84-1 FY82	R97-1 FY96	R97-1 FY96	R84-1 Ratio Mach to NMO
Sack	7.92	5.8	n/a	n/a	n/a	n/a
Sack in OTR	126.7	93.0	n/a	n/a	n/a	n/a
OTR	106.9	78.4	42.0	30.8	6.9	2.55
APC	55.2	40.5	21.7	15.9	3.6	2.54
Hamper	35.6	26.1	14.0	10.3	2.3	2.54
	[13]	[14]	[15]	[16]		
	Cubic Feet Per Parcel Post					
	Form 12 Machinable	Form 12 NMO	Form 22 CRA	Regression 108"-130"		
FY96	0.547	1.844	0.733	8.19		
FY82			0.538			

[1 & 2] Container Methods, Handbook PO-502 (September 1992) USPS LR-H-133

[3] Length * Width * Height

[4] (Column [3]) / ((Column [13]) * 1.10), to account for "effective cube" and (Column [3]) / ((Column [14]) * 1.10) and (Column [3]) / ((Column [16]) * 1.10)

[5] Effective Cubic Capacity (Column [4]) * Average % Fullness (Column [6])

[6] Pallets, Postal Paks and IHCs should be as full as practicable before dispatch so it is reasonable to assume these containers will be at least 85% full

[7 & 9] Docket No. R84-1, Exhibit USPS-14I

[8 & 10] Pieces Per Container in Docket No. R84-1 (Column [7 & 9]) * FY82 Cub. Ft per Pcs. (Column [15]) / FY96 Cub. Ft. per Pcs. (Column [15])

[11] Column [10] * Column [14] / Column [16]

[12] Column [7] / Column [9]

[13 & 14] USPS-LR-H-135 Mach cub ft (104,992,019) / mach pcs (192,078,715) NMO cub ft (30,530,590) / NMO pcs (16,556,809)

[15] FY82 CRA at 12. Cubic feet (90,380,000) / pieces (167,967,000) FY96 CRA at 13. Cubic feet (156,063,000) / pieces (212,828,000)

Special Standard (B)
Parcel Mail Processing Cost Models

Appendix VI

Barcoded Machinable Nonpresort Inter-BMC Model Cost Summary

	[1] # handlings	[2] units/hr	[3] conversion	[4] piggyback	[5] \$ per oper. ¹	[6] \$ per facility ²
Origin SCF						0.0255
Unload Containers ¹	1.0000				0.0086	0.0086
Bedload Sacks	0.0224	325.8	19.2	1.84	0.0075	0.0002
Bedload loose	0.0336	315.3	1	1.84	0.1488	0.0050
Load Sacks in OTRs	0.1884	18.6	307.4	1.84	0.0082	0.0015
Load Loose in OTRs	0.4396	18.6	291.8	1.84	0.0087	0.0038
Load OWCs	0.3090	18.6	124.0	1.84	0.0204	0.0063
Load Pallets	0.0070	23.9	259.3	1.84	0.0076	0.0001
Origin BMC						0.0878
Unload Bedload Sack	0.0224	333.8	19.2	2.13	0.0084	0.0002
Unload Bedload Loose	0.0336	1111.6	1.0	2.13	0.0486	0.0016
Unload Sacks in OTR	0.1884	37.2	307.4	2.13	0.0047	0.0009
Unload loose in OTR	0.4396	37.2	291.8	2.13	0.0050	0.0022
Unload Other Wheeled Cont.	0.3090	37.2	124.0	2.13	0.0117	0.0036
Unload Pallet	0.0070	21.9	259.3	2.13	0.0095	0.0001
Dump OTR of sacks	0.1884	11.9	307.4	1.69	0.0117	0.0022
Dump OTR of loose	0.4396	11.9	291.8	1.69	0.0123	0.0054
Dump Other Wheeled Cont	0.3090	11.9	124.0	1.69	0.0290	0.0090
Dump Pallet	0.0070	11.9	259.3	1.69	0.0139	0.0001
Sack Sorter	0.2108	456.6	19.2	2.41	0.0070	0.0015
Sack shakeout	0.2108	133.7	19.2	1.69	0.0167	0.0035
O. Primary (scan)	1.0000	1433	1.0	2.03	0.0360	0.0360
Sweep Runouts P.Pak	1.0000	9.8	347.5	2.03	0.0151	0.0151
Load Postal Pak	1.0000	23.9	347.5	2.13	0.0065	0.0065
Destination BMC						0.1517
Unload Postal Pak	1.0000	21.9	347.5	2.13	0.0071	0.0071
Dump Postal Pak	1.0000	11.9	347.5	1.69	0.0103	0.0103
D Primary (scan)	0.5850	1433	1.0	2.03	0.0360	0.0211
Secondary (scan)	1.1225	1433	1.0	2.03	0.0360	0.0404
Sweep Runouts OTR	0.7327	9.8	291.8	1.69	0.0150	0.0110
Sack and Tie	0.2673	227.6	1.0	1.69	0.1886	0.0504
Bedload Sacks	0.2384	325.8	19.2	2.13	0.0086	0.0021
Load OTRs w/ sacks	0.0289	18.6	307.4	2.13	0.0095	0.0003
Load OTRs w/ loose	0.6025	18.6	291.8	2.13	0.0100	0.0060
Load Hampers/OWC	0.1302	18.6	124.0	2.13	0.0235	0.0031
Destination SCF						0.0451
Unload Bedload Sacks ¹	0.2091	275.1	19.2	1.84	0.0089	0.0019
Unload Sacks in OTR	0.0253	37.2	307.4	1.84	0.0041	0.0001
Unload loose in OTR	0.5284	37.2	291.8	1.84	0.0043	0.0023
Unload OWC	0.1142	37.2	124.0	1.84	0.0102	0.0012
Crossdock Bedload Sacks ¹	0.2091	12.3	39.2	1.84	0.0971	0.0203
Crossdock Sacks in OTR	0.0253	12.3	307.4	1.84	0.0124	0.0003
Crossdock loose in OTR	0.5284	12.3	291.8	1.84	0.0130	0.0069
Crossdock OWC	0.1142	12.3	124.0	1.84	0.0307	0.0035
Bedload Sacks	0.2344	325.8	19.2	1.84	0.0075	0.0018
Load OTRs w/ loose	0.5284	18.6	291.8	1.84	0.0087	0.0046
Load Hampers/OWC	0.1142	18.6	124.0	1.84	0.0204	0.0023
Destination Delivery Unit						0.0098
Unload Bedload Sacks ¹	0.2673	275.1	19.2	1.84	0.0089	0.0024
Unload loose in OTR	0.6025	37.2	291.8	1.84	0.0043	0.0026
Unload OWC	0.1302	37.2	124.0	1.84	0.0102	0.0013
Dump Sacks	0.2673	187.5	19.2	1.84	0.0130	0.0035
TOTAL	2.7075					
				Model Cost	0.3198	
				Model Weight	Exhibit USPS-29F	15.8%
				Wtd Modeled Cost		0.0505

Source of Inputs: Appendix VI page 11-12

Column [5] = TY Wage Rate (\$25.445) * (Column [4]) / ((Column [2]) * (Column [3]))

Column [6] = (Column [1] * Column [5])/10000

¹Unload Containers cost at OSCF uses the average cost of unloading containers at Origin BMC as proxy.

Nonbarcoded Machinable Nonpresort Inter-BMC Model Cost Summary

	[1] # handlings	[2] units/hr	[3] conversion	[4] piggyback	[5] \$ per oper.	[6] \$ per facility ²
Origin SCF						0.0255
Unload Containers ¹	1.0000				0.0086	0.0086
Bedload Sacks	0.0224	325.8	19.2	1.84	0.0075	0.0002
Bedload loose	0.0336	315.3	1	1.84	0.1488	0.0050
Load Sacks in OTRs	0.1884	18.6	307.4	1.84	0.0082	0.0015
Load Loose in OTRs	0.4396	18.6	291.8	1.84	0.0087	0.0038
Load OWCs	0.3090	18.6	124.0	1.84	0.0204	0.0063
Load Pallets	0.0070	23.9	259.3	1.84	0.0076	0.0001
Origin BMC						0.1048
Unload Bedload Sack	0.0224	333.8	19.2	2.13	0.0084	0.0002
Unload Bedload Loose	0.0336	1111.6	1.0	2.13	0.0486	0.0016
Unload Sacks in OTR	0.1884	37.2	307.4	2.13	0.0047	0.0009
Unload loose in OTR	0.4396	37.2	291.8	2.13	0.0050	0.0022
Unload Other Wheeled Cont	0.3090	37.2	124.0	2.13	0.0117	0.0036
Unload Pallet	0.0070	21.9	259.3	2.13	0.0095	0.0001
Dump OTR of sacks	0.1884	11.9	307.4	1.69	0.0117	0.0022
Dump OTR of loose	0.4396	11.9	291.8	1.69	0.0123	0.0054
Dump Other Wheeled Cont.	0.3090	11.9	124.0	1.69	0.0290	0.0090
Dump Pallet	0.0070	11.9	259.3	1.69	0.0139	0.0001
Sack Sorter	0.2108	456.6	19.2	2.41	0.0070	0.0015
Sack shakeout	0.2108	133.7	19.2	1.69	0.0167	0.0035
O. Primary (key)	1.0000	974	1.0	2.03	0.0529	0.0529
Sweep Runouts P Pak	1.0000	9.8	347.5	2.03	0.0151	0.0151
Load Postal Pak	1.0000	23.9	347.5	2.13	0.0065	0.0065
Destination BMC						0.1517
Unload Postal Pak	1.0000	21.9	347.5	2.13	0.0071	0.0071
Dump Postal Pak	1.0000	11.9	347.5	1.69	0.0103	0.0103
D. Primary (scan)	0.5850	1433	1.0	2.03	0.0360	0.0211
Secondary (scan)	1.1225	1433	1.0	2.03	0.0360	0.0404
Sweep Runouts OTR	0.7327	9.8	291.8	1.69	0.0150	0.0110
Sack and Tie	0.2673	227.6	1.0	1.69	0.1886	0.0504
Bedload Sacks	0.2384	325.8	19.2	2.13	0.0086	0.0021
Load OTRs w/ sacks	0.0289	18.6	307.4	2.13	0.0095	0.0003
Load OTRs w/ loose	0.6025	18.6	291.8	2.13	0.0100	0.0060
Load Hampers/OWC	0.1302	18.6	124.0	2.13	0.0235	0.0031
Destination SCF						0.0451
Unload Bedload Sacks ¹	0.2091	275.1	19.2	1.84	0.0089	0.0019
Unload Sacks in OTR	0.0253	37.2	307.4	1.84	0.0041	0.0001
Unload loose in OTR	0.5284	37.2	291.8	1.84	0.0043	0.0023
Unload OWC	0.1142	37.2	124.0	1.84	0.0102	0.0012
Crossdock Bedload Sacks ¹	0.2091	12.3	39.2	1.84	0.0971	0.0203
Crossdock Sacks in OTR	0.0253	12.3	307.4	1.84	0.0124	0.0003
Crossdock loose in OTR	0.5284	12.3	291.8	1.84	0.0130	0.0069
Crossdock OWC	0.1142	12.3	124.0	1.84	0.0307	0.0035
Bedload Sacks	0.2344	325.8	19.2	1.84	0.0075	0.0018
Load OTRs w/ loose	0.5284	18.6	291.8	1.84	0.0087	0.0046
Load Hampers/OWC	0.1142	18.6	124.0	1.84	0.0204	0.0023
Destination Delivery Unit						0.0098
Unload Bedload Sacks ¹	0.2673	275.1	19.2	1.84	0.0089	0.0024
Unload loose in OTR	0.6025	37.2	291.8	1.84	0.0043	0.0026
Unload OWC	0.1302	37.2	124.0	1.84	0.0102	0.0013
Dump Sacks	0.2673	187.5	19.2	1.84	0.0130	0.0035
TOTAL	2.7075					
				Model Cost	0.3368	
				Model Weight	44.1%	
				Wtd Modeled Cost	0.1484	

Source of Inputs: Appendix VI page 11-12.

Column [5] = TY Wage Rate (\$25.445) * (Column [4]) / ((Column [2]) * (Column [3]))

Column [6] = (Column [1] * Column [5])/10000

¹Unload Containers cost at OSCF uses the average cost of unloading containers at Origin BMC as proxy.

Nonmachinable Nonpresort Inter-BMC Model Cost Summary

	[1] # handlings	[2] units/hr	[3] conversion	[4] piggyback	[5] \$ per oper. ¹	[6] \$ per facility ²
Origin SCF						0.0257
Unload Containers ¹	1.0000				0.0109	0.0109
Bedload NMOs	0.0230	315.3	1.0	1.84	0.1488	0.0034
Load NMOs in OTRs	0.7260	18.6	291.8	1.84	0.0087	0.0063
Load NMOs in OWCs	0.2500	18.6	124.0	1.84	0.0204	0.0051
Load NMOs on Pallets	0.0010	23.9	259.3	1.84	0.0076	0.0000
Origin BMC						0.2681
Unload Bedloaded NMOs	0.0230	288.0	1.0	2.13	0.1877	0.0043
Unload NMOs in OTRs	0.7260	37.2	291.8	2.13	0.0050	0.0036
Unload NMOs in OWC	0.2500	37.2	124.0	2.13	0.0117	0.0029
Unload NMOs on Pallets	0.0010	21.9	259.3	2.13	0.0095	0.0000
O. Primary NMO Sort	1.0000	168.7	1.0	1.65	0.2485	0.2485
Load NMOs on Pallets	1.0000	23.9	259.3	2.13	0.0087	0.0087
Destination BMC						0.2917
Unload NMOs on Pallets	1.0000	21.9	259.3	2.13	0.0095	0.0095
D. Primary NMO Sort	1.0000	168.7	1.0	1.65	0.2485	0.2485
Bedload from IHC	0.1461	315.3	1.0	2.13	0.1715	0.0251
Load NMOs in OTRs	0.5444	18.6	291.8	2.13	0.0100	0.0054
Load NMOs on Pallet	0.2717	23.9	259.3	2.13	0.0087	0.0024
Load NMOs in OWC	0.0378	18.6	124.0	2.13	0.0235	0.0009
Destination SCF						0.1916
Unload Bedload to IHC	0.1132	275.1	1.0	1.84	0.1706	0.0193
Unload OTRs	0.4703	37.2	291.8	1.84	0.0043	0.0020
Unload Pallet	0.2717	21.9	259.3	1.84	0.0083	0.0022
Unload OWC	0.0217	37.2	124.0	1.84	0.0102	0.0002
Move IHC	0.1132	24.7	269.9	1.84	0.0070	0.0008
Move OTRs	0.4703	24.7	291.8	1.84	0.0065	0.0031
Move Pallet	0.2717	24.7	259.3	1.84	0.0073	0.0020
Move OWC	0.0217	24.7	124.0	1.84	0.0153	0.0003
Manual Sort	0.8770	303.5	1.0	1.54	0.1288	0.1129
Move IHC	0.2344	24.7	269.9	1.84	0.0070	0.0017
Move OTRs	0.5284	24.7	291.8	1.84	0.0065	0.0034
Move OWC	0.1142	24.7	124.0	1.84	0.0153	0.0018
Bedload NMOs	0.2344	315.3	1.0	1.84	0.1488	0.0349
Load OTRs w/ loose	0.5284	18.6	291.8	1.84	0.0087	0.0046
Load Hampers/OWC	0.1142	18.6	124.0	1.84	0.0204	0.0023
Destination Delivery Unit						0.0495
Unload Bedload NMOs	0.2673	275.1	1.0	1.84	0.1706	0.0456
Unload loose in OTR	0.6025	37.2	291.8	1.84	0.0043	0.0026
Unload OWC	0.1302	37.2	124.0	1.84	0.0102	0.0013
TOTAL	2.0000					0.8266
				Model Cost		
				Model Weight	Exhibit USPS-29F	8.9%
				Wtd Modeled Cost		0.0739

Source of Inputs: Appendix VI page 11-12

Column [5] = TY Wage Rate (\$25.445) * (Column [4]) / ((Column [2]) * (Column [3]))

Column [6] = (Column [1] * Column [5])/10000

¹Unload Containers cost at OSCF uses the average cost of unloading containers at Origin BMC as proxy.

Machinable Nonpresort Intra-BMC Model Cost Summary

	[1]	[2]	[3]	[4]	[5]	[6]
	# handlings	units/hr	conversion	piggyback	\$ per oper.	\$ per facility ²
Origin SCF						0.0255
Unload Containers ¹	1.0000				0.0086	0.0086
Bedload Sacks	0.0224	325.8	19.2	1.84	0.0075	0.0002
Bedload loose	0.0336	315.3	1	1.84	0.1488	0.0050
Load Sacks in OTRs	0.1884	18.6	307.4	1.84	0.0082	0.0015
Load Loose in OTRs	0.4396	18.6	291.8	1.84	0.0087	0.0038
Load OWCs	0.3090	18.6	124.0	1.84	0.0204	0.0063
Load Pallets	0.0070	23.9	259.3	1.84	0.0076	0.0001
Destination BMC						0.1689
Unload Bedload Sack	0.0224	333.8	19.2	2.13	0.0084	0.0002
Unload Bedload Loose	0.0336	1111.6	1.0	2.13	0.0486	0.0016
Unload Sacks in OTR	0.1884	37.2	307.4	2.13	0.0047	0.0009
Unload loose in OTR	0.4396	37.2	291.8	2.13	0.0050	0.0022
Unload Other Wheeled Cont.	0.3090	37.2	124.0	2.13	0.0117	0.0036
Unload Pallet	0.0070	21.9	259.3	2.13	0.0095	0.0001
Dump OTR of sacks	0.1884	11.9	307.4	1.69	0.0117	0.0022
Dump OTR of loose	0.4396	11.9	291.8	1.69	0.0123	0.0054
Dump Other Wheeled Cont.	0.3090	11.9	124.0	1.69	0.0290	0.0090
Dump Pallet	0.0070	11.9	259.3	1.69	0.0139	0.0001
Sack Sorter	0.2108	456.6	19.2	2.41	0.0070	0.0015
Sack shakeout	0.2108	133.7	19.2	1.69	0.0167	0.0035
O. Primary (scan)	1.0000	1433.3	1.0	2.03	0.0360	0.0360
Secondary (scan)	0.8300	1433.3	1.0	2.03	0.0360	0.0299
Sweep Runouts OTR	0.7327	9.8	291.8	1.69	0.0150	0.0110
Sack and Tie	0.2673	227.6	1.0	1.69	0.1886	0.0504
Bedload Sacks	0.2384	325.8	19.2	2.13	0.0086	0.0021
Load OTRs w/ sacks	0.0289	18.6	307.4	2.13	0.0095	0.0003
Load OTRs w/ loose	0.6025	18.6	291.8	2.13	0.0100	0.0060
Load Hampers/OWC	0.1302	18.6	124.0	2.13	0.0235	0.0031
Destination SCF						0.0451
Unload Bedload Sacks1	0.2091	275.1	19.2	1.84	0.0089	0.0019
Unload Sacks in OTR	0.0253	37.2	307.4	1.84	0.0041	0.0001
Unload loose in OTR	0.5284	37.2	291.8	1.84	0.0043	0.0023
Unload OWC	0.1142	37.2	124.0	1.84	0.0102	0.0012
Crossdock Bedload Sacks1	0.2091	12.3	39.2	1.84	0.0971	0.0203
Crossdock Sacks in OTR	0.0253	12.3	307.4	1.84	0.0124	0.0003
Crossdock loose in OTR	0.5284	12.3	291.8	1.84	0.0130	0.0069
Crossdock OWC	0.1142	12.3	124.0	1.84	0.0307	0.0035
Bedload Sacks	0.2344	325.8	19.2	1.84	0.0075	0.0018
Load OTRs w/ loose	0.5284	18.6	291.8	1.84	0.0087	0.0046
Load Hampers/OWC	0.1142	18.6	124.0	1.84	0.0204	0.0023
Destination Delivery Unit						0.0098
Unload Bedload Sacks1	0.2673	275.1	19.2	1.84	0.0089	0.0024
Unload loose in OTR	0.6025	37.2	291.8	1.84	0.0043	0.0026
Unload OWC	0.1302	37.2	124.0	1.84	0.0102	0.0013
Dump Sacks	0.2673	187.5	19.2	1.84	0.0130	0.0035
TOTAL	1.8300					

Model Cost	0.2492
Model Weight	Exhibit USPS-29F
Wtd Modeled Cost	4.0%
	0.0098

Source of Inputs: Appendix VI page 11-12

Column [5] = TY Wage Rate (\$25.445) * (Column [4]) / ((Column [2]) * (Column [3]))

Column [6] = (Column [1] * Column [5])/10000

¹Unload Containers cost at OSCF uses the average cost of unloading containers at Origin BMC as proxy

Machinable Nonpresort Intra-BMC Model Cost Summary

	[1] # handlings	[2] units/hr	[3] conversion	[4] piggyback	[5] \$ per oper.	[6] \$ per facility ²
Origin SCF						0.0255
Unload Containers ¹	1.0000				0.0086	0.0086
Bedload Sacks	0.0224	325.8	19.2	1.84	0.0075	0.0002
Bedload loose	0.0336	315.3	1	1.84	0.1488	0.0050
Load Sacks in OTRs	0.1884	18.6	307.4	1.84	0.0082	0.0015
Load Loose in OTRs	0.4396	18.6	291.8	1.84	0.0087	0.0038
Load OWCs	0.3090	18.6	124.0	1.84	0.0204	0.0063
Load Pallets	0.0070	23.9	259.3	1.84	0.0076	0.0001
Destination BMC						0.1858
Unload Bedload Sack	0.0224	333.8	19.2	2.13	0.0084	0.0002
Unload Bedload Loose	0.0336	1111.6	1.0	2.13	0.0486	0.0016
Unload Sacks in OTR	0.1884	37.2	307.4	2.13	0.0047	0.0009
Unload loose in OTR	0.4396	37.2	291.8	2.13	0.0050	0.0022
Unload Other Wheeled Cont.	0.3090	37.2	124.0	2.13	0.0117	0.0036
Unload Pallet	0.0070	21.9	259.3	2.13	0.0095	0.0001
Dump OTR of sacks	0.1884	11.9	307.4	1.69	0.0117	0.0022
Dump OTR of loose	0.4396	11.9	291.8	1.69	0.0123	0.0054
Dump Other Wheeled Cont.	0.3090	11.9	124.0	1.69	0.0290	0.0090
Dump Pallet	0.0070	11.9	259.3	1.69	0.0139	0.0001
Sack Sorter	0.2108	456.6	19.2	2.41	0.0070	0.0015
Sack shakeout	0.2108	133.7	19.2	1.69	0.0167	0.0035
O. Primary (key)	1.0000	974.4	1.0	2.03	0.0529	0.0529
Secondary (scan)	0.8300	1433	1.0	2.03	0.0360	0.0299
Sweep Runouts OTR	0.7327	9.8	291.8	1.69	0.0150	0.0110
Sack and Tie	0.2673	227.6	1.0	1.69	0.1886	0.0504
Bedload Sacks	0.2384	325.8	19.2	2.13	0.0086	0.0021
Load OTRs w/ sacks	0.0289	18.6	307.4	2.13	0.0095	0.0003
Load OTRs w/ loose	0.6025	18.6	291.8	2.13	0.0100	0.0060
Load Hampers/OWC	0.1302	18.6	124.0	2.13	0.0235	0.0031
Destination SCF						0.0451
Unload Bedload Sacks1	0.2091	275.1	19.2	1.84	0.0089	0.0019
Unload Sacks in OTR	0.0253	37.2	307.4	1.84	0.0041	0.0001
Unload loose in OTR	0.5284	37.2	291.8	1.84	0.0043	0.0023
Unload OWC	0.1142	37.2	124.0	1.84	0.0102	0.0012
Crossdock Bedload Sacks1	0.2091	12.3	39.2	1.84	0.0971	0.0203
Crossdock Sacks in OTR	0.0253	12.3	307.4	1.84	0.0124	0.0003
Crossdock loose in OTR	0.5284	12.3	291.8	1.84	0.0130	0.0069
Crossdock OWC	0.1142	12.3	124.0	1.84	0.0307	0.0035
Bedload Sacks	0.2344	325.8	19.2	1.84	0.0075	0.0018
Load OTRs w/ loose	0.5284	18.6	291.8	1.84	0.0087	0.0046
Load Hampers/OWC	0.1142	18.6	124.0	1.84	0.0204	0.0023
Destination Delivery Unit						0.0098
Unload Bedload Sacks1	0.2673	275.1	19.2	1.84	0.0089	0.0024
Unload loose in OTR	0.6025	37.2	291.8	1.84	0.0043	0.0026
Unload OWC	0.1302	37.2	124.0	1.84	0.0102	0.0013
Dump Sacks	0.2673	187.5	19.2	1.84	0.0130	0.0035
TOTAL	1.8300					

Model Cost	0.2661
Model Weight <small>Exhibit USPS-29F</small>	11.0%
Wtd Modeled Cost	0.0293

Source of Inputs: Appendix VI page 11-12.

Column [5] = TY Wage Rate (\$25.445) * (Column [4]) / ((Column [2]) * (Column [3]))

Column [6] = (Column [1] * Column [5])/10000

¹Unload Containers cost at OSCF uses the average cost of unloading containers at Origin BMC as proxy

Nonmachinable Nonpresort Intra-BMC Model Cost Summary

	[1] # handlings	[2] units/hr	[3] conversion	[4] piggyback	[5] \$ per oper. ¹	[6] \$ per facility ²
Origin SCF						0.0257
Unload Containers ¹	1.0000				0.0109	0.0109
Bedload NMOs	0.0230	315.3	1.0	1.84	0.1488	0.0034
Load NMOs in OTRs	0.7260	18.6	291.8	1.84	0.0087	0.0063
Load NMOs in OWCs	0.2500	18.6	124.0	1.84	0.0204	0.0051
Load NMOs on Pallets	0.0010	23.9	259.3	1.84	0.0076	0.0000
Destination BMC						0.2931
Unload Bedloaded NMOs	0.0230	288.0	1.0	2.13	0.1877	0.0043
Unload NMOs in OTRs	0.7260	37.2	291.8	2.13	0.0050	0.0036
Unload NMOs in OWC	0.2500	37.2	124.0	2.13	0.0117	0.0029
Unload NMOs on Pallets	0.0010	21.9	259.3	2.13	0.0095	0.0000
D. Primary NMO Sort	1.0000	168.7	1.0	1.65	0.2485	0.2485
Bedload from IHC	0.1461	315.3	1.0	2.13	0.1715	0.0251
Load NMOs in OTRs	0.5444	18.6	291.8	2.13	0.0100	0.0054
Load NMOs on Pallet	0.2717	23.9	259.3	2.13	0.0087	0.0024
Load NMOs in OWC	0.0378	18.6	124.0	2.13	0.0235	0.0009
Destination SCF						0.1916
Unload Bedload to IHC	0.1132	275.1	1.0	1.84	0.1706	0.0193
Unload OTRs	0.4703	37.2	291.8	1.84	0.0043	0.0020
Unload Pallet	0.2717	21.9	259.3	1.84	0.0083	0.0022
Unload OWC	0.0217	37.2	124.0	1.84	0.0102	0.0002
Move IHC	0.1132	24.7	269.9	1.84	0.0070	0.0008
Move OTRs	0.4703	24.7	291.8	1.84	0.0065	0.0031
Move Pallet	0.2717	24.7	259.3	1.84	0.0073	0.0020
Move OWC	0.0217	24.7	124.0	1.84	0.0153	0.0003
Manual Sort	0.8770	303.5	1.0	1.54	0.1288	0.1129
Move IHC	0.2344	24.7	269.9	1.84	0.0070	0.0017
Move OTRs	0.5284	24.7	291.8	1.84	0.0065	0.0034
Move OWC	0.1142	24.7	124.0	1.84	0.0153	0.0018
Bedload NMOs	0.2344	315.3	1.0	1.84	0.1488	0.0349
Load OTRs w/ loose	0.5284	18.6	291.8	1.84	0.0087	0.0046
Load Hampers/OWC	0.1142	18.6	124.0	1.84	0.0204	0.0023
Destination Delivery Unit						0.0495
Unload Bedload NMOs	0.2673	275.1	1.0	1.84	0.1706	0.0456
Unload loose in OTR	0.6025	37.2	291.8	1.84	0.0043	0.0026
Unload OWC	0.1302	37.2	124.0	1.84	0.0102	0.0013
TOTAL	1.0000				0.5599	
			Model Cost			
			Model Weight <small>Exhibit USPS-29F</small>		2.2%	
			Wtd Modeled Cost			0.0125

Source of Inputs: Appendix VI page 11-12

Column [5] = TY Wage Rate (\$25.445) * (Column [4]) / ((Column [2]) * (Column [3]))

Column [6] = (Column [1] * Column [5])/10000

¹Unload Containers cost at OSCF uses the average cost of unloading containers at Origin BMC as proxy.

Machinable BMC Presort Model Cost Summary

	[1] # handlings	[2] units/hr	[3] conversion	[4] piggyback	[5] \$ per oper. ¹	[6] \$ per facility ²
Origin SCF						0.0114
Unload Gaylord	1.0000	21.9	359.8	1.84	0.0060	0.0060
Load Gaylord	1.0000	23.9	359.8	1.84	0.0055	0.0055
Origin BMC						0.0253
Unload Gaylord	1.0000	21.9	359.8	2.13	0.0069	0.0069
Crsdk Gaylord	1.0000	12.3	359.8	2.13	0.0122	0.0122
Load Gaylord	1.0000	23.9	359.8	2.13	0.0063	0.0063
Destination BMC						0.1511
Unload Gaylord	1.0000	21.9	359.8	2.13	0.0069	0.0069
Dump Gaylord	1.0000	11.9	359.8	1.69	0.0100	0.0100
D. Primary (Scan)	0.5850	1433.3	1.0	2.03	0.0360	0.0211
Secondary (scan)	1.1225	1433.3	1.0	2.03	0.0360	0.0404
Container Loader OTR	0.7327	9.8	291.8	1.69	0.0150	0.0110
Sack & Tie	0.2673	227.6	1.0	1.69	0.1886	0.0504
Bedload Vans	0.2384	325.8	19.2	2.13	0.0086	0.0021
Load OTRs w/ sacks	0.0289	18.6	307.4	2.13	0.0095	0.0003
Load OTRs w/ loose	0.6025	18.6	291.8	2.13	0.0100	0.0060
Load OWC	0.1302	18.6	124.0	2.13	0.0235	0.0031
Destination SCF						0.0451
Unload Bedload Sacks1	0.2091	275.1	19.2	1.84	0.0089	0.0019
Unload OTRs w/sacks	0.0253	37.2	307.4	1.84	0.0041	0.0001
Unload OTRs w/ loose	0.5284	37.2	291.8	1.84	0.0043	0.0023
Unload OWC	0.1142	37.2	124.0	1.84	0.0102	0.0012
Crossdock Bedload Sack	0.2091	12.3	39.2	1.84	0.0971	0.0203
Crossdock Sacks in OTR	0.0253	12.3	307.4	1.84	0.0124	0.0003
Crossdock loose in OTR	0.5284	12.3	291.8	1.84	0.0130	0.0069
Crossdock OWC	0.1142	12.3	124.0	1.84	0.0307	0.0035
Bedload Sacks	0.2344	325.8	19.2	1.84	0.0075	0.0018
Load OTRs w/ loose	0.5284	18.6	291.8	1.84	0.0087	0.0046
Load Hampers/OWC	0.1142	18.6	124.0	1.84	0.0204	0.0023
Destination Delivery Unit						0.0098
Unload Bedload Sacks1	0.2673	275.1	19.2	1.84	0.0089	0.0024
Unload loose in OTR	0.6025	37.2	291.8	1.84	0.0043	0.0026
Unload OWC	0.1302	37.2	124.0	1.84	0.0102	0.0013
Dump Sacks	0.2673	187.5	19.2	1.84	0.0130	0.0035
TOTAL	1.7075					
				Model Cost	0.2427	
				Model Weight	Exhibit USPS-29F	7.4%
				Wtd Modeled Cost		0.0180

Source of Inputs: Appendix VI page 11-12.

Column [5] = TY Wage Rate (\$25.445) * (Column [4]) / ((Column [2]) * (Column [3]))

Column [6] = (Column [1] * Column [5])/10000

¹Unload Containers cost at OSCF uses the average cost of unloading containers at Origin BMC as proxy

Machinable BMC Presort Model Cost Summary

	[1] # handlings	[2] units/hr	[3] conversion	[4] piggyback	[5] \$ per oper. ¹	[6] \$ per facility ²
Origin SCF						0.0114
Unload Gaylord	1.0000	21.9	359.8	1.84	0.0060	0.0060
Load Gaylord	1.0000	23.9	359.8	1.84	0.0055	0.0055
Origin BMC						0.0253
Unload Gaylord	1.0000	21.9	359.8	2.13	0.0069	0.0069
Crsdk Gaylord	1.0000	12.3	359.8	2.13	0.0122	0.0122
Load Gaylord	1.0000	23.9	359.8	2.13	0.0063	0.0063
Destination BMC						0.1724
Unload Gaylord	1.0000	21.9	359.8	2.13	0.0069	0.0069
Dump Gaylord	1.0000	11.9	359.8	1.69	0.0100	0.0100
D. Primary (Key)	1.0000	974.4	1.0	2.03	0.0529	0.0529
Secondary (scan)	0.8300	1433.3	1.0	2.03	0.0360	0.0299
Container Loader OTR	0.7327	9.8	291.8	1.69	0.0150	0.0110
Sack & Tie	0.2673	227.6	1.0	1.69	0.1886	0.0504
Bedload Vans	0.2384	325.8	19.2	2.13	0.0086	0.0021
Load OTRs w/ sacks	0.0289	18.6	307.4	2.13	0.0095	0.0003
Load OTRs w/ loose	0.6025	18.6	291.8	2.13	0.0100	0.0060
Load OWC	0.1302	18.6	124.0	2.13	0.0235	0.0031
Destination SCF						0.0451
Unload Bedload Sacks1	0.2091	275.1	19.2	1.84	0.0089	0.0019
Unload OTRs w/sacks	0.0253	37.2	307.4	1.84	0.0041	0.0001
Unload OTRs w/ loose	0.5284	37.2	291.8	1.84	0.0043	0.0023
Unload OWC	0.1142	37.2	124.0	1.84	0.0102	0.0012
Crossdock Bedload Sack	0.2091	12.3	39.2	1.84	0.0971	0.0203
Crossdock Sacks in OTR	0.0253	12.3	307.4	1.84	0.0124	0.0003
Crossdock loose in OTR	0.5284	12.3	291.8	1.84	0.0130	0.0069
Crossdock OWC	0.1142	12.3	124.0	1.84	0.0307	0.0035
Bedload Sacks	0.2344	325.8	19.2	1.84	0.0075	0.0018
Load OTRs w/ loose	0.5284	18.6	291.8	1.84	0.0087	0.0046
Load Hampers/OWC	0.1142	18.6	124.0	1.84	0.0204	0.0023
Destination Delivery Unit						0.0098
Unload Bedload Sacks1	0.2673	275.1	19.2	1.84	0.0089	0.0024
Unload loose in OTR	0.6025	37.2	291.8	1.84	0.0043	0.0026
Unload OWC	0.1302	37.2	124.0	1.84	0.0102	0.0013
Dump Sacks	0.2673	187.5	19.2	1.84	0.0130	0.0035
TOTAL	1.8300				Model Cost	0.2640
					Model Weight	<small>Exhibit USPS-29F</small>
					Wtd Modeled Cost	3.0%
						0.0080

Source of Inputs: Appendix VI page 11-12

Column [5] = TY Wage Rate (\$25.445) * (Column [4]) / ((Column [2]) * (Column [3]))

Column [6] = (Column [1] * Column [5])/10000

Nonmachinable BMC Presort Model Cost Summary

	[1] # handlings	[2] units/hr	[3] conversion	[4] piggyback	[5] \$ per oper. ¹	[6] \$ per facility ²
Origin SCF						0.0135
Unload Pallets	1.0000	21.9	305.0	1.84	0.0070	0.0070
Load NMOs Pallets	1.0000	23.9	305.0	1.84	0.0064	0.0064
Origin BMC						0.0299
Unload Pallets	1.0000	21.9	305.0	2.13	0.0081	0.0081
Crossdock Pallets	1.0000	12.3	305.0	2.13	0.0144	0.0144
Load NMOs Pallets	1.0000	23.9	305.0	2.13	0.0074	0.0074
Destination BMC						0.2903
Unload Pallets	1.0000	21.9	305.0	2.13	0.0081	0.0081
D. Primary NMO Sort	1.0000	168.7	1.0	1.65	0.2485	0.2485
Bedload from IHC	0.1461	315.3	1.0	2.13	0.1715	0.0251
Load NMOs in OTRs	0.5444	18.6	291.8	2.13	0.0100	0.0054
Load NMOs on Pallets	0.2717	23.9	259.3	2.13	0.0087	0.0024
Load NMOs in OWC	0.0378	18.6	124.0	2.13	0.0235	0.0009
Destination SCF						0.1916
Unload Bedload to IHC	0.1132	275.1	1.0	1.84	0.1706	0.0193
Unload OTRs	0.4703	37.2	291.8	1.84	0.0043	0.0020
Unload Pallets	0.2717	21.9	259.3	1.84	0.0083	0.0022
Unload OWC	0.0217	37.2	124.0	1.84	0.0102	0.0002
Move IHC	0.1132	24.7	269.9	1.84	0.0070	0.0008
Move OTRs	0.4703	24.7	291.8	1.84	0.0065	0.0031
Move Pallet	0.2717	24.7	259.3	1.84	0.0073	0.0020
Move OWC	0.0217	24.7	124.0	1.84	0.0153	0.0003
Manual Sort	0.8770	303.5	1.0	1.54	0.1288	0.1129
Move IHC	0.2344	24.7	269.9	1.84	0.0070	0.0017
Move OTRs	0.5284	24.7	291.8	1.84	0.0065	0.0034
Move OWC	0.1142	24.7	124.0	1.84	0.0153	0.0018
Bedload NMOs	0.2344	315.3	1.0	1.84	0.1488	0.0349
Load OTRs w/ loose	0.5284	18.6	291.8	1.84	0.0087	0.0046
Load OWC	0.1142	18.6	124.0	1.84	0.0204	0.0023
Destination Delivery Unit						0.0495
Unload Bedload NMOs	0.2673	275.1	1.0	1.84	0.1706	0.0456
Unload loose in OTR	0.6025	37.2	291.8	1.84	0.0043	0.0026
Unload OWC	0.1302	37.2	124.0	1.84	0.0102	0.0013
TOTAL	1.0000				Model Cost	0.5748
					Model Weight Exhibit USPS-29F	1.6%
					Wtd Modeled Cost	0.0090

Source of Inputs. Appendix VI page 11-12.

Column [5] = TY Wage Rate (\$25.445) * (Column [4]) / ((Column [2]) * (Column [3]))

Column [6] = (Column [1] * Column [5])/10000

5-Digit Presort

	[1] # handlings	[2] units/hr	[3] conversion	[4] piggyback	[5] \$ per oper.	[6] \$ per facility ²
Origin SCF						0.0075
Unload Sack	1.0000	333.8	19.2	1.84	0.0357	0.0357
Bedload Sacks	1.0000	325.8	19.2	1.84	0.0075	0.0075
Origin BMC						0.0241
Unload Bedload Sack	1.0000	333.8	19.2	2.13	0.0084	0.0084
SSM	1.0000	456.6	19.2	2.41	0.0070	0.0070
Bedload Sacks	1.0000	325.8	19.2	2.13	0.0086	0.0086
Destination BMC						0.0241
Unload Bedload Sack	1.0000	333.8	19.2	2.13	0.0084	0.0084
SSM	1.0000	456.6	19.2	2.41	0.0070	0.0070
Bedload Sacks	1.0000	325.8	19.2	2.13	0.0086	0.0086
Destination SCF						0.0441
Unload Bedload Sack	1.0000	333.8	19.2	1.84	0.0073	0.0073
Crossdock Bedload Sacks1	1.0000	12.3	129.8	1.84	0.0293	0.0293
Bedload Sacks	1.0000	325.8	19.2	1.84	0.0075	0.0075
Destination Delivery Unit						0.0219
Unload Bedload Sacks1	1.0000	275.1	19.2	1.84	0.0089	0.0089
Dump Sacks	1.0000	187.5	19.2	1.84	0.0130	0.0130
TOTAL	1.0000				Model Cost	0.1217
					Model Weight	<small>Exhibit USPS-29F</small> 2.0%
					Wtd Modeled Cost	0.0024

Source of Inputs: Appendix VI page 11-12.

Column [5] = TY Wage Rate (\$25 445) * (Column [4]) / ((Column [2]) * (Column [3]))

Column [6] = (Column [1] * Column [5])/10000

Productivities and Conversion Factors for Direct Labor Operations

	Units/Wkhr	Conversion Factors	3/
	Marginal	Machinable	NMO
UNLOADING			
Unload sacked machinable parcels to extended conveyor	333.8 1/	19.2	n/a
Unload machinable parcels to extended conveyor	1111.6 1/	1.0	n/a
Unload non-machinable parcels	288.0 1/	n/a	1.0
Unload non-machinable parcels to IHC only (proxy for sacks)	275.1 1/	19.2	1.0
Unload machinable parcels sacked in OTRs	37.2 1/	307.4	n/a
Unload parcels loose in OTRs	37.2 1/	291.8	291.8
Unload Wire Tainer/Hamper/APC (Other Wheeled Cont. - OWC)	37.2 1/	124.0	124.0
Unload Pallets	21.9 1/	259.3	259.3
Unload Postal Paks	21.9 1/	347.5	n/a
Unload Gaylords (of BMC presorted parcels)	21.9 1/	359.8	n/a
Unload Pallets (of BMC presorted NMOs)	21.9 1/	n/a	305.0
DUMPING & SACK HANDLING			
Dump Sacks in OTRs	11.9 1/	307.4	n/a
Dump OTRs (loose)	11.9 1/	291.8	291.8
Dump Other Wheeled Containers (OWC)	11.9 1/	124.0	124.0
Dump Pallets	11.9 1/	259.3	259.3
Dump Postal Paks	11.9 1/	347.5	n/a
Dump Gaylords	11.9 1/	359.8	n/a
Sack shake out	133.7 1/	19.2	n/a
Manually dump sacks	187.5 10/	19.2	n/a
Sack sorter (FY96 PIRS)	456.6 2/	19.2	n/a
PARCEL SORTING MACHINE DISTRIBUTION			
Key Rate Primary (FY93 PIRS)	974.4 2/	1.0	n/a
Scan Rate Primary	1433.3 5/		
Secondary Rate (PIRS 96)	1433.3 2/	1.0	n/a
NONMACHINABLE OUTSIDES DISTRIBUTION			
NMO Distribution (FY 95, PIRS)	168.7 2/	n/a	1.0
NMO Secondary Distribution at SCFs (MODS FY 95)	303.5 2/	n/a	1.0
OTHER OPERATIONS			
Tend container loader/sweep runouts (Origin BMC - Postal Pak)	9.8 1/	347.5	n/a
Tend container loader/sweep runouts (Destinating BMC - OTR)	9.8 1/	291.8	n/a
Crossdock BMC Presorted Pallets	12.3 1/	n/a	305.0
Crossdock BMC Presorted Gaylords	12.3 1/	359.8	n/a
Crossdock IHCs w/5-d sacks or NMOs	12.3 1/	39.2	269.9
Crossdock IHCs w/5-d presorted sacks	12.3 1/	129.8	
Sack and Tie	227.6 1/	1.0	n/a
LOADING			
Bedload NMOs to van (proxy for machinables)	315.3 1/	1.0	1.0
Bedload Sacked Machinables	325.8 1/	19.2	n/a
Load loose parcels in OTRs to van	18.6 1/	291.8	291.8
Load sacked machinables in OTRs to van	18.6 1/	307.4	n/a
Load Other Wheeled Containers (OWC) to van	18.6 1/	124.0	124.0
Load pallets to van	23.9 1/	259.3	259.3
Load Postal Paks to van	23.9 1/	347.5	n/a
Load Gaylord to van	23.9 1/	359.8	n/a

Other Inputs

TY Clerk and Mail Handler Wage Rate	\$25.445 6/
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Mail Processing Operation Specific Piggyback Factors

Parcel Sorting Machine	2.027 7/
NMO Sorting at BMC	1.647 7/
NMO Sorting at SCF	1.536 7/
Other Operations at BMCs	1.687 7/
Sack Sorting Machine - BMC	2.414 7/
Platform Non-BMC	1.844 7/
Platform BMC	2.125 7/

Mail Flow Arrival and Dispatch Profiles

Machinable Parcels Arriving in Bedloaded Sacks at BMC	2.24% 4/
Machinable Parcels Arriving Bedloaded at BMC	3.36% 4/
Machinable Parcels Arriving sacked in OTRs at BMC	18.84% 4/
Machinable Parcels Arriving loose in OTRs at BMC	43.96% 4/
Machinable Parcels Arriving in Hampers/APC/OWC (OWC) at BMC	30.90% 4/
Machinable Parcels Arriving Palletized at BMC	0.70% 4/
Non-Machinable Parcels Arriving Bedloaded at BMC	2.30% 4/
Non-Machinable Parcels Arriving Palletized at BMC	0.10% 4/
Non-Machinable Parcels Arriving in OTR Containers at BMC	72.60% 4/
Non-Machinable Parcels Arriving in Hampers/APC/OWC (OWC) at BMC	25.00% 4/

Machinable Parcels Arriving in Postal Paks at Destination BMC (from Origin BMC)	100% 8/
NMOs Arriving Palletized at Destination BMC (from Origin BMC)	100% 8/

Machinable Parcels Dispatched in Bedloaded Sacks to Service Area	23.84% 1/
Machinable Parcels Dispatched loose in OTRs to Service Area	60.25% 1/
Machinable Parcels Dispatched sacked in OTRs to Service Area	2.89% 1/
Machinable Parcels Dispatched in Hampers/APC/OWC (OWC) to Service Area	13.02% 1/
Non-Machinable Parcels Dispatched Bedloaded to Plant	12.91% 1/
Non-Machinable Parcels Dispatched on Pallets to Plant	30.98% 1/
Non-Machinable Parcels Dispatched in OTRs to Plant	53.63% 1/
Non-Machinable Parcels Dispatched in Hampers/APC/OWC (OWC) to Plant	2.48% 1/
Non-Machinable Parcels Dispatched Bedloaded to Delivery Unit (proxy mach)	26.73% 1/
Non-Machinable Parcels Dispatched in OTRs to Delivery Unit (proxy mach)	60.25% 1/
Non-Machinable Parcels Dispatched in Hampers/APC/OWC (OWC) to Delivery Unit (proxy)	13.02% 1/

Mail Flow Operating Assumptions

Percent with direct transportation to destinatating delivery unit from BMC	12% 9/
Percent Sorted to 5-Digits by Primary Parcel Sorting Machine	17% 8/
Destinating BMCs will feed barcoded destinatating mail unfiltered to secondary	50% 8/
Probability that mail fed directly to nonspecific secondary will receive more than one sort	50% 8/

1/ USPS LR-H-132

6/ USPS LR-H-146

2/ National databases (PIRS and MODS)

7/ USPS LR-H-77

3/ Page 13 of this appendix.

8/ USPS-T-29 Section V.B.2

4/ USPS LR-H-131

9/ USPS LR-PCR-40

5/ Productivity of Secondary as Proxy

10/Proxy based on Planning Guidelines (PGLs)

Conversion Factor Calculations

Container Type	[1] Outside Dim. Per Container	[2] Inside Dim. Per Container	[3] Cubic Feet Per Container	[4] Effective Cubic Capacity	[5] Capacity at Average Fullness	[6] Average % FULL
Machinable						
Pallet	48x40x48	48x40x48	53.3	305.0	259.3	85%
Postal Pak	48x40x69	46.5x38.5x69	71.5	408.8	347.5	85%
Gaylord	48x40x69	46.5x38.5x69	71.5	408.8	359.8	88%
Non-Machinable						
Pallet	48x40x48	48x40x48	53.3	305.0	259.3	85%
Presorted Pallet	48x40x48	48x40x48	53.3	305.0	305.0	100%
In-house Container	65x41.5x36	65x41.5x36	55.5	317.5	269.9	85%

Pieces Per Container	[7] Machinable		[9] Nonmachinable		[11] R84-1 Ratio Mach to NMO
	R84-1 FY82	R97-1 FY96	R84-1 FY82	R97-1 FY96	
Sack	15.89	19.2	n/a	n/a	n/a
Sack in OTR	254.2	307.4	n/a	n/a	n/a
OTR	241.3	291.8	241.3	291.8	1.00
APC	124.7	150.8	124.7	150.8	1.00
Hamper	80.4	97.2	80.4	97.2	1.00
[12] [13] [14] Cubic Feet Per Special Standard					
	Machinable	Non-Machinable	CRA		
FY96	0.159	0.159	0.159		
FY82			0.192		

[1 & 2] Container Methods, Handbook PO-502 (September 1992) USPS LR-H-133

[3] Length * Width * Height

[4] (Column [3]) / ((Column [12]) * 1.10), to account for "effective cube" and (Column [3]) / ((Column [13]) * 1.10), to account for "effective cube"

[5] Effective Cubic Capacity (Column [4]) * Average % Fullness (Column [6])

[6] Pallets, Postal Paks and IHCs should be as full as practicable before dispatch so it is reasonable to assume these containers will be at least 85% full.

[7 & 9] Docket No. R84-1, Exhibit USPS-141

[8 & 10] Pieces Per Container in Docket No. R84-1 (Column [7 & 9]) * FY82 Cub. Ft per Pcs (Column [14]) / FY96 Cub. Ft. per Pcs. (Column [14])

[11] Column [7] / Column [9]