

DOCKET SECTION

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

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POSTAL RATE COMMISSION
OFFICE OF THE SECRETARY

POSTAL RATE AND FEE CHANGES, 1997

Docket No. R97-1

NOTICE OF UNITED STATES POSTAL SERVICE OF INCORPORATION OF
LIBRARY REFERENCE H-108 MATERIAL INTO THE DIRECT TESTIMONY OF
WITNESS CHARLES L. CRUM (USPS-T-28)
(October 1, 1997)

The United States Postal Service hereby gives notice of the incorporation of the attached Exhibit K into the Direct Testimony of Charles L. Crum, USPS-T-28. The Exhibit consists of material that had been filed as pages 2 through 17 of Library Reference H-108, *Standard Mail (A) Unit Costs by Shape*, with changes to reflect its incorporation into witness Crum's testimony.¹ In addition to this material, the Exhibit contains additional breakdowns of Table 3, of the type which had been requested by participants.² Also attached are a revised Listing of Exhibits (page iii of witness Crum's testimony); revisions to pages 10 through 12 of his testimony, changing references to Library Reference H-108 to Exhibit K; and revised introductory pages for Library Reference H-108, which replace current pages 1 through A1.

¹ Appendix A to the Library Reference, describing and providing the computer runs used in the analysis, remains in the Library Reference as background information. Revised introductory pages to the Library Reference are also being filed herewith. These pages incorporate the existing introduction to Appendix A (page A1) and include the material that comprised paragraphs 3, 4, and 5 of the Volume Estimates section on pages 2 and 3, which are not included in Exhibit K because they relate to the computer documentation remaining in the Library Reference.

² The spreadsheets presenting these breakdowns, which are contained on the CD-ROM version of the Library Reference, but were not in the hard copy, are included for the convenience of all participants, inasmuch as the witness has referred to some of these spreadsheets in several interrogatory answers.

Witness Crum is qualified to adopt this material as his testimony, as he indicated in response to NDMS/USPS-T28-1(b):

I personally supervised both the planning and conduct of the studies described in LR-H-108. I produced and/or assisted with the separate analyses to varying degrees. I completely reviewed the printed version of the library reference, other than the computer documentation.

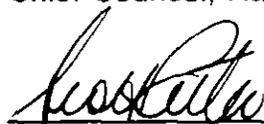
In addition, witness Crum has already answered a number of interrogatories about the Library Reference. See NDMS/USPS-T28-2, 3, 6-11 & 18; PSA/USPS-T28-1, 4 & 5; and DMA/USPS-T28-1, 4 & 9. Incorporation of this material will provide the Commission a firm foundation on which to recommend the proposed Standard Mail (A) residual-shape surcharge and allow the issue to be litigated on its substantive merits without further procedural controversy.

Respectfully submitted,

UNITED STATES POSTAL SERVICE

By its attorneys:

Daniel J. Foucheaux, Jr.
Chief Counsel, Ratemaking



Scott L. Reiter

CERTIFICATE OF SERVICE

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

475 L'Enfant Plaza West, S.W.
Washington, D.C. 20260-1137
(202) 268-2999; Fax -5402
October 1, 1997



Scott L. Reiter

REVISIONS TO USPS-T-28

LISTING OF EXHIBITS

- Exhibit A Window Service and Platform Costs
- Exhibit B Volume of Parcel Post Pieces Entered Upstream of a BMC/ASF
- Exhibit C Outgoing Mail Processing Costs at Non-BMC Facilities Avoided by DBMC Parcel Post
- Exhibit D BMC Presort Parcel Post Cost Savings
- Exhibit E Costs Avoided by Depositing Inter-BMC Parcels at the Origin BMC with Presort to the Destination BMC
- Exhibit F Destination BMC Mail Processing Costs Avoided by Parcel Post Deposited at Destination SCFs or Delivery Units
- Exhibit G Avoided Mail Processing Costs of DSCF Parcel Post at SCFs and Delivery Units
- Exhibit H Mail Processing Costs Avoided by Carrier Route Presorted Bound Printed Matter
- Exhibit I Revenue, Pieces, and Weight (RPW) Volume Summary - Government Fiscal Year 1996
- Exhibit J BMC Presorted Parcel Post Cost Per Piece
- Exhibit K Standard Mail (A) Unit Costs by Shape

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VIII. STANDARD MAIL (A) NONLETTER COST DIFFERENCES

A. BACKGROUND

In 1990, the Postal Service took the first step towards recognizing the effects of shape in Standard Mail (A) (then third-class) when witnesses Moeller and Shipe produced studies showing shape-based cost differences between letters and nonletters (Docket No. R90-1, USPS-T-9 and USPS-T-10). This cost distinction was supported by the models presented in Docket No. MC95-1. Though the rate distinction has always been limited by low "passthroughs," this concept still is integral to current Standard Mail (A) rates. My testimony will further distinguish costs on the basis of shape by showing the additional shape-based cost differences within nonletters, between flats and parcels.

The following table presents total bulk Standard Mail (A) volume shares based on Tables 1 and 2 of Exhibit K.

FY 1996 VOLUME SHARES

<u>Letters</u>	<u>Flats</u>	<u>Parcels</u>
58.5%	40.1%	1.4%

While the relative volume of parcels is low, the absolute volume is not and there is sufficient data to separate parcels from flats in Standard Mail (A). This effort to more closely align rates with costs will help reduce the rate averaging that currently exists within Standard Mail (A).

1 B. INTRODUCTION

2

3 My testimony uses the volumes and costs by shape presented in Exhibit K
4 to show the cost differences within Standard Mail (A) nonletters between
5 parcels and flats. Volumes by shape and rate category within third-class Bulk Rate
6 (now Standard Mail (A) Regular/Nonprofit and Enhanced Carrier Route) are derived
7 from the Permit/Bravis system and tied to official Revenue, Pieces, and Weight
8 (RPW) totals. Volume variable costs are based on the In-Office Cost System
9 (IOCS) and the Cost and Revenue Analysis (CRA) report and its associated
10 workpapers where possible. Several studies supply additional data as necessary.
11 Total volume variable unit costs by shape are found by dividing costs by volumes in
12 each category.

13

14 C. ANALYSIS AND PRESENTATION

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16 I combine Regular and Enhanced Carrier Route as well as Commercial and
17 Nonprofit costs and volumes for the purposes of my analysis. The following table
18 summarizes fiscal year 1996 cost per piece data from Table 3 of Exhibit K.

19

20 FY 1996 STANDARD MAIL (A) COSTS BY SHAPE

21

22 Cost per Piece (cents)

23

24 Parcels 51.6

25 Flats 11.3

26

27 Difference 40.3

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29 To find the FY 1998 test year cost difference per piece, I multiply the 40.3 cents
30 described above by the test year/base year wage rate adjustment factor of 1.053

1 (described in Library Reference H-146). This yields 42.4 cents as my estimate of
2 the FY 1998 test year cost difference between parcels and flats in bulk Standard
3 Mail (A).

4
5 The degree of presort and depth of dropshipment can each have an impact on
6 costs. Standard Mail (A) flats are somewhat more finely presorted and deeply
7 dropshipped than parcels. I have adjusted the parcel/flat cost difference to
8 account for this. Table 7 of Exhibit K shows that .3 cents of the 42.4 cent cost
9 difference is due to the deeper entry of flats and 7.0 cents is due to the finer
10 presort of flats. This leaves 35.1 cents per piece as my estimate of the FY 1998
11 shape-related volume variable cost difference between Standard Mail (A) parcels
12 and flats.

13

14 D. SUMMARY

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16 My testimony has identified cost differences between flats and parcels within
17 Standard Mail (A). I have been quite conservative and backed out the portion of the
18 cost differences due to differing levels of dropship and presort. As previously
19 stated, my purpose is to support witness Moeller's proposed 10 cent surcharge of
20 nonletter, nonflat-shaped mail. My costs and volumes cover the same full range
21 (Regular Rate and Nonprofit, Regular and ECR) of pieces that witness Moeller's
22 surcharge will impact. On the basis of my analysis I estimate the adjusted FY 1998
23 test year cost difference between flats and parcels within bulk Standard Mail (A)
24 nonletters to be 35.1 cents per piece.

ADDITION TO USPS-T-28
(NEW EXHIBIT K)

EXHIBIT K - STANDARD MAIL (A) UNIT COSTS BY SHAPE

Introduction

This exhibit describes an analysis which estimates the unit attributable costs for flats and parcels in Standard Mail (A). In this analysis, the existing Cost and Revenue Analysis (CRA) mail volume and cost estimates for third-class bulk regular rate mail in Base Year (BY) 1996 were separated into estimates for letters, flats and parcels. Mail volumes for each shape and subclass were derived from the PERMIT and BRAVIS data systems and the Revenue, Pieces and Weight system (RPW). Attributable costs were developed primarily from the In-Office Cost System (IOCS) and the BY CRA and its workpapers. The unit cost for each shape and rate category was then calculated by dividing the attributable cost by the mail volume. Throughout this document the name Standard Mail (A) will be used in the place of third-class, with the understanding that part of the data used for this analysis was collected when Standard Mail (A) was still called third-class mail.

Volume Estimates

The PERMIT and BRAVIS data systems were used as the source of Standard Mail (A) volumes by shape. These systems recorded mailing statement information from each bulk mail transaction at approximately 1,680 offices in FY 1996, covering 93 percent of the revenue in Standard Mail (A) for that year. The information recorded from the mailing statement includes the shape, the indicia, and the revenue, pieces, and weight by detailed rate category of mail. Christensen Associates collected this information for the Postal Service in the form of data tapes for the PERMIT systems, and diskettes for BRAVIS.

The general approach used to estimate mail volumes by shape was to group all offices accepting Standard Mail (A) into strata based upon their National Consolidated Trial Balance (NCTB) revenue for permit imprint Standard Mail (A) bulk regular mail and then to inflate PERMIT and BRAVIS revenue reported in each stratum to the stratum revenue total. A general description of this process and detailed documentation appear in Library Reference H-108. Tables 1 and 2 of this exhibit include commercial and nonprofit volume by shape estimates respectively.

CRA Costs

Shape specific costs were also estimated for bulk Standard Mail (A). These costs were estimated explicitly for six cost segments of the CRA: mail processing, window service, city delivery carriers, vehicle service drivers, rural delivery carriers, and transportation. The remaining cost segments were accounted for by the use of piggyback factors and a final control to CRA totals. Table 3 displays the construction of the cost estimates by shape. Tables 4 through 6 show the construction of various distribution keys used in this process.

Mail processing costs were estimated by summing the variable mail processing costs by shape with the remote encoding costs. Mail processing costs were taken from the variable mail processing cost development by shape shown in Library Reference H-106. These costs include the worksheet adjustments, premium pay adjustments, and piggyback factors. The remote encoding costs were attributed entirely to letter-shaped mail.

Window service costs were estimated in two parts. Window service direct costs from LIOCATT (Report ALA850p16, Basic Function Total) were used without modification. The balance of cost segment 3.2 was distributed in proportion to the mail volume. The sum of direct and other costs was multiplied by the window service piggyback factor to calculate piggybacked window service costs.

City carrier in-office direct labor costs come from IOCS LIOCATT (Report ALA860P14 - Schedule K&L City Carrier Cost - Basic Function Total) , and were multiplied by the in-office support factor to yield in-office support costs. City carrier street time costs from segments 7.1 (Route), 7.2 (Access), and 7.4 (Other Load) were distributed to shape by the proportion of mail volume. Cost segment 7.3 (Elemental Load) was distributed to shape using the distribution key elemental load. This key was constructed from the CRA workpapers for city carriers and is shown in Table 5. Cost segment 7.5 was distributed in proportion to the sum of the distributed costs for all other city carrier in-office and street cost components. Costs piggybacked on city delivery carriers were estimated by multiplying the sum of the distributed costs for city carriers by the piggyback factor from library reference H-77.

Vehicle service driver costs were distributed in proportion to estimated cubic volume, and piggybacked costs estimated by multiplying the distributed costs by the piggyback factors.

Cubic volume was calculated by dividing the weight by an estimate of the density of each shape of mail. The density estimate for letters and flats was obtained from Docket No. MC95-1, USPS-LR-MCR-13, Supplement 1. The density estimate for parcels was developed in the study described in Appendix C of Docket No. MC97-2, Library Reference PCR-38.

Total rural delivery carrier costs were distributed by the key rural delivery. This key was developed in Table 6 from the evaluated route workpapers for the CRA. Costs piggybacked on rural carrier costs were estimated by multiplying the distributed costs by the piggyback factor. Costs for domestic air and domestic water transportation were distributed in proportion to weight by shape. Costs for highway and rail transportation were distributed in proportion to estimated cubic volume.

The resulting costs were summed and subtracted from the total attributable cost for each rate category. The residual cost was distributed to shape in proportion to mail volume. The sums of the distributed costs are shown in the row titled "Total Attributable" on page 2 of Table 3. These costs were divided by the mail volume estimate to estimate unit attributable cost.

To examine the potential cost differences between flats and parcels due to factors other than shape, differences in the use of destination entry and presort were analyzed. This calculation is shown in Table 7. The result of this analysis is that 7.3 cents of the cost difference between flats and parcels in Bulk Standard Mail (A) can be explained by differences in destination entry and presort level.

Table 1

FY 1996 Bulk Standard Mail (A) Commercial Rate

Letters	PERMIT Estimate			Controlled to GFY RPW		
	Revenue	Pieces	Weight	Revenue	Pieces	Weight
Basic	501,423	2,161,886	124,867	499,923	2,147,361	125,586
Basic ZIP+4 and BC	294,592	1,503,105	87,256	293,710	1,493,006	87,759
3/5-Digit	1,023,843	5,580,969	372,252	1,020,780	5,543,472	374,395
3/5 Digit ZIP+4 and BC	1,628,741	9,958,430	586,173	1,623,868	9,891,523	589,548
Carner Route	1,381,484	10,063,117	648,127	1,387,705	10,090,942	676,543
High Density	10,359	81,164	6,889	10,406	81,389	7,191
Saturation	323,062	2,628,568	172,071	324,517	2,635,836	179,615
Total Letters	5,163,503	31,977,240	1,997,635	5,160,910	31,883,530	2,040,638
Flats						
	Revenue	Pieces	Weight	Revenue	Pieces	Weight
Basic	383,934	1,186,201	266,888	382,785	1,178,231	268,425
Basic ZIP+4 and BC	50,715	163,307	41,944	50,563	162,210	42,185
3/5-Digit	602,289	2,421,399	512,630	600,487	2,405,130	515,582
3/5 Digit ZIP+4 and BC	1,452,014	6,503,836	1,552,762	1,447,670	6,460,139	1,561,704
Carrier Route	1,456,642	8,268,106	1,781,047	1,463,202	8,290,968	1,859,133
High Density	112,480	740,174	134,252	112,986	742,221	140,138
Saturation	984,277	7,249,871	1,184,821	988,710	7,269,917	1,236,767
Total Flats	5,042,350	26,532,894	5,474,343	5,046,404	26,508,816	5,623,935
IPPs and Parcels						
	Revenue	Pieces	Weight	Revenue	Pieces	Weight
Basic	131,981	268,253	140,873	131,587	266,451	141,685
Basic ZIP+4 and BC	-	-	-	-	-	-
3/5-Digit	273,042	607,062	340,016	272,225	602,983	341,974
3/5 Digit ZIP+4 and BC	-	-	-	-	-	-
Carrier Route	8,818	54,338	8,966	8,857	54,488	9,360
High Density	342	1,810	532	343	1,815	555
Saturation	1,784	13,125	2,025	1,792	13,161	2,114
Total IPPs and Parcels	415,967	944,587	492,413	414,805	938,898	495,688
All Shapes						
	Revenue	Pieces	Weight	Revenue	Pieces	Weight
Basic	1,017,338	3,616,340	532,629	1,014,295	3,592,043	535,696
Basic ZIP+4 and BC	345,306	1,666,413	129,200	344,273	1,655,217	129,944
3/5-Digit	1,899,174	8,609,429	1,224,897	1,893,492	8,551,586	1,231,951
3/5 Digit ZIP+4 and BC	3,080,755	16,462,266	2,138,935	3,071,539	16,351,662	2,151,253
Carrier Route	2,846,943	18,385,561	2,438,140	2,859,764	18,436,398	2,545,036
High Density	123,181	823,148	141,673	123,736	825,424	147,885
Saturation	1,309,124	9,891,564	1,358,917	1,315,020	9,918,914	1,418,496
Total All Shapes	10,621,821	59,454,721	7,964,391	10,622,119	59,331,244	8,160,261
GFY RPW Total						
	Revenue	Pieces	Weight			
Basic and 3/5-Digit	6,323,599	30,150,508	4,048,844			
Carrier Route	4,298,520	29,180,737	4,111,416			
	10,622,119	59,331,244	8,160,261			
GFY RPW Factors						
	Revenue	Pieces	Weight			
Basic and 3/5-Digit	0.99701	0.99328	1.00576			
Carrier Route	1.00450	1.00277	1.04384			

Table 2

FY 1996 Bulk Standard Mail (A) Nonprofit Rate

Letters	PERMIT Estimate			Controlled to GFY RPW		
	Revenue	Pieces	Weight	Revenue	Pieces	Weight
Basic	177,935	1,442,931	62,600	175,394	1,394,463	60,593
Basic ZIP+4 and BC	63,465	596,780	30,352	62,558	576,734	29,379
3/5-Digit	284,748	2,757,622	114,293	280,681	2,664,994	110,628
3/5 Digit ZIP+4 and BC	292,641	3,157,261	166,550	288,461	3,051,208	161,210
Carrier Route	145,165	1,932,918	85,798	139,491	1,850,970	83,996
High Density	-	-	-	-	-	-
Saturation	30,566	463,079	23,987	29,372	443,446	23,483
Total Letters	994,520	10,350,590	483,579	975,957	9,981,815	469,288
Flats						
	Revenue	Pieces	Weight	Revenue	Pieces	Weight
Basic	75,736	387,740	69,190	74,654	374,716	66,972
Basic ZIP+4 and BC	4,303	26,249	4,456	4,241	25,368	4,313
3/5-Digit	100,534	606,797	92,115	99,099	586,414	89,162
3/5 Digit ZIP+4 and BC	89,202	604,515	94,257	87,928	584,210	91,235
Carrier Route	55,284	449,512	62,274	53,124	430,455	60,966
High Density	509	4,418	585	489	4,231	572
Saturation	19,744	186,012	23,616	18,973	178,126	23,120
Total Flats	345,312	2,265,244	346,493	338,507	2,183,519	336,340
IPPs and Parcels						
	Revenue	Pieces	Weight	Revenue	Pieces	Weight
Basic	5,075	18,895	7,198	5,002	18,260	6,967
Basic ZIP+4 and BC	-	-	-	-	-	-
3/5-Digit	6,320	24,938	10,296	6,230	24,100	9,966
3/5 Digit ZIP+4 and BC	-	-	-	-	-	-
Carrier Route	155	1,148	242	149	1,099	237
High Density	0	0	0	0	0	0
Saturation	30	303	29	29	290	29
Total IPPs and Parcels	11,580	45,283	17,766	11,410	43,749	17,199
All Shapes						
	Revenue	Pieces	Weight	Revenue	Pieces	Weight
Basic	258,746	1,849,566	138,988	255,051	1,787,439	134,532
Basic ZIP+4 and BC	67,768	623,029	34,808	66,800	602,102	33,692
3/5-Digit	391,602	3,389,356	216,704	386,009	3,275,508	209,756
3/5 Digit ZIP+4 and BC	381,842	3,761,776	260,807	376,389	3,635,418	252,445
Carrier Route	200,605	2,383,578	148,314	192,764	2,282,525	145,199
High Density	509	4,418	585	489	4,231	572
Saturation	50,341	649,393	47,632	48,373	621,862	46,632
Total All Shapes	1,351,413	12,661,117	847,838	1,325,874	12,209,084	822,827
GFY RPW Total						
	Revenue	Pieces	Weight			
Basic and 3/5-Digit	1,084,248	9,300,466	630,424			
Carrier Route	241,626	2,908,617	192,403			
	1,325,874	12,209,084	822,827			
GFY RPW Factors						
	Revenue	Pieces	Weight			
Basic and 3/5-Digit	0.98572	0.96641	0.96794			
Carrier Route	0.96091	0.95760	0.97900			

Table 3

**FY 1996 Bulk Standard Mail (A)
Costs by Shape (\$000)**

Cost Category	Sum over Shapes	Letters	Flats	IPPs & Parcels	Source / Derivation
C.S. 3.1 Mail Processing					
3.1a Mail Processing Variable w/ Pigbk	3,388,933	1,692,471	1,417,869	278,593	LR-H-106
3.1b Remote Encoding Costs	33,698	33,698			WS 3.1.1
3.1 Total	3,422,631	1,726,169	1,417,869	278,593	=sum(3 1a,3 1b)
C.S. 3.2 Window Service					
3.2a Liocatt Window Service Direct	5,997	3,386	2,024	588	Liocatt report ALA850P16
3.2b CRA Window Service Total	36,627				C.S. 3.2 Total from CRA
3.2c Window Service Non-Direct	30,630	19,802	10,259	569	=3.2b - 3.2a distributed to shape by key Volume
3.2d Window Service Piggyback Factor		1.4222	1.4222	1.4221	LR-H-77 : Cost wghtd avg of Std A subclasses.
3.2e Piggybacked Costs		9,790	5,186	488	=sum(3.2a,3.2c)*(3.2d - 1)
3.2 Total	52,091	32,978	17,468	1,645	=sum(3 2a,3.2c,3.2e)
C.S. 6 & 7 City Delivery Carriers					
6.1 Liocatt In-Office Direct Labor	814,403	447,768	346,088	20,547	LIOCATT report ALA850P14
6.2 In-Office Support	156,629	86,116	66,561	3,952	= 6.1 * Support Factor 0.1923
7.1 Route	40,197	22,160	17,500	537	= CS total from CRA dist. to shape by Volume
7.2 Access	68,045	35,814	31,492	739	= CS total from CRA dist. to shape by Volume
7.3 Elemental Load	449,685	222,638	177,711	49,336	= CS total from CRA dist. to shape by ElemLoad
7.4 Other Load	-	-	-	-	= CS total from CRA dist. to shape by Volume
7.5 Street Support	231,632	123,310	96,984	11,339	= CS total from CRA dist. to shape by 6 1 - 7 4
6&7 Subtotal	1,760,591	937,807	736,334	86,450	= sum of 6.1 through 7.5
6&7 Piggyback Factors		1.3109	1.3095	1.3118	LR-H-77 : Cost wghtd avg of Std A subclasses.
6&7 Piggybacked Costs	546,443	291,584	227,907	26,952	= 6&7 subtotal *(6&7 pig. fact - 1)
6&7 Total	2,307,033	1,229,390	964,241	113,401	= sum(6&7 subtotal, 6&7 piggybacked costs)
C.S. 8 Vehicle Service Drivers					
8a Vehicle Service Drivers	84,575	17,424	55,933	11,218	= CS total from CRA dist. to shape by Cube
8b Piggyback Factors		1.5490	1.5485	1.5454	LR-H-77 : Cost wghtd avg of Std A subclasses.
8c Piggybacked Costs	46,365	9,565	30,681	6,118	= 8a * (8b - 1)
8 Total	130,940	26,989	86,615	17,337	=sum(8a, 8c)

Table 3

FY 1996 Bulk Standard Mail (A)

Costs by Shape (\$000)

Cost Category	Sum over Shapes	Letters	Flats	IPPs & Parcels	Source / Derivation		
C.S. 10 Rural Delivery Carriers							
10a Rural Delivery Carriers	647,876	178,721	446,783	22,373	= CS total from CRA dist to shape by RuralDel		
10b Piggyback Factors		1,1985	1,1985	1,1985	LR-H-77 . Cost wghtd avg of Std A subclasses		
10c Piggybacked Costs	128,621	35,480	88,699	4,441	= 9a * (9b -1)		
10 Total	776,497	214,201	535,482	26,814	=sum(9a, 9c)		
C.S 14 Transportation							
14.1a Domestic Air	19,598	7,029	10,908	1,661	C.S Total dist to shape by Weight		
14.1b Highway	247,899	57,028	141,180	49,691	C.S Total dist to shape by Cube		
14.1c Railroad	84,646	19,897	47,278	17,471	C.S. Total dist to shape by Cube		
14.1d Domestic Water	8,618	2,861	4,992	765	C.S. Total dist to shape by Weight		
14.2 International Transportation	-	-	-	-	C.S. Total dist to shape by Weight		
14 Total	360,761	86,815	204,358	69,589	= sum of 14.1a through 14.2		
All Other Costs							
A. CRA Total for Rate Category	7,092,588				CRA total attributable for rate category		
B. Sum of C.S. Totals from above	7,049,953				Sum of C.S. totals above		
C. Difference	42,635				= A - B		
Total All Other	42,635	17,099	25,456	80	= C dist. to shape by Volume		
Total Attributable	7,092,588	3,333,641	3,251,488	507,459			
		47.00%	45.84%	7.15%			
Attributable Cost per Piece (Dollars)	0.099	0.080	0.113	0.516			
Distribution Keys					Key Name	Source	
1	Volume of Mail (000)	71,540,328	41,865,345	28,692,335	982,647	Table 1 & 2	
2	Weight of Mail (000)	8,983,088	2,509,926	5,960,275	512,887	Table 1 & 2	
3	Density of Mail (pounds / cubic feet)	20.4	28.4	20.7	8.1	MC95-1, LR-MCR-13, Supp. 1	
4	Cube of Mail (000)	440,059	88,310	288,597	63,152	= Weight / Density	
5	Key - Volume of Mail (percent by shape)		58.5%	40.1%	1.4%	Volume	Share of (1) by shape
6	Key - Weight of Mail (percent by shape)		27.9%	66.3%	5.7%	Weight	Share of (2) by shape
7	Key - Cube of Mail (percent by shape)		20.1%	65.6%	14.4%	Cube	Share of (4) by shape
8							
9	Elemental Load Key		49.5%	39.5%	11.0%	ElemLoad	Table 5
10	Rural Delivery Key		27.6%	69.0%	3.5%	RuralDel	Table 6

FY 1996 Bulk Standard Mail (A) carrier route - Total

Table 3A
Costs by Shape(\$000)

Cost Category	Sum over Shapes	Letters	Flats	IPPs & Parcels	Source / Derivation
C.S. 3.1 Mail Processing					
3.1a Mail Processing Variable w/ Pigbk	452,944	224,970	217,310	10,664	LR-H-106
3.1b Remote Encoding Costs	4,735	4,735			WS 3.1.1
3.1 Total	457,679	229,705	217,310	10,664	=sum(3.1a,3.1b)
C.S. 3.2 Window Service					
3.2a Liocatt Window Service Direct	695	422	273	0	Liocatt report ALA850P16
3.2b CRA Window Service Total	6,607				C.S. 3.2 Total from CRA
3.2c Window Service Non-Direct	5,912	2,920	2,979	12	=3.2b - 3.2a distributed to shape by key Volume
3.2d Window Service Piggyback Factor		1.42250	1.42258	1.42259	LR-H-77
3.2e Piggybacked Costs		1,412	1,374	5	=sum(3.2a,3.2c)*(3.2d - 1)
3.2 Total	9,399	4,755	4,626	18	=sum(3.2a,3.2c,3.2e)
C.S. 6 & 7 City Delivery Carriers					
6.1 Liocatt In-Office Direct Labor	307,200	153,551	147,314	6,335	LIOCATT report ALA850P14
6.2 In-Office Support	59,082	29,532	28,332	1,218	= 6.1 * Support Factor
7.1 Route	20,911	9,418	11,444	48	= CS total from CRA dist. to shape by Volume
7.2 Access	44,303	20,429	23,774	100	= CS total from CRA dist. to shape by Volume
7.3 Elemental Load	229,514	105,818	117,777	5,919	= CS total from CRA dist. to shape by ElemLoad
7.4 Other Load	0	0	0	0	= CS total from CRA dist. to shape by Volume
7.5 Street Support	100,947	48,668	50,199	2,080	= CS total from CRA dist. to shape by 6.1 - 7.4
6&7 Subtotal	761,957	367,415	378,840	15,702	= sum of 6.1 through 7.5
6&7 Piggyback Factors		1.30603	1.30602	1.30603	LR-H-77
6&7 Piggybacked Costs	233,181	112,442	115,934	4,805	= 6&7 subtotal *(6&7 pig. fact - 1)
6&7 Total	995,139	479,857	494,775	20,507	= sum(6&7 subtotal, 6&7 piggybacked costs)
C.S. 8 Vehicle Service Drivers					
8a Vehicle Service Drivers	40,370	7,079	32,731	559	= CS total from CRA dist. to shape by Cube
8b Piggyback Factors		1.55084	1.55027	1.55016	LR-H-77
8c Piggybacked Costs	22,219	3,900	18,011	308	= 8a * (8b -1)
8 Total	62,589	10,979	50,743	867	=sum(8a, 8c)

FY 1996 Bulk Standard Mail (A) carrier route - Total

Table 3A
Costs by Shape(\$000)

Cost Category	Sum over Shapes	Letters	Flats	IPPs & Parcels	Source / Derivation
C.S. 10 Rural Delivery Carriers					
10a Rural Delivery Carriers	273,474	62,426	210,527	521	= CS total from CRA dist to shape by RuralDel
10b Piggyback Factors		1,19853	1,19853	1,19853	LR-H-77.
10c Piggybacked Costs	54,295	12,394	41,798	103	= 9a * (9b -1)
10 Total	327,769	74,819	252,326	624	=sum(9a, 9c)
C.S 14 Transportation					
14.1a Domestic Air	1,726	369	1,352	5	C.S Total dist to shape by Weight
14.1b Highway	41,309	7,801	32,955	553	C.S. Total dist to shape by Cube
14.1c Railroad	11,862	2,570	9,145	147	C.S. Total dist to shape by Cube
14.1d Domestic Water	1,210	330	877	3	C.S. Total dist to shape by Weight
14.2 International Transportation	0	0	0	0	C.S. Total dist to shape by Weight
14 Total	56,107	11,069	44,330	708	= sum of 14.1a through 14.2
All Other Costs					
A. CRA Total for Rate Category	1,958,502				CRA total attributable for rate category
B. Sum of C.S. Totals from above	1,908,681				Sum of C.S. totals above
C. Difference	49,821				= A - B
Total All Other	49,821	23,045	26,663	112	= C dist. to shape by Volume
Total Attributable	1,958,502	834,229	1,090,773	33,500	
		42.60%	55.69%	1.71%	
Attibutable Cost per Piece (Dollars)	0.061	0.055	0.064	0.473	
Distribution Keys					Key Name Source
1 Volume of Mail (000)	32,089,354	15,102,584	16,915,917	70,853	Tables 1 and 2
2 Weight of Mail (000)	4,303,820	970,828	3,320,697	12,295	Tables 1 and 2
3 Cube of Mail (000)	197,704	34,158	160,788	2,758	Sum of carrier route

Table 3B
Costs by Shape(\$000)

Cost Category	Sum over Shapes	Letters	Flats	IPPs & Parcels	Source / Derivation
C.S. 3.1 Mail Processing					
3.1a Mail Processing Variable w/ Pigbk	2,935,988	1,467,501	1,200,558	267,929	LR-H-106
3.1b Remote Encoding Costs	28,963	28,963			WS 3.1.1
3.1 Total	2,964,952	1,496,465	1,200,558	267,929	=sum(3.1a,3.1b)
C.S. 3.2 Window Service					
3.2a Liocatt Window Service Direct	5,302	2,964	1,751	588	Liocatt report ALA850P16
3.2b CRA Window Service Total	30,020				C.S. 3.2 Total from CRA
3.2c Window Service Non-Direct	24,718	16,881	7,279	557	=3.2b - 3.2a distributed to shape by key Volume
3.2d Window Service Piggyback Factor		1.42215	1.42212	1.42210	LR-H-77
3.2e Piggybacked Costs		8,378	3,812	483	=sum(3.2a,3.2c)*(3.2d - 1)
3.2 Total	42,693	28,223	12,842	1,628	=sum(3.2a,3.2c,3.2e)
C.S. 6 & 7 City Delivery Carriers					
6.1 Liocatt In-Office Direct Labor	507,202	294,217	198,774	14,211	LIOCATT report ALA850P14
6.2 In-Office Support	97,547	56,585	38,229	2,733	= 6.1 * Support Factor
7.1 Route	19,286	12,742	6,055	488	= CS total from CRA dist. to shape by Volume
7.2 Access	23,742	15,385	7,718	639	= CS total from CRA dist. to shape by Volume
7.3 Elemental Load	220,171	116,820	59,934	43,417	= CS total from CRA dist. to shape by ElemLoad
7.4 Other Load	0	0	0	0	= CS total from CRA dist. to shape by Volume
7.5 Street Support	130,685	74,642	46,785	9,259	= CS total from CRA dist. to shape by 6.1 - 7.4
6&7 Subtotal	998,633	570,391	357,494	70,748	= sum of 6.1 through 7.5
6&7 Piggyback Factors		1.31407	1.31322	1.31303	LR-H-77
6&7 Piggybacked Costs	313,261	179,142	111,973	22,146	= 6&7 subtotal *(6&7 pig. fact. - 1)
6&7 Total	1,311,895	749,533	469,467	92,894	= sum(6&7 subtotal, 6&7 piggybacked costs)
C.S. 8 Vehicle Service Drivers					
8a Vehicle Service Drivers	44,205	10,344	23,202	10,659	= CS total from CRA dist. to shape by Cube
8b Piggyback Factors		1.54771	1.54608	1.54514	LR-H-77
8c Piggybacked Costs	24,146	5,666	12,670	5,811	= 8a * (8b -1)
8 Total	68,351	16,010	35,872	16,469	=sum(8a, 8c)

FY 1996 Bulk Standard Mail (A) non-carrier route - Total

Table 3B
Costs by Shape(\$000)

Cost Category	Sum over Shapes	Letters	Flats	IPPs & Parcels	Source / Derivation
C.S. 10 Rural Delivery Carriers					
10a Rural Delivery Carriers	374,402	116,295	236,255	21,852	= CS total from CRA dist. to shape by RuralDel
10b Piggyback Factors		1 19852	1 19852	1.19852	LR-H-77.
10c Piggybacked Costs	74,325	23,087	46,901	4,338	= 9a * (9b -1)
10 Total	448,727	139,382	283,156	26,190	=sum(9a, 9c)
C.S 14 Transportation					
14 1a Domestic Air	17,872	6,661	9,555	1,656	C.S. Total dist to shape by Weight
14.1b Highway	206,590	49,227	108,225	49,139	C S. Total dist to shape by Cube
14.1c Railroad	72,784	17,327	38,133	17,324	C S. Total dist to shape by Cube
14.1d Domestic Water	7,408	2,531	4,115	762	C.S. Total dist to shape by Weight
14.2 International Transportation	0	0	0	0	C.S. Total dist to shape by Weight
14 Total	304,654	75,745	160,028	68,881	= sum of 14 1a through 14.2
All Other Costs					
A. CRA Total for Rate Category	5,134,086				CRA total attributable for rate category
B. Sum of C.S. Totals from above	5,141,272				Sum of C.S. totals above
C. Difference	-7,186				= A - B
Total All Other	-7,186	-5,946	-1,208	-32	= C dist. to shape by Volume
Total Attributable	5,134,086	2,499,412	2,160,715	473,959	
		48.68%	42.09%	9.23%	
Attbutable Cost per Piece (Dollars)	0.130	0.093	0.183	0.520	
Distribution Keys					Key Name Source
1 Volume of Mail (000)	39,450,974	26,762,761	11,776,419	911,794	Tables 1 and 2
2 Weight of Mail (000)	4,679,268	1,539,098	2,639,578	500,592	Tables 1 and 2
3 Cube of Mail (000)	242,355	54,152	127,808	60,394	Sum of non-carrier route

FY 1996 Bulk Standard Mail (A) Enhanced Carrier Route

Table 3A(1)
Costs by Shape (\$000)

Cost Category	Sum over Shapes	Letters	Flats	IPPs & Parcels	Source / Derivation
C.S. 3.1 Mail Processing					
3.1a Mail Processing Variable w/ Pigbk	408,076	192,382	205,540	10,154	LR-H-106
3.1b Remote Encoding Costs	4,735	4,735			WS 3.1.1
3.1 Total	412,810	197,116	205,540	10,154	=sum(3.1a,3.1b)
C.S. 3.2 Window Service					
3.2a Liocatt Window Service Direct	695	422	273	0	Liocatt report ALA850P16
3.2b CRA Window Service Total	5,677				C.S. 3.2 Total from CRA
3.2c Window Service Non-Direct	4,982	2,187	2,783	12	=3.2b - 3.2a distributed to shape by key Volume
3.2d Window Service Piggyback Factor		1.42261	1.42261	1.42261	LR-H-77
3.2e Piggybacked Costs		1,103	1,292	5	=sum(3.2a,3.2c)*(3.2d - 1)
3.2 Total	8,076	3,712	4,348	17	=sum(3.2a,3.2c,3.2e)
C.S. 6 & 7 City Delivery Carriers					
6.1 Liocatt In-Office Direct Labor	286,843	138,071	142,485	6,286	LIOCATT report ALA850P14
6.2 In-Office Support	55,167	26,554	27,403	1,209	= 6.1 * Support Factor 0.192
7.1 Route	20,226	8,878	11,300	48	= CS total from CRA dist. to shape by Volume
7.2 Access	41,494	18,213	23,182	99	= CS total from CRA dist. to shape by Volume
7.3 Elemental Load	216,510	97,109	114,296	5,105	= CS total from CRA dist. to shape by ElemLoad
7.4 Other Load	0	0	0	0	= CS total from CRA dist. to shape by Volume
7.5 Street Support	94,758	44,126	48,685	1,948	= CS total from CRA dist. to shape by 6.1 - 7.4
6&7 Subtotal	714,998	332,951	367,351	14,695	= sum of 6.1 through 7.5
6&7 Piggyback Factors		1.30602	1.30602	1.30602	LR-H-77
6&7 Piggybacked Costs	218,804	101,890	112,417	4,497	= 6&7 subtotal *(6&7 pig. fact. - 1)
6&7 Total	933,801	434,841	479,768	19,192	= sum(6&7 subtotal, 6&7 piggybacked costs)
C.S. 8 Vehicle Service Drivers					
8a Vehicle Service Drivers	38,428	6,150	31,724	554	= CS total from CRA dist. to shape by Cube
8b Piggyback Factors		1.55010	1.55010	1.55010	LR-H-77
8c Piggybacked Costs	21,139	3,383	17,452	304	= 8a * (8b -1)
8 Total	59,567	9,533	49,176	858	=sum(8a, 8c)
C.S. 10 Rural Delivery Carriers					
10a Rural Delivery Carriers	259,640	57,257	201,916	466	= CS total from CRA dist. to shape by RuralDel
10b Piggyback Factors		1.19855	1.19855	1.19855	LR-H-77
10c Piggybacked Costs	51,552	11,368	40,091	93	= 9a * (9b -1)

FY 1996 Bulk Standard Mail (A) Enhanced Carrier Route

Table 3A(1)
Costs by Shape (\$000)

Cost Category	Sum over Shapes	Letters	Flats	IPPs & Parcels	Source / Derivation		
10 Total	311,192	68,626	242,007	559	=sum(9a, 9c)		
C.S 14 Transportation							
14.1a Domestic Air	1,708	359	1,344	5	C.S. Total dist to shape by Weight		
14.1b Highway	37,571	6,013	31,017	541	C.S. Total dist to shape by Cube		
14.1c Railroad	9,753	1,561	8,052	140	C.S. Total dist to shape by Cube		
14.1d Domestic Water	993	209	782	3	C.S. Total dist to shape by Weight		
14.2 International Transportation	0	0	0	0	C S Total dist to shape by Weight		
14 Total	50,025	8,141	41,194	690	= sum of 14.1a through 14.2		
All Other Costs							
A. CRA Total for Rate Category	1,821,927				CRA total attributable for rate category		
B. Sum of C.S. Totals from above	1,775,471				Sum of C S. totals above		
C. Difference	46,456				= A - B		
Total All Other	46,456	20,391	25,954	111	= C dist. to shape by Volume		
Total Attributable	1,821,927	742,360	1,047,987	31,580			
		40.75%	57.52%	1.73%			
Attributable Cost per Piece (Dollars)	0.062	0.058	0.064	0.455			
Distribution Keys							
					Key Name	Source	
1	Volume of Mail (000)	29,180,737	12,808,167	16,303,105	69,464		Table 1
2	Weight of Mail (000)	4,111,416	863,349	3,236,038	12,029		Table 1
3	Density of Mail (pounds / cubic feet)	21.6619	28.4219	20.6526	4.4		LR-MCR-13, LR-PCR-38
4	Cube of Mail (000)	189,799	30,376	156,689	2,734		= Weight / Density
5	Key - Volume of Mail (percent by shape)	100.00%	43.89%	55.87%	0.24%	Volume	Share of (1) by shape
6	Key - Weight of Mail (percent by shape)	100.00%	21.00%	78.71%	0.29%	Weight	Share of (2) by shape
7	Key - Cube of Mail (percent by shape)	100.00%	16.00%	82.56%	1.44%	Cube	Share of (4) by shape
8							
9	Elemental Load Key	100.00%	44.85%	52.79%	2.36%	ElemLoad	Table 5
10	Rural Delivery Key	100.00%	22.05%	77.77%	0.18%	RuralDel	Table 6

FY 1996 Bulk Standard Mail (A) Regular

Table 3B(1)
Costs by Shape(\$000)

Cost Category	Sum over Shapes	Letters	Flats	IPPs & Parcels	Source / Derivation
C.S. 3.1 Mail Processing					
3.1a Mail Processing Variable w/ Pigbk	2,372,166	1,089,837	1,030,093	252,236	LR-H-106
3.1b Remote Encoding Costs	24,186	24,186			WS 3.1.1
3.1 Total	2,396,352	1,114,024	1,030,093	252,236	=sum(3.1a,3.1b)
C.S. 3.2 Window Service					
3.2a Liocatt Window Service Direct	3,716	1,571	1,557	588	Liocatt report ALA850P16
3.2b CRA Window Service Total	22,022				C S. 3.2 Total from CRA
3.2c Window Service Non-Direct	18,306	11,582	6,197	528	=3.2b - 3.2a distributed to shape by key Volume
3.2d Window Service Piggyback Factor		1.42210	1.42210	1.42210	LR-H-77
3.2e Piggybacked Costs		5,552	3,273	471	=sum(3.2a,3.2c)*(3.2d - 1)
3.2 Total	31,317	18,704	11,027	1,586	=sum(3.2a,3.2c,3.2e)
C.S. 6 & 7 City Delivery Carriers					
6.1 Liocatt In-Office Direct Labor	411,386	222,276	175,672	13,439	LIOCATT report ALA850P14
6.2 In-Office Support	79,119	42,749	33,786	2,585	= 6.1 * Support Factor 0.192
7.1 Route	16,498	10,438	5,584	476	= CS total from CRA dist. to shape by Volume
7.2 Access	21,862	13,831	7,400	630	= CS total from CRA dist. to shape by Volume
7.3 Elemental Load	172,709	82,419	51,482	38,808	= CS total from CRA dist. to shape by ElemLoad
7.4 Other Load	0	0	0	0	= CS total from CRA dist. to shape by Volume
7.5 Street Support	105,645	55,973	41,248	8,423	= CS total from CRA dist to shape by 6.1 - 7.4
6&7 Subtotal	807,220	427,686	315,173	64,360	= sum of 6.1 through 7.5
6&7 Piggyback Factors		1.31245	1.31245	1.31245	LR-H-77
6&7 Piggybacked Costs	252,216	133,630	98,476	20,109	= 6&7 subtotal *(6&7 pig fact. - 1)
6&7 Total	1,059,435	561,316	413,649	84,470	= sum(6&7 subtotal, 6&7 piggybacked costs)
C.S. 8 Vehicle Service Drivers					
8a Vehicle Service Drivers	37,843	7,251	20,241	10,351	= CS total from CRA dist to shape by Cube
8b Piggyback Factors		1.54487	1.54487	1.54487	LR-H-77
8c Piggybacked Costs	20,620	3,951	11,029	5,640	= 8a * (8b -1)
8 Total	58,463	11,202	31,269	15,991	=sum(8a, 8c)
C.S. 10 Rural Delivery Carriers					
10a Rural Delivery Carriers	304,392	85,054	198,334	21,003	= CS total from CRA dist to shape by RuralDel
10b Piggyback Factors		1.19851	1.19851	1.19851	LR-H-77
10c Piggybacked Costs	60,425	16,884	39,371	4,169	= 9a * (9b -1)

FY 1996 Bulk Standard Mail (A) Regular

Table 3B(1)
Costs by Shape(\$000)

Cost Category	Sum over Shapes	Letters	Flats	IPPs & Parcels	Source / Derivation	
10 Total	364,817	101,938	237,706	25,173	=sum(9a, 9c)	
C.S 14 Transportation						
14.1a Domestic Air	12,702	3,693	7,491	1,517	C.S. Total dist to shape by Weight	
14.1b Highway	173,861	33,315	92,992	47,554	C.S. Total dist to shape by Cube	
14.1c Railroad	61,308	11,748	32,791	16,769	C.S. Total dist to shape by Cube	
14.1d Domestic Water	6,077	1,767	3,584	726	C.S. Total dist to shape by Weight	
14.2 International Transportation	0	0	0	0	C.S. Total dist to shape by Weight	
14 Total	253,948	50,523	136,859	66,567	= sum of 14.1a through 14.2	
All Other Costs						
A. CRA Total for Rate Category	4,164,366				CRA total attributable for rate category	
B. Sum of C.S. Totals from above	4,164,332				Sum of C.S. totals above	
C. Difference	34				= A - B	
Total All Other	34	21	11	1	= C dist. to shape by Volume	
Total Attributable	4,164,366	1,857,729	1,860,614	446,023		
		44.61%	44.68%	10.71%		
Attributable Cost per Piece (Dollars)	0.138	0.097	0.182	0.513		
Distribution Keys						
					Key Name	
					Source	
1	Volume of Mail (000)	30,150,508	19,075,363	10,205,711	869,434	Table 1
2	Weight of Mail (000)	4,048,844	1,177,289	2,387,896	483,659	Table 1
3	Density of Mail (pounds / cubic feet)	18.7298	28.4219	20.6526	8.18	LR-MCR-13, LR-PCR-38
4	Cube of Mail (000)	216,171	41,422	115,622	59,127	= Weight / Density
5	Key - Volume of Mail (percent by shape)	100.00%	63.27%	33.85%	2.88%	Volume
6	Key - Weight of Mail (percent by shape)	100.00%	29.08%	58.98%	11.95%	Weight
7	Key - Cube of Mail (percent by shape)	100.00%	19.16%	53.49%	27.35%	Cube
8						
9	Elemental Load Key	100.00%	47.72%	29.81%	22.47%	ElemLoad
10	Rural Delivery Key	100.00%	27.94%	65.16%	6.90%	RuralDel

FY 1996 Bulk Standard Mail (A) Nonprofit Enhanced Carrier Route

Table 3A(2)

Costs by Shape(\$000)

Cost Category	Sum over Shapes	Letters	Flats	IPPs & Parcels	Source / Derivation
C.S. 3.1 Mail Processing					
3.1a Mail Processing Variable w/ Pigbk	44,869	32,588	11,770	510	LR-H-106
3.1b Remote Encoding Costs	0	0			WS 3 1.1
3.1 Total	44,869	32,588	11,770	510	=sum(3.1a,3.1b)
C.S. 3.2 Window Service					
3.2a Liocatt Window Service Direct	0	0	0	0	Liocatt report ALA850P16
3.2b CRA Window Service Total	930				C S 3.2 Total from CRA
3.2c Window Service Non-Direct	930	734	196	0	=3.2b - 3.2a distributed to shape by key Volume
3.2d Window Service Piggyback Factor		1.42213	1.42213	1.42213	LR-H-77
3.2e Piggybacked Costs		310	83	0	=sum(3.2a,3.2c)*(3.2d - 1)
3.2 Total	1,323	1,043	279	1	=sum(3.2a,3.2c,3.2e)
C.S. 6 & 7 City Delivery Carriers					
6.1 Liocatt In-Office Direct Labor	20,357	15,480	4,829	49	LIOCATT report ALA850P14
6.2 In-Office Support	3,915	2,977	929	9	= 6.1 * Support Factor 0.192
7.1 Route	685	540	144	0	= CS total from CRA dist. to shape by Volume
7.2 Access	2,809	2,216	592	1	= CS total from CRA dist. to shape by Volume
7.3 Elemental Load	13,004	8,709	3,481	814	= CS total from CRA dist. to shape by ElemLoad
7.4 Other Load	0	0	0	0	= CS total from CRA dist. to shape by Volume
7.5 Street Support	6,189	4,542	1,514	133	= CS total from CRA dist. to shape by 6.1 - 7.4
6&7 Subtotal	46,960	34,464	11,489	1,007	= sum of 6.1 through 7.5
6&7 Piggyback Factors		1.30617	1.30617	1.30617	LR-H-77.
6&7 Piggybacked Costs	14,378	10,552	3,518	308	= 6&7 subtotal *(6&7 pig. fact. - 1)
6&7 Total	61,337	45,016	15,006	1,315	= sum(6&7 subtotal, 6&7 piggybacked costs)
C.S. 8 Vehicle Service Drivers					
8a Vehicle Service Drivers	1,942	929	1,007	6	= CS total from CRA dist. to shape by Cube
8b Piggyback Factors		1.55577	1.55577	1.55577	LR-H-77.
8c Piggybacked Costs	1,079	516	560	3	= 8a * (8b -1)
8 Total	3,021	1,445	1,567	9	=sum(8a, 8c)
C.S. 10 Rural Delivery Carriers					
10a Rural Delivery Carriers	13,834	5,168	8,611	55	= CS total from CRA dist. to shape by RuralDel
10b Piggyback Factors		1.19834	1.19834	1.19834	LR-H-77.
10c Piggybacked Costs	2,744	1,025	1,708	11	= 9a * (9b -1)

Costs by Shape(\$000)

Cost Category	Sum over Shapes	Letters	Flats	IPPs & Parcels	Source / Derivation
10 Total	16,578	6,193	10,319	66	=sum(9a, 9c)
C.S 14 Transportation					
14 1a Domestic Air	18	10	8	0	C.S. Total dist to shape by Weight
14.1b Highway	3,738	1,788	1,938	11	C S Total dist to shape by Cube
14.1c Railroad	2,109	1,009	1,094	6	C.S. Total dist to shape by Cube
14.1d Domestic Water	217	121	95	0	C.S. Total dist to shape by Weight
14.2 International Transportation	0	0	0	0	C.S. Total dist to shape by Weight
14 Total	6,082	2,928	3,135	18	= sum of 14.1a through 14.2
All Other Costs					
A CRA Total for Rate Category	136,575				CRA total attributable for rate category
B. Sum of C.S. Totals from above	133,210				Sum of C S. totals above
C. Difference	3,365				= A - B
Total All Other	3,365	2,655	709	2	= C dist. to shape by Volume
Total Attributable	136,575	91,869	42,786	1,920	
		67.27%	31.33%	1.41%	
Attributable Cost per Piece (Dollars)	0 047	0 040	0.070	1.382	

Distribution Keys

					Key Name	Source
1	Volume of Mail (000)	2,908,617	2,294,417	612,811	1,389	Table 2
2	Weight of Mail (000)	192,403	107,479	84,658	266	Table 2
3	Density of Mail (pounds / cubic feet)	24.3399	28.4219	20.6526	11.03	LR-MCR-13, LR-PCR-38
4	Cube of Mail (000)	7,905	3,782	4,099	24	= Weight / Density
5	Key - Volume of Mail (percent by shape)	100.00%	78.88%	21.07%	0.05%	Volume Share of (1) by shape
6	Key - Weight of Mail (percent by shape)	100.00%	55.86%	44.00%	0.14%	Weight Share of (2) by shape
7	Key - Cube of Mail (percent by shape)	100.00%	47.84%	51.86%	0.31%	Cube Share of (4) by shape
8						
9	Elemental Load Key	100.00%	66.97%	26.77%	6.26%	ElemLoad Table 5
10	Rural Delivery Key	100.00%	37.36%	62.25%	0.40%	RuralDel Table 6

FY 1996 Bulk Standard Mail (A) Nonprofit

Table 3B(2)
Costs by Shape(\$000)

Cost Category	Sum over Shapes	Letters	Flats	IPPs & Parcels	Source / Derivation
C.S. 3.1 Mail Processing					
3.1a Mail Processing Variable w/ Pigbk	563,823	377,664	170,466	15,693	LR-H-106
3.1b Remote Encoding Costs	4,777	4,777			WS 3.1.1
3.1 Total	568,600	382,441	170,466	15,693	=sum(3.1a,3.1b)
C.S. 3.2 Window Service					
3.2a Liocatt Window Service Direct	1,586	1,393	193	0	Liocatt report ALA850P16
3.2b CRA Window Service Total	7,998				C S. 3.2 Total from CRA
3.2c Window Service Non-Direct	6,412	5,300	1,083	29	=3.2b - 3.2a distributed to shape by key Volume
3.2d Window Service Piggyback Factor		1.42225	1.42225	1.42225	LR-H-77
3.2e Piggybacked Costs		2,826	539	12	=sum(3.2a,3.2c)*(3.2d - 1)
3.2 Total	11,375	9,518	1,815	42	=sum(3.2a,3.2c,3.2e)
C.S. 6 & 7 City Delivery Carriers					
6.1 Liocatt In-Office Direct Labor	95,816	71,942	23,102	773	LIOCATT report ALA850P14
6.2 In-Office Support	18,428	13,836	4,443	149	= 6.1 * Support Factor 0.192
7.1 Route	2,788	2,304	471	13	= CS total from CRA dist. to shape by Volume
7.2 Access	1,880	1,554	318	9	= CS total from CRA dist. to shape by Volume
7.3 Elemental Load	47,462	34,401	8,451	4,610	= CS total from CRA dist. to shape by ElemLoad
7.4 Other Load	0	0	0	0	= CS total from CRA dist. to shape by Volume
7.5 Street Support	25,040	18,668	5,536	836	= CS total from CRA dist. to shape by 6 1 - 7 4
6&7 Subtotal	191,414	142,705	42,321	6,388	= sum of 6.1 through 7 5
6&7 Piggyback Factors		1.31892	1.31892	1.31892	LR-H-77
6&7 Piggybacked Costs	61,046	45,512	13,497	2,037	= 6&7 subtotal *(6&7 pig. fact. - 1)
6&7 Total	252,459	188,217	55,818	8,425	= sum(6&7 subtotal, 6&7 piggybacked costs)
C.S. 8 Vehicle Service Drivers					
8a Vehicle Service Drivers	6,362	3,093	2,961	308	= CS total from CRA dist. to shape by Cube
8b Piggyback Factors		1.55437	1.55437	1.55437	LR-H-77
8c Piggybacked Costs	3,527	1,715	1,641	171	= 8a * (8b -1)
8 Total	9,889	4,808	4,602	479	=sum(8a, 8c)
C.S. 10 Rural Delivery Carriers					
10a Rural Delivery Carriers	70,010	31,241	37,921	848	= CS total from CRA dist. to shape by RuralDel
10b Piggyback Factors		1.19855	1.19855	1.19855	LR-H-77
10c Piggybacked Costs	13,900	6,203	7,529	168	= 9a * (9b -1)

FY 1996 Bulk Standard Mail (A) Nonprofit

Table 3B(2)
Costs by Shape(\$000)

Cost Category	Sum over Shapes	Letters	Flats	IPPs & Parcels	Source / Derivation
10 Total	83,910	37,443	45,450	1,017	=sum(9a, 9c)
C.S 14 Transportation					
14 1a Domestic Air	5,170	2,967	2,064	139	C.S Total dist to shape by Weight
14.1b Highway	32,729	15,912	15,233	1,584	C.S. Total dist to shape by Cube
14.1c Railroad	11,476	5,579	5,341	556	C S Total dist to shape by Cube
14.1d Domestic Water	1,331	764	531	36	C.S. Total dist to shape by Weight
14.2 International Transportation	0	0	0	0	C.S. Total dist to shape by Weight
14 Total	50,706	25,222	23,169	2,314	= sum of 14.1a through 14.2
All Other Costs					
A CRA Total for Rate Category	969,720				CRA total attributable for rate category
B. Sum of C.S. Totals from above	976,940				Sum of C S. totals above
C. Difference	-7,220				= A - B
Total All Other	-7,220	-5,967	-1,219	-33	= C dist. to shape by Volume
Total Attributable	969,720	641,683	300,101	27,936	
		66.17%	30.95%	2.88%	
Attibutable Cost per Piece (Dollars)	0.104	0.083	0.191	0.659	

Distribution Keys

					Key Name	Source
1	Volume of Mail (000)	9,300,466	7,687,399	1,570,708	42,360	Table 2
2	Weight of Mail (000)	630,424	361,810	251,681	16,933	Table 2
3	Density of Mail (pounds / cubic feet)	24.0768	28.4219	20.6526	13.36	LR-MCR-13, LR-PCR-38
4	Cube of Mail (000)	26,184	12,730	12,186	1,267	= Weight / Density
5	Key - Volume of Mail (percent by shape)	100.00%	82.66%	16.89%	0.46%	Volume Share of (1) by shape
6	Key - Weight of Mail (percent by shape)	100.00%	57.39%	39.92%	2.69%	Weight Share of (2) by shape
7	Key - Cube of Mail (percent by shape)	100.00%	48.62%	46.54%	4.84%	Cube Share of (4) by shape
8						
9	Elemental Load Key	100.00%	72.48%	17.81%	9.71%	ElemLoad Table 5
10	Rural Delivery Key	100.00%	44.62%	54.17%	1.21%	RuralDel Table 6

Table 4
Derivation of In-Office Support Factor

	Volume Variable	Source
CS 6.1 Direct Labor	2,788,173	a.
CS 6.2 In Office Support	536,232	a.
Support Factor	0.1923	$= (6.1 + 6.2) / 6.1$

a. Development of Cost by Segment and Component
(USPS 10-4730,ALA430P1, Page 26)

Table 5
Construction of FY 1996 Elemental Load Key

ELEMENTAL LOAD: SPECIAL PURPOSE ROUTES

Line No. Class	C6.1 Collection	C6.2 Parcel	C6.3 Other	C6.4 Accountable
----------------	--------------------	----------------	---------------	---------------------

- Third-Class Mail.
- 16 Single Piece Rate
- Bulk Rate-Reg
- 17 Car Presort
- 18 Other
- 19 Total Regular(Br)
- Bulk Rate-Nonprofit
- 20 Car Presort
- 21 Other
- 22 Total Nonprofit(Br)
- 23 Total Third

Sources: W/S 7.0.6.1 W/S 7.0.6.2 W/S 7.0.6.3 W/S 7.0.6.4
(Col 15) (Col 15) (Col 15) (Col 15)

C6.5 ELEMENTAL LOAD-LETTER ROUTES-SINGLE DEL RES STOPS

Line No. Class	Letters	Flats	Parcels	Accountables	Collected
----------------	---------	-------	---------	--------------	-----------

- Third-Class Mail:
- 16 Single Piece Rate
- Bulk Rate-Reg
- 17 Car Presort
- 18 Other
- 19 Total Regular(Br)
- Bulk Rate-Nonprofit
- 20 Car Presort
- 21 Other
- 22 Total Nonprofit(Br)
- 23 Total Third

Source: W/S 7.0.6.5 W/S 7.0.6.5 W/S 7.0.6.5 W/S 7.0.6.5 W/S 7.0.6.5
(Col 8) (Col 9) (Col 10) (Col 11) (Col 12)

C6.6 ELEMENTAL LOAD-LETTER ROUTES-MULTIPLE DEL RES STOPS

Table 5
Construction of FY 1996 Elemental Load Key

Line No.	Class	Letters	Flats	Parcels	Accountables	Collected
Third-Class Mail:						
16	Single Piece Rate	22	13	221	0	0
	Bulk Rate-Reg					
17	Car Presort	51,883	31,531	1,565	0	0
18	Other	42,031	12,847	11,995	0	0
19	Total Regular(Br)	93,914	44,378	13,560	0	0
	Bulk Rate-Nonprofit					
20	Car Presort	4,558	1,089	415	0	0
21	Other	16,249	1,939	561	0	0
22	Total Nonprofit(Br)	20,807	3,028	976	0	0
23	Total Third	114,743	47,419	14,757	0	0
Source:		W/S 7.0.6.6 (Col 8)	W/S 7.0.6.6 (Col 9)	W/S 7.0.6.6 (Col 10)	W/S 7.0.6.6 (Col 11)	W/S 7.0.6.6 (Col 12)

C6.7 ELEMENTAL LOAD-LETTER ROUTES-MIXED/BUS STOPS

Line No.	Class	Letters	Flats	Parcels	Accountables	Collected
Third-Class Mail:						
16	Single Piece Rate	2	0	59	11	0
	Bulk Rate-Reg					
17	Car Presort	639	141	93	0	0
18	Other	2,895	334	1726	0	0
19	Total Regular(Br)	3,534	475	1819	0	0
	Bulk Rate-Nonprofit					
20	Car Presort	196	6	4	0	0
21	Other	944	41	142	0	0
22	Total Nonprofit(Br)	1,140	47	146	0	0
23	Total Third	4,676	522	2024	11	0
Source:		W/S 7.0.6.7 (Col 8)	W/S 7.0.6.7 (Col 9)	W/S 7.0.6.7 (Col 10)	W/S 7.0.6.7 (Col 11)	W/S 7.0.6.7 (Col 12)

Table 5
Construction of FY 1996 Elemental Load Key

TOTAL ELEMENTAL LOAD COSTS BY SHAPE OF MAIL

Line No. Class	(1) Letters	(2) Flats	(3) Parcels	(4) Other	(5) Total	Distribution Key:			(8) Parcels
						(6) Letters	(7) Flats	(8) Parcels	
Third-Class Mail									
16 Single Piece Rate	56	73	886	0	1,015	5.52%	7.19%	87.29%	
Bulk Rate-Reg									
17 Car Presort	89,423	105,249	4,701	0	199,373	44.85%	52.79%	2.36%	
18 Other	79,703	49,786	37,529	0	167,018	47.72%	29.81%	22.47%	
19 Total Regular(Br)	169,126	155,035	42,230	0	366,391	46.16%	42.31%	11.53%	
Bulk Rate-Nonprofit									
20 Car Presort	8,131	3,250	760	0	12,141	66.97%	26.77%	6.26%	
21 Other	32,942	8,093	4,414	0	45,449	72.48%	17.81%	9.71%	
22 Total Nonprofit(Br)	41,073	11,343	5,174	0	57,590	71.32%	19.70%	8.98%	
23 Total Third	210,255	166,451	48,290	0	424,996	49.47%	39.17%	11.36%	
Carrier Presort	97,554	108,499	5,461	0	211,514	46.12%	51.30%	2.58%	/ sum rows 17 & 20
Other	112,645	57,879	41,943	0	212,467	53.02%	27.24%	19.74%	/ sum rows 18 & 21
Source:	C6.5+C6.6+ C6.7	C6.5+C6.6+ C6.7	C6.5+C6.6+ C6.7+C6.2	C6.1+C6.3+ C6.4		$\frac{[(1) + (1) / \text{sum}((1),(2),(3),(4))] / (5)}$	$\frac{[(2) + (2) / \text{sum}((1),(2),(3),(4))] / (5)}$	$\frac{[(3) + (3) / \text{sum}((1),(2),(3),(4))] / (5)}$	

Table 6
Construction of FY 1996 Rural Delivery Key

Part 1 Rural Carriers: Evaluated Routes

Line	Class	Letters	Flats	Parcels	Boxhldr	Acctbls	Dps/Sec	Seg	Postage Due	Ltr/Fits Collected	Parcels Accepted	Acctbls Accepted
THIRD-CLASS MAIL:												
16	SINGLE PIECE RATE BULK RATE-REG	57	268	285	0	0	0		5	101	327	0
17	CAR PRESORT	33,382	160,343	322	42,804	0	0		4	0	0	0
18	OTHER	65,201	179,263	18,928	4,785	0	8,983		23	0	0	0
19	TOTAL REGULAR(BR) BULK RATE-NONPROF	98,583	339,606	19,250	47,589	0	8,983		27	0	0	0
20	CAR PRESORT	3,636	7,569	49	1,354	0	0		1	0	0	0
21	OTHER	23,801	34,471	767	666	0	3,997		5	0	0	0
22	TOTAL NONPROF(BR)	27,437	42,040	816	2,020	0	3,997		6	0	0	0
23	TOTAL THIRD	126,077	381,914	20,351	49,609	0	12,980		38	101	327	0
Source:		W/S 10.1.2 Col 8	W/S 10.1.2 Col 9	W/S 10.1.2 Col 10	W/S 10.1.2 Col 11	W/S 10.1.2 Col 12			W/S 10.1.2 Col 19	W/S 10.1.2 Col 20	W/S 10.1.2 Col 21	W/S 10.1.2 Col 22

Part 2 Rural Carriers: Other Routes

Line	Class	Letters	Flats	Parcels	Boxhldr	Acctbls	Dps/Sec	Seg	Postage Due	Ltr/Fits Collected	Parcels Accepted	Acctbls Accepted
THIRD-CLASS MAIL:												
16	SINGLE PIECE RATE BULK RATE-REG	6	26	29	0	0	0		1	10	34	0
17	CAR PRESORT	3,363	15,462	33	3927	0	0		0	0	0	0
18	OTHER	6,568	17,286	1,923	439	0	990		3	0	0	0
19	TOTAL REGULAR(BR) BULK RATE-NONPROF	9,931	32,748	1,956	4366	0	990		3	0	0	0
20	CAR PRESORT	366	730	5	124	0	0		0	0	0	0
21	OTHER	2,398	3,324	78	61	0	441		1	0	0	0
22	TOTAL NONPROF(BR)	2,764	4,054	83	185	0	441		1	0	0	0
23	TOTAL THIRD	12,701	36,828	2,068	4551	0	1431		5	10	34	0
Source:		W/S 10.2.2 Col 8	W/S 10.2.2 Col 9	W/S 10.2.2 Col 10	W/S 10.2.2 Col 11	W/S 10.2.2 Col 12			W/S 10.2.2 Col 19	W/S 10.2.2 Col 20	W/S 10.2.2 Col 21	W/S 10.2.2 Col 22

Table 6
Construction of FY 1996 Rural Delivery Key

Part 3 Rural Carriers: Sum of Evaluated and Other Routes

Line	Class	Letters	Flats	Parcels	Boxhdr	Acctbls	Dps/Sec	Seg	Postage Due	Ltr/Flts Collected	Parcels Accepted	Acctbls Accepted	Total
THIRD-CLASS MAIL:													
16	SINGLE PIECE RATE BULK RATE-REG	63	294	314	0	0	0		6	111	361	0	1,149
17	CAR PRESORT	36,745	175,805	355	46,731	0	0		4	0	0	0	259,640
18	OTHER	71,769	196,549	20,851	5,224	0	9,973		26	0	0	0	304,392
19	TOTAL REGULAR(BR) BULK RATE-NONPROF	108,514	372,354	21,206	51,955	0	9,973		30	0	0	0	564,032
20	CAR PRESORT	4,002	8,299	54	1,478	0	0		1	0	0	0	13,834
21	OTHER	26,199	37,795	845	727	0	4,438		6	0	0	0	70,010
22	TOTAL NONPROF(BR)	30,201	46,094	899	2,205	0	4,438		7	0	0	0	83,844
23	TOTAL THIRD	138,778	418,742	22,419	54,160	0	14,411		43	111	361	0	649,025
	Carrier Presort	40,747	184,104	409	48,209	0	0		5	0	0	0	273,474
	Other	97,968	234,344	21,696	5,951	0	14,411		32	0	0	0	374,402
Source:		Sum of Part 1 & 2			Sum of Part 1 & 2	Sum of Part 1 & 2	Sum of Part 1 & 2	Sum of Part 1 & 2					

Part 4 Distribution Key: /1

Line	Class	Distribution Key				Letters	Flats	Parcels	
		Letters	Flats	Parcels	Total				
THIRD-CLASS MAIL:									
16	SINGLE PIECE RATE BULK RATE-REG								
17	CAR PRESORT	57,256	201,913	466	259,636	22.05%	77.77%	0.18%	100.00%
18	OTHER	85,047	198,317	21,002	304,366	27.94%	65.16%	6.90%	100.00%
19	TOTAL REGULAR(BR) BULK RATE-NONPROF	146,407	395,567	22,028	564,002	25.96%	70.14%	3.91%	100.00%
20	CAR PRESORT	5,168	8,610	55	13,833	37.36%	62.25%	0.40%	100.00%
21	OTHER	31,238	37,918	848	70,004	44.62%	54.17%	1.21%	100.00%
22	TOTAL NONPROF(BR)	36,442	46,488	907	83,837	43.47%	55.45%	1.08%	100.00%
23	TOTAL THIRD	184,883	440,464	23,163	648,510	28.51%	67.92%	3.57%	100.00%
	Carrier Presort	63,436	209,517	515	273,469	23.20%	76.61%	0.19%	100.00%
	Other	116,416	236,120	21,834	374,370	31.10%	63.07%	5.83%	100.00%
Source:									

/1 Proportion of costs by shape, with boxholder distributed to letters, flats, and parcels in proportion to mail volume (exhibit A), parcels accepted distributed to parcels, and accountables and postage due distributed in proportion to evaluated costs for letters, flats, and parcels.

Table 7
Calculation of Cost Difference Due to Differences in Presorting and Drop Shipment
FY 1996 Bulk Standard Mail (A)

1) Weight by Entry Discount (Appendix A)

	None	BMC	SCF	DDU	Total
Flats	1,415,393	1,403,515	2,168,316	970,803	5,958,027
Parcels	365,493	108,058	37,195	2,108	512,855

2) Cost Avoidance \$/lb (LR-H-111)

	None	BMC	SCF	DDU
	0	0.0904	0.1105	0.1379

3) Avoided Costs (= (1) * (2))

	None	BMC	SCF	DDU	Total	Average Avoided Cost/Piece	
Flats	0	126,878	239,599	133,874	500,350	0.017	(3a) = (3) to
Parcels	0	9,768	4,110	291	14,169	0.014	(3b) = (3) to

4) Pieces by Presort Level (Table 1 and Table 2)

	Basic	3/5 Digit	Carrier	125 Walk	Saturation	Total
Flats	1,740,525	10,035,893	8,721,423	746,451	7,448,043	28,692,335
Parcels	284,711	627,083	55,587	1,815	13,451	982,647

5) Presort Cost Avoidances \$ / pc (Exhibit USPS-T-29C)

	Basic	3/5 Digit	Carrier	125 Walk	Saturation
	0	0.082227	0.160176	0.18690	0.202025

Table 7
Calculation of Cost Difference Due to Differences in Presorting and Drop Shipment
FY 1996 Bulk Standard Mail (A)

6) Avoided Costs (= (4) * (5))							Average Avoided Cost/ Piece
	Basic	3/5 Digit	Carrier	125 Walk	Saturation	Total	
Flats	0	825,221	1,396,963	139,514	1,504,691	3,866,389	0.135
Parcels	0	51,563	8,904	339	2,717	63,524	0.065

7) Cost Difference Due to Differences in Entry and Presort Profile

Flats

- 7a) 0.003 \$ / piece saved due to entry profile relative to parcels. (= (3a) - (3b))
- 7b) 0.070 \$ / piece saved due to presort profile relative to parcels. (= (6a) - (6b))
- 7c) 0.073 \$ / piece of difference in average costs of flats and parcels are explained by differences in presorting and entry profiles. (= (7a) + (7b))

REVISION TO USPS-LR-H-108

(Replace Pages 1 through A1
with attached pages 1 through 3)

LR-H-108: Standard (A) Commercial and Nonprofit Rate Mail Volume Estimates

Table of Contents

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General Description of Process..... 2

Data Processing 3

Introduction

This document describes the methods used to produce volume estimates by rate, weight and shape for Standard (A) commercial rate and nonprofit rate mail. This report is divided into four sections. The first provides an overview of the stratification and control process. The second describes the methods used in the handling of PERMIT and BRAVIS data. The third describes the methods used to summarize the data by entry/presort and shape. The fourth section describes how volumes are controlled to RPW values. The same methodology is used in nonprofit rate estimation. Nonprofit program listings follow regular rate programs.

Several miscellaneous tables appear here as well. Table A-1 contains the weight by entry discount used in USPS-T-28, Exhibit K, Table 7. Tables A-2 and A-3 contain detailed rate data used in the construction of the unit cost benchmarks in library reference H-106. Table A-4 contains share of parcels data used by witness Moeller.

General Description of Process

The general approach used to estimate mail volumes by shape was to group all offices accepting Standard Mail (A) into strata based upon their National Consolidated Trial Balance (NCTB) revenue for permit imprint Standard Mail (A) bulk regular mail and then to inflate PERMIT and BRAVIS revenue reported in each stratum to the stratum revenue total.

The strata were formed by sorting all offices recording Standard Mail (A) commercial rate revenue in the NCTB in descending order by magnitude of revenue. These offices were grouped into 20 strata of equal revenue sums. The motivation for this initial stratification was based upon the theory that offices with approximately the same revenue totals would have mail of similar characteristics. Thus the first stratum is comprised of only a few offices with very large revenue totals, and the last stratum contains many offices, each with a small amount of revenue. The initial 20 strata were further collapsed into 3 final strata by comparing the billing determinants for each of the 20 strata and combining similar adjacent strata.

Once the 3 strata were defined, the sum of the NCTB revenue for each stratum and Postal fiscal quarter was computed. The mailing statement data for each stratum and quarter were summed and then multiplied by the ratio of NCTB strata revenue divided by the mailing statement strata revenue for permit imprint mail. This ratio was applied to both permit imprint and stamped and meter mailing statement data. When this was completed for every stratum, the sum of the revenue for both permit imprint and stamped and metered mail was calculated. A final control factor of RPW revenue for the quarter divided by this sum was applied to all the

mailing statement information for the quarter.

A summary of the resulting estimates by shape and subclass for Postal Fiscal Year (PFY) 1996 commercial rate Standard Mail (A) appears in USPS-T-28, Exhibit K, Table 1, and for nonprofit mail in Table 2. For the purposes of this analysis the resulting piece and weight estimates were controlled by subclass to the official Government Fiscal Year (GFY) 1996 RPW totals as shown in the tables.

Data Processing

Acquisition of Data

Each quarter Christiansen Associates receives two tapes from the San Mateo Data Center containing the PERMIT System Transaction records. BRAVIS records are sent on disk from the various BRAVIS sites throughout the country. The BRAVIS system was completely replaced by the PERMIT system as of AP 09 1997

PERMIT Data

Translation of PERMIT Records from VAX Format

The files that we receive are in a VAX variable length record format, with padded blocks. This is not compatible with our operating system (variable length records span blocks), so it is necessary to translate each block of data to Data General format by stripping each block of the padding characters.

Unpack, Translate Data and Remove Reversals - PERMIT Records

Records for non-mail transactions (deposits, refunds, etc.) are skipped. Unused information, such as clerk's initials, supervisor's initials and account balance information, are removed from the record.