DOCKET SECTION

USPS-RT-2

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

POSTAL RATE AND FEE CHANGES, 1997

Docket No. R97–1

REBUTTAL TESTIMONY OF
JOHN T. PICKETT
ON BEHALF OF
UNITED STATES POSTAL SERVICE

Table of Contents

1 **Library Reference**

2   The following Library Reference is sponsored by me and should be

3 considered incorporated by reference in my testimony:

4 USPS LR-H-347:   Programs and Spreadsheets Used in Creation of Exhibits in
5   USPS-RT-2
6
7

8 **List of Exhibits**

9
10   At the end of my testimony the following exhibits appear:
11
12 USPS-RT-2A: Breakdown of Attributable/Volume Variable Costs for Fiscal
13   Year 1995, Base Year 1995, Fiscal Year 1996 and Base
14   Year 1996.
15
16 USPS-RT-2B: Calculation of Changes Due to Removal of Empty Space
17   Allocation Algorithm.
18
19 USPS-RT-2C: Percent Empty by TRACS Facility Type.

1

2 **Autobiographical Sketch**

3

4   My name is John T. Pickett. I am an economist in the Cost Attribution

5 section of Product Finance at Postal Service Headquarters. I have been

6 employed as an economist by the Postal Service since 1984. From 1984 to

7 1986, I worked in the Revenue and Cost Analysis Division on transportation

8 costing issues. I supported the Postal Service's attorneys and witnesses on

9 transportation issues in Docket No. R84-1 and worked on a task force that

10 addressed plant load policy. From 1986 to 1989 I worked in the Information

11 Analysis Division on a wide range of projects. I analyzed third-class service

12 performance measurement, supported the rates staff on rate level policy in

13 Docket No. R87-1, and participated in the Integrated Mail Handling System and

14 Pallet Advisory task forces. From 1989 to 1992, I moved to the Demand

15 Research Division where I worked on econometric demand analysis and revenue

16 and volume forecasting. In this capacity, I supported the Postal Service's

17 volume forecasting efforts in Docket No. R90-1 and developed the Postal

18 Service's forecast in Docket No. MC93-1. From 1992 through 1996, I worked in

19 the Pricing office, focusing primarily on second-class mail. In February 1996, I

20 returned to Product Finance and transportation costing.

21   Prior to joining the Postal Service, I was employed as a consulting

22 economist by Charles River Associates, the firm of Kennan and Rohr, and Brown

1 University Professor George Borts. I also taught economics and statistics to

2 students at Brown University, Salve Regina College and the Naval War College.

3 I have testified three times on economic issues before the Postal Rate

4 Commission. In Docket No. MC95-1, I presented the Postal Service's proposal

5 to reclassify regular rate second-class mail. In Docket No. R90-1, I testified on

6 rebuttal on econometric demand analysis and forecasting issues. In Docket No.

7 MC86-3, I testified on parcel post rates and costs. In addition, while working for

8 Kennan and Rohr, I testified on earnings loss due to wrongful death in Rhode

9 Island Superior Court.

10 I received a B.A. in economics from Boston University in 1977 and an

11 M.A. in economics from Brown University in 1980. While at Brown, I completed

12 all the requirements for a Ph.D. except the dissertation.

1   **Purpose of Testimony**

2   The purpose of my testimony is to rebut arguments made by witnesses Haldi

3   (ANM-T-1), Merewitz (FGFSA-T-1), and Ball (FGFSA-T-2). My testimony

4   demonstrates that:

5   1)   . The influence of TRACS on increases in highway transportation
6   costs for noncarrier route nonprofit Standard A Mail has been
7   greatly overstated.
8
9   2)   The TRACS expansion process that accounts for the full space
10   taken up by containers is sound.
11
12   3)   The argument about the TRACS empty space allocation algorithm
13   is a red herring.
14
15   4)   Differences in the incidence of TRACS tests at various facilities do
16   not impart bias.
17
18   5)   Sampling by route trip destination day is necessary to solve
19   practical data collection problems and is not the same as sampling
20   by segment.
21
22   6)   Peak volume loads occur on inbound route trips as well as
23   outbound route trips. Truck size is not determined only by
24   outbound trips.

1

**1.   Dr. Haldi overstates the increases in transportation costs between
Fiscal Year (FY) 1995 and FY 1996 and erroneously blames the increase on
the TRACS highway system, specifically on the empty space allocation in
TRACS.**

        Dr. Haldi (Tr. 22/11816) notes an increase in transportation costs of nearly

$11.5 million for noncarrier route Nonprofit Standard A (NCRNPSA) mail from FY

1995 to FY 1996.   This increase, he claims, is evidence of problems with the

TRACS highway sampling system.

        Dr. Haldi's argument is not supported by the facts. As page 1 of Exhibit

USPS-RT-2A to my testimony shows, almost one-third of the cost increase

(nearly $3.7 million) between FY 1995 and FY 1996[1] is the result of cost

increases in NCRNPSA in other transportation modes.   Obviously, none of this

cost change has anything to do with the TRACS highway sampling system.

        With regard to the remaining $7.6 million in highway cost increases for

NCRNPSA mail, about 40% of the increases are the result of the higher volume

variabilities associated with Dr. Bradley's testimony (USPS-T-13)[2]. As page 2 of

Exhibit USPS-RT-2A shows, Dr. Bradley's analysis increases the volume

variability of purchased highway transportation by 14 percent. Once again, none

of this cost change has anything to do with TRACS highway sampling.

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[1] As Exhibit USPS-RT-2A shows, FY 1996 and Base Year (BY) 1996 highway costs are slightly
different. BY 1996 costs reflect minor changes to TRACS resulting from data encryption required
to meet Commission filing requirements.
[2] The FY 1996 CRA as well as BY 1996 used in this case incorporate Dr. Bradley's new variability
analysis. See the testimony of Postal Service witnesses Alexandrovich (Tr. 13/6957,6959, and
7156) and Patelunas (Tr. 13/7196).

1   The remaining increase of $3.653 million in highway costs, which amounts

2   to about 0.04 cents per piece, is the result of the combination of TRACS highway

3   distribution keys, inflation, and additional cost incurred from additional highway

4   capacity.

5   **2.   Dr. Haldi finds fault with the container portion of the highway**
6   **expansion process. This process is sound.**

7

8   The TRACS highway sampling process expands sampled mail cube to the

9   cube of the containers in which the mail travels, a procedure with which Dr. Haldi

10   disagrees (Tr. 22/11820). The purpose of this procedure is to account for the

11   space that mail actually takes up on the truck, which is greater than the actual

12   cubic volume of mail.   In TRACS, mail in containers is assessed the full cube of

13   the container, because the container and its contents use the space occupied by

14   the container. That space thus becomes unavailable for use by other mail.

15   To some, it may seem like the Postal Service is charging mailers for

16   inefficiency, because containers are not filled. However, there are a number of

17   practical reasons for partially filled containers.

18   A.   Container contents are sampled in TRACS at destinations after the
19   load has settled.

20
21   A container can be filled at origin and, because of settling, appear

22   to be less than 100 percent full at its destination, where the TRACS

23   sample is taken. Since the Postal Service does not offload

1   containers to "top them off" in route, this container was and should

2   be considered filled.

3   B.   A container may be only partially loaded at dispatch time (i.e.,
4   when the truck is leaving).

5

6   When a truck is dispatched, the Postal Service faces a choice:

7   either delay the mail and fill the container to the top or send a

8   partially filled container. Failure to dispatch the mail can result in

9   an uneven workload for downstream facilities or delays and service

10   degradation. Obviously, the preference is to dispatch the mail.

11   C.   A container may only be partially loaded because of its weight.

12

13   Safety is a crucial consideration for the Postal Service. When a

14   postal employee believes a container is becoming too heavy to be

15   handled safely, he or she will dispatch that container and start

16   loading another one. This container takes up the same floor space

17   on the truck as a container that is filled with lighter items.

18   TRACS also expands to the full vertical space of the truck above the

19   container. This is appropriate because containers effectively take up the entire

20   vertical space in the truck. Containers preclude the use of the entire vertical

21   cube of the truck for a number of reasons. First, allowance must be made for

22   mail protruding from the top of the container. Second, allowance must be made

23   for the small rise in the platform caused by the retractable metal bridge that

1   spans the gap between platform and trailer. Third, certain containers,[3] such as

2   postal paks and gaylords, must be loaded with a forklift. In these cases,

3   additional allowances must be made for the few inches of rise caused by the

4   forks and the few inches of overhanging door on the truck.

5   There are additional restrictions associated with wiretainers. Two

6   wiretainers can be stacked, but they must be stacked inside the truck since a

7   double stack will not clear the truck opening. This stacking can only take place

8   when one of the containers is not loaded over the level of its top and when the

9   destination facility has a forklift that can offload the top container. When these

10   two conditions are not met, wiretainers must be loaded unstacked, taking up

11   twice the floorspace of a double stack.

12   There are similar restrictions with regard to pallets. In addition,

13   pallets generally can be stacked only when they are top-capped. The Postal

14   Service does not require a top cap on the top pallet in a stack or on a pallet that

15   is not stacked. Pallets without a top cap generally cannot be used as the bottom

16   pallet in a stack at downstream facilities and take up whatever floor space they

17   occupy.

18   In summary, by assigning the full cube effectively occupied by containers

19   and pallets, TRACS correctly assigns cube to those classes of mail that use up

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[3] Dr. Merewitz claims that the Postal Service never loads mail over six feet (Tr. 22/11417). Not only is this untrue for bedloaded mail (Tr. 7/3310), but the Domestic Mail Manual expressly permits pallet boxes, combined (stacked) pallets, and single pallets as high as 77 inches (DMM 041). A double stack of wiretainers is considerably taller than 6 feet.

1   truck space and, to use Dr. Haldi's phrase, "transportation services" (Tr.

2   22/11826).

3   **3.   The empty space allocation problem is a red herring.**

4

5   Drs. Haldi (Tr. 22/11822) and Merewitz (Tr. 22/11417) claim that TRACS

6   improperly assigns costs of unoccupied vehicle space to the mail on the vehicle

7   at the time of sampling. They each claim this imparts a bias that raises their

8   clients' costs. These claims grossly exaggerate the magnitude of "empty space"

9   costs. Moreover, in the case of parcel post, the empty space allocation algorithm

10   actually slightly reduces subclass costs. This fact can be demonstrated using

11   data already provided by Dr. Merewitz[4]. My Exhibit USPS-RT-2B shows the

12   effect of removing the TRACS empty space algorithm for inter- and intra-BMC

13   highway costs on six categories of mail (parcel post, periodicals, Priority and

14   Express Mail, First-Class Mail, Standard A, and Other Domestic Mail[5]). These

15   calculations show that the empty space allocation algorithm has very little impact

16   on costs. Specifically, for parcel post, as Dr. Merewitz already has confirmed (Tr.

17   22/11639-11640), the removal of the empty space allocation algorithm raises

18   parcel post costs, albeit by less than 1/2 cent per piece. For Periodicals, the

19   removal of the empty space allocation raises Periodicals costs by less than 0.01

20   cents per piece.   Similar insignificant changes are shown for Priority and

---

[4] See FGFSA Library Reference H-3.
[5] What Dr. Merewitz refers to as Priority Mail includes both Priority and Express Mail. His
designation of Standard B other than parcel post includes Free Mail and U.S. Postal Service Mail;
I call this "Other Domestic Mail".

1 Express Mail, First-Class Mail, Standard A, and Other Domestic Mail. These

2 calculations clearly indicate that the empty space allocation algorithm cannot be

3 the source of significant highway cost increases in this proceeding.

4 **4.   TRACS facility sample selection does not impart bias.**

5   Mr. Ball (Tr. 22/11365) claims that the TRACS sample design imparts bias

6 because a higher percentage of TRACS tests are conducted at facilities on

7 inbound runs. Although Ms. Nieto testified to this point[6], a clarification needs to

8 be made. The relatively heavy inbound sampling and the relatively light

9 outbound sampling are compensated for in the expansion process. The process

10 is simple -- the costs associated with inbound and outbound sampled

11 movements are multiplied by an expansion factor which reflects the actual

12 occurrence of the movements. The concept can be thought of as calculating a

13 weighted average. Before the expansion, there are costs associated with

14 sampled inbound movements, and costs associated with sampled outbound

15 movements. Using a very simple example, assume that the sampled cost for a

16 particular subclass of mail on inbound movements is $150, and that the total

17 sampled cost for that same subclass of mail on outbound movements is $50. At

18 this point, these costs reflect the relative percentages of the sample. If we were

19 to simply add these two costs up without weighting and calculate the distribution

20 key, this would reflect bias because there is no accounting for the actual

21 occurrence of these movements in the population. However, the TRACS

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[6] See Tr. 7/3266-3268.

1   occurrence of these movements in the population. However, the TRACS

2   expansion factors (as described by witness Nieto in Tr. 7/3266-3268) weight

3   these two costs before combining them so that the total reflects the occurrence

4   of these movements in the population.

5   To continue our example, let us assume, like Drs. Haldi and Merewitz,

6   that inbound movements and outbound movements occur on a one-to-one basis,

7   such that there were 500 inbound movements and 500 outbound movements. If

8   we sampled 75 inbound movements and 25 outbound movements, the

9   expansion factor for inbound movements would be 500/75, or 6.66, and the

10   expansion factor for outbound movements would be 500/25, or 20. Thus, to

11   calculate the costs that would go into the calculation of the distribution key, we

12   multiply our sampled costs by the expansion factors:

13        $150*6.66 + $50*20 = $1000 + $1000 = $2000

14   So although the sampling percentages were 75% inbound and 25% outbound,

15   the costs that go into the distribution key calculations are 50% inbound and 50%

16   outbound, which reflects the actual occurrence of these movements in our

17   example.

18   **5.   TRACS samples route trip destination days, not segments. This**
19   **sampling strategy is a practical solution to a complex data collection**
20   **problem.**

21

22   Dr. Haldi protests the use of segments as the basis for the TRACS

23   primary sampling unit (Tr. 22/11818). The costs of a contract are caused, he

1   claims, by mail in general, not mail moving on any segment of a contract. This

2   criticism may be based on a misconception. TRACS uses route trip destination

3   days, not segments, as the primary sampling unit. The calculated cubic foot

4   miles of unloaded mail are based on the point of origin of the mail on the contract

5   route trip that day, which is not necessarily the previous stop. For example, if a

6   TRACS test is taken on the second stop (C) of a two-stop trip (A to B to C) and

7   all the mail was loaded at the origin facility (A), the cubic foot miles are based on

8   the total movement of the mail (A to B to C), not the last segment (B to C).

9   To better understand why TRACS uses route trip destination days as its

10   primary sampling unit, it is helpful to review some alternative sampling

11   strategies. Another method that could address Dr. Haldi's criticisms would be to

12   sample all the mail on the trucks at all points on a given contract on a given day.

13   Let me explore why that methodology is not used.

14   Once mail is loaded on the truck, it is not available for sampling without

15   causing disruption to postal operations. Unloading mail specifically for TRACS

16   sampling is out of the question; it must be sampled as it is normally loaded or

17   unloaded. Sampling mail as it is loaded at the origin cannot be used because

18   trucks are loaded over significant periods of time. Origin sampling would greatly

19   extend the length of TRACS highway tests and would raise data collection costs

20   unless some other compensating adjustments (like reducing the sample size)

21   were made. Also, origin sampling cannot be used because the mail loaded at

22   the last minute would be unavailable for sampling.   It is only at destinations that

1   the data collector can be confident that he can draw a sample of all the mail that

2   has received transportation on a vehicle without disrupting operations.

3   In theory, the Postal Service could follow a truck around its route and

4   collect a "moving sample" of mail as it is unloaded at each destination. The

5   difficulty of this proposition is clear; each TRACS highway test can take hours to .

6   conduct. So, a single data collector would be unable to conduct the test and

7   keep up with the truck as it moves to the next destination. It would be necessary

8   to deploy data collectors at every site along a route. Of course, we could

9   purchase additional vehicles specifically for data collection personnel or hire

10   additional data collection personnel, but this would cause data collection costs to

11   increase substantially. Also, a moving TRACS sample strategy would create a

12   peak workload problem for our field data collection staffs, resulting in significant

13   disruption to other data collection systems[7]. Reviewing these alternatives, the

14   best available option is sampling mail at a sample of route trip destination days

15   as it is unloaded.

16   Given that mail must be sampled at destinations, TRACS makes the most

17   of the information at hand. Rather than base cubic foot miles of mail on the last

18   segment, it records the origin of the mail and calculates total cubic foot miles of

19   transportation service.

20

---

[7] On a recent trip to a BMC, I observed a TRACS test being conducted by an experienced data collector. During the course of the TRACS test, the same data collector conducted three IOCS tests.

1 **6.   Dr. Merewitz claims that truck size is determined by peaks that occur**

2 **on outbound route trips. This claim is incorrect.**

3

4   As Mr. Young demonstrates, the size of a truck is determined, in part, by

5 anticipated peak-day volumes. And peaks occur on inbound runs as well as

6 outbound runs[8].   As Exhibit USPS-RT-2C[9] shows, in about 16 percent of the

7 inbound TRACS tests used in FY 1996, trucks arrived full. Another 7 percent

8 were filled to 90 percent of capacity. (There were actually more intra-BMC

9 TRACS tests taken on inbound runs that were full to capacity than on outbound

10 runs.) These data indicate that it is wrong to conclude that the size of trucks is

11 determined by the flow of mail that TRACS defines as "outbound" from facilities,

12 as Dr. Merewitz claims (Tr. 22/11504).

---

[8] It should be noted that the inbound and outbound definitions in TRACS do not necessarily correspond to inbound and outbound operations. Dr. Haldi alludes to this when he refers to a run as mixed (Tr. 22/11857).   A truck that runs outbound from a BMC to one SCF and continues on to a second SCF before returning has one outbound leg (BMC to SCF1) and one inbound leg (SCF2 to BMC). The middle or "mixed" leg is defined in TRACS depending on how the route trips are specified in the contract. This specification does not mean that TRACS necessarily defines this leg in an operationally meaningful way.

[9] This exhibit is based on output from a SAS program which is included in Library Reference H-347, Programs and Spreadsheets Used in Creation of Exhibits in USPS-RT-2.

Exhibit USPS-RT-2A

Breakdown of Attributable/Volume Variable Costs for Fiscal Year 1995, Base Year 1995, Fiscal Year 1996, and Base Year 1996

Cost Segment 14							
Purchased Transportation							
Attributable/Volume Variable Cost							
Non-Carrier Route Nonprofit Third-Class/Standard A							
(Thousands)							
Mode	Fiscal Year 1995		Base Year 1995		Fiscal Year 1996		Base Year 1996
Highway	$	25,162	$	28,087	$	32,723	$	32,729
Air	$	4,053	$	3,905	$	5,406	$	5,170
Rail	$	9,145	$	9,145	$	11,476	$	11,476
Water	$	1,126	$	1,119	$	1,332	$	1,331
Total	$	39,486	$	42,256	$	50,937	$	50,706
Difference with FY 1996	$	11,451	$	8,681	$	-	$	(231)
Difference with BY 1996	$	11,220	$	8,450	$	(231)	$	-
Highway Difference with FY 1996	$	7,561	$	4,636	$	-	$	(6)
Highway Difference with BY 1996	$	7,567	$	4,642	$	6	$	-
Nonhighway Increase to BY 1996	$	3,653						

Cost Segment 14
Purchased Transportation
Highway Attributable/Volume Variable Cost
(Thousands)

	Fiscal Year 1995	Base Year 1995	Fiscal Year 1996	Base Year 1996
Total Attributable/Volume Variable	$ 996,896	$ 1,138,451	$ 1,223,869	$ 1,223,869
Total Costs	$ 1,432,363	$ 1,432,363	$ 1,541,650	$ 1,541,650
Percent Attributable/Volume Variable	69.60%	79.48%	79.39%	79.39%
Increase in 1995 Attributable Cost		$ 141,555		
Percentage Increase Due to Bradley		14.2%		
Difference with BY 1996	$ 226,973	$ 85,418	$ -	$ -
Percent Increase to BY 1996	22.8%	7.5%		

Exhibit USPS-RT-2B

Calculation of Changes Due to Removal of TRACS Empty Space Allocation Algorithm

All Costs and Volumes in Thousands	Including Empty Space Allocation (ESA)					Excluding Empty Space Allocation (ESA)				
	1996Q1	1996Q2	1996Q3	1996Q4	1996	1996Q1	1996Q2	1996Q3	1996Q4	1996
Intra BMC										
Parcel Post Distribution Factors	31.71%	29.66%	26.75%	28.83%		34.32%	29.63%	27.66%	28.70%	
Volume Variable Costs	$55,012	$60,045	$54,805	$74,225		$55,012	$60,045	$54,805	$74,225	
Parcel Post Volume Variable Cost	$17,444	$17,809	$14,660	$21,399	$ 71,313	$18,880	$17,791	$15,159	$21,303	$ 73,133
Inter BMC										
Parcel Post Distribution Factors	23.39%	23.72%	19.21%	19.63%		24.12%	23.52%	18.01%	18.35%	
Volume Variable Costs	$49,800	$53,910	$52,403	$74,832		$49,800	$53,910	$52,403	$74,832	
Parcel Post Volume Variable Cost	$11,648	$12,787	$10,067	$14,690	$ 49,192	$12,012	$12,680	$ 9,438	$13,732	$ 47,861
Total Inter & Intra BMC Parcel Post Cost					$120,505					$ 120,994
Difference with and without ESA										$ 489
Parcel post volume										212,828
Change in Unit Parcel Post Cost										$ 0.00230
Sources:	Distribution Factors:									
	Including ESA from Library Reference FGFSA-H-3, Y96A11d									
	Excluding ESA from Library Reference FGFSA-H-3, Y96A11b									
	Volume Variable Costs:									
	USPS Witness Alexandovich, USPS-T-5, Workpaper B14.1.2									
	Parcel Post Volume Variable Costs = Volume Variable Costs x Parcel Post Distribution Factor									
	Volume:									
	USPS Library Reference H-2, FY 1996 Cost and Revenue Analysis									
Note:	All Costs and Volumes in Thousands									

All Costs and Volumes in Thousands	Including Empty Space Allocation (ESA)					Excluding Empty Space Allocation (ESA)				
	1996Q1	1996Q2	1996Q3	1996Q4	1996	1996Q1	1996Q2	1996Q3	1996Q4	1996
Intra BMC										
Periodicals Distribution Factors	10.67%	9.81%	8.92%	10.28%		7.77%	9.32%	9.44%	10.89%	
Volume Variable Costs	$55,012	$60,045	$54,805	$74,225		$55,012	$60,045	$54,805	$74,225	
Periodicals Volume Variable Costs	$ 5,870	$ 5,890	$ 4,889	$ 7,630	$24,279	$ 4,274	$ 5,596	$ 5,174	$ 8,083	$ 23,127
Inter BMC										
Periodicals Distribution Factors	21.74%	21.41%	20.36%	18.15%		20.54%	21.86%	21.12%	18.84%	
Volume Variable Costs	$49,800	$53,910	$52,403	$74,832		$49,800	$53,910	$52,403	$74,832	
Periodicals Volume Variable Costs	$10,827	$11,542	$10,669	$13,585	$46,623	$10,229	$11,785	$11,068	$14,098	$ 47,180
Total Inter & Intra BMC Periodiclas Cost					$70,902					$ 70,307
Difference with and without ESA										$ (595)
Periodicals volume										10,126,195
Change in Unit Periodicals Cost										$ (0.00006)
Sources:	Distribution Factors:									
	Including ESA from Library Reference FGFSA-H-3, Y96A11d									
	Excluding ESA from Library Reference FGFSA-H-3, Y96A11b									
	Volume Variable Costs:									
	USPS Witness Alexandovich, USPS-T-5, Workpaper B14.1.2									
	Periodicals Volume Variable Costs = Volume Variable Costs x Periodicals Distribution Factor									
	Volume:									
	USPS Library Reference H-2, FY 1996 Cost and Revenue Analysis									
Note:	All Costs and Volumes in Thousands									

All Costs and Volumes in Thousands	Including Empty Space Allocation (ESA)					Excluding Empty Space Allocation (ESA)				
	1996Q1	1996Q2	1996Q3	1996Q4	1996	1996Q1	1996Q2	1996Q3	1996Q4	1996
Intra BMC										
First-Class Distribution Factors	6.08%	11.40%	14.97%	12.73%		6.27%	12.65%	11.72%	13.08%	
Volume Variable Costs	$55,012	$60,045	$54,805	$74,225		$55,012	$60,045	$54,805	$74,225	
First-Class Volume Variable Costs	$ 3,345	$ 6,845	$ 8,204	$ 9,449	$27,843	$ 3,449	$ 7,596	$ 6,423	$ 9,709	$ 27,177
Inter BMC										
First-Class Distribution Factors	10.86%	9.75%	14.99%	7.98%		9.49%	8.50%	15.42%	6.34%	
Volume Variable Costs	$49,800	$53,910	$52,403	$74,832		$49,800	$53,910	$52,403	$74,832	
First-Class Volume Variable Costs	$ 5,408	$ 5,256	$ 7,855	$ 5,972	$24,491	$ 4,726	$ 4,582	$ 8,081	$ 4,744	$ 22,133
Total Inter & Intra BMC First-Class Cost					$52,334					$ 49,310
Difference with and without ESA										$ (3,024)
First-Class volume										98,216,074
Change in Unit First-Class Cost										$ (0.00003)
Sources:	Distribution Factors:									
	Including ESA from Library Reference FGFSA-H-3, Y96A11d									
	Excluding ESA from Library Reference FGFSA-H-3, Y96A11b									
	Volume Variable Costs:									
	USPS Witness Alexandovich, USPS-T-5, Workpaper B14.1.2									
	First-Class Volume Variable Costs = Volume Variable Costs x First-Class Distribution Factor									
	Volume:									
	USPS Library Reference H-2, FY 1996 Cost and Revenue Analysis									
Note:	All Costs and Volumes in Thousands									

All Costs and Volumes in Thousands	Including Empty Space Allocation (ESA)					Excluding Empty Space Allocation (ESA)				
	1996Q1	1996Q2	1996Q3	1996Q4	1996	1996Q1	1996Q2	1996Q3	1996Q4	1996
Intra BMC										
Priority & Express Mail Distribution Factors	4.63%	6.48%	4.43%	4.62%		3.09%	7.36%	3.88%	3.96%	
Volume Variable Costs	$ 55,012	$ 60,045	$ 54,805	$ 74,225		$ 55,012	$ 60,045	$ 54,805	$ 74,225	
Priority & Express Mail Volume Variable Costs	$ 2,547	$ 3,891	$ 2,428	$ 3,429	$ 12,295	$ 1,700	$ 4,419	$ 2,126	$ 2,939	$ 11,185
Inter BMC										
Priority & Express Mail Distribution Factors	3.50%	0.95%	1.42%	1.56%		3.83%	0.84%	1.42%	1.37%	
Volume Variable Costs	$ 49,800	$ 53,910	$ 52,403	$ 74,832		$ 49,800	$ 53,910	$ 52,403	$ 74,832	
Priority & Express Mail Volume Variable Costs	$ 1,743	$ 512	$ 744	$ 1,167	$ 4,167	$ 1,907	$ 453	$ 744	$ 1,025	$ 4,130
Total Inter & Intra BMC Priority & Express Mail Cost					$ 16,462					$ 15,314
Difference with and without ESA										$ (1,147)
Priority & Express Mail volume										994,846
Change in Unit Priority & Express Mail Cost										(0.0012)
Sources:	Distribution Factors:									
	Including ESA from Library Reference FGFSA-H-3, Y96A11d									
	Excluding ESA from Library Reference FGFSA-H-3, Y96A11b									
	Volume Variable Costs:									
	USPS Witness Alexandovich, USPS-T-5, Workpaper B14.1.2									
	Priority & Express Mail Volume Variable Costs = Volume Variable Costs x Priority & Express Mail Distribution Factor									
	Volume:									
	USPS Library Reference H-2, FY 1996 Cost and Revenue Analysis									
	Priority & Expresss Mail are shown as Priority Mail in FGFSA-H-3									
Note:	All Costs and Volumes in Thousands									

All Costs and Volumes in Thousands	Including Empty Space Allocation (ESA)					Excluding Empty Space Allocation (ESA)				
	1996Q1	1996Q2	1996Q3	1996Q4	1996	1996Q1	1996Q2	1996Q3	1996Q4	1996
Intra BMC										
Standard A Distribution Factors	30.94%	27.53%	34.20%	27.89%		32.82%	26.03%	35.44%	27.92%	
Volume Variable Costs	$55,012	$60,045	$54,805	$74,225		$55,012	$60,045	$54,805	$74,225	
Standard A Volume Variable Costs	$17,021	$16,530	$18,743	$20,701	$ 72,996	$18,055	$15,630	$19,423	$20,724	$ 73,831
Inter BMC										
Standard A Distribution Factors	29.67%	31.55%	31.19%	37.59%		30.72%	32.79%	30.64%	39.49%	
Volume Variable Costs	$49,800	$53,910	$52,403	$74,832		$49,800	$53,910	$52,403	$74,832	
Standard A Volume Variable Costs	$14,776	$17,009	$16,344	$28,129	$ 76,258	$15,299	$17,677	$16,056	$29,551	$ 78,583
Total Inter & Intra BMC Standard A Cost					$149,254					$ 152,414
Difference with and without ESA										$ 3,160
Standard A volume										71,686,135
Change in Unit Standard A Cost										$ 0.00004
Sources:	Distribution Factors:									
	Including ESA from Library Reference FGFSA-H-3, Y96A11d									
	Excluding ESA from Library Reference FGFSA-H-3, Y96A11b									
	Volume Variable Costs:									
	USPS Witness Alexandovich, USPS-T-5, Workpaper B14.1.2									
	Standard A Volume Variable Costs = Volume Variable Costs x Standard A Distribution Factor									
	Volume:									
	USPS Library Reference H-2, FY 1996 Cost and Revenue Analysis									
Note:	All Costs and Volumes in Thousands									

All Costs and Volumes in Thousands	Including Empty Space Allocation (ESA)					Excluding Empty Space Allocation (ESA)				
	1996Q1	1996Q2	1996Q3	1996Q4	1996	1996Q1	1996Q2	1996Q3	1996Q4	1996
Intra BMC										
Other Domestic Mail Distribution Factors	14.21%	14.73%	10.26%	15.26%		14.93%	14.64%	11.57%	15.15%	
Volume Variable Costs	$55,012	$60,045	$54,805	$74,225		$55,012	$60,045	$54,805	$74,225	
Other Domestic Mail Volume Variable Costs	$ 7,817	$ 8,845	$ 5,623	$11,327	$33,612	$ 8,213	$ 8,791	$ 6,341	$11,245	$ 34,590
Inter BMC										
Other Domestic Mail Distribution Factors	9.80%	11.61%	12.13%	14.27%		10.43%	11.40%	12.81%	15.07%	
Volume Variable Costs	$49,800	$53,910	$52,403	$74,832		$49,800	$53,910	$52,403	$74,832	
Other Domestic Mail Volume Variable Costs	$ 4,880	$ 6,259	$ 6,356	$10,679	$28,174	$ 5,194	$ 6,146	$ 6,713	$11,277	$ 29,330
Total Inter & Intra BMC Other Domestic Mail Cost					$61,786					$ 63,920
Difference with and without ESA										$ 2,134
Other Domestic Mail volume										1,146,120
Change in Unit Other Domestic Mail Cost										$ 0.00186
Sources:										
Distribution Factors:										
Including ESA from Library Reference FGFSA-H-3, Y96A11d										
Excluding ESA from Library Reference FGFSA-H-3, Y96A11b										
Volume Variable Costs:										
USPS Witness Alexandovich, USPS-T-5, Workpaper B14.1.2										
Other Domestic Mail Volume Variable Costs = Volume Variable Costs x Other Domestic Mail Distribution Factor										
Volume:										
USPS Library Reference H-2, FY 1996 Cost and Revenue Analysis										
Other Domestic Mail includes Standard B except parcel post, free mail, and USPS mail										
All Costs and Volumes in Thousands										
Note:										

Exhibit USPS-RT-2C

Percent Empty by TRACS Facility Type

	Number of Tests			Percent by FACCAT	
FACCAT	0%	1-10	Total	0%	1-10
1	160	72	1013	16%	7%
2	29	9	128	23%	7%
3	9	2	31	29%	6%
4	136	52	425	32%	12%
5	16	5	84	19%	6%
All Facilities	350	140	1681	21%	8%
FACCAT Key:					
1=	Inbound to BMC, Test taken at BMC				
2=	Inbound to BMC, Test taken at SCF				
3=	Inbound to BMC, Test taken at another facility				
4=	Outbound from BMC, Test taken at SCF				
5=	Outbound from BMC, test taken at another facility				