

USPS-T-2

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

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POSTAL RATE AND FEE CHANGES, 2006

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Docket No. R2006-1

DIRECT TESTIMONY OF  
HERBERT B. HUNTER, III  
ON BEHALF OF THE  
UNITED STATES POSTAL SERVICE

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ASSOCIATED CATEGORY 1 LIBRARY REFERENCES

- USPS-LR-K-21/R2005-1 Handbook F-65, Data Collection User's Guide for Cost Systems, TL-2, September 2001 (1 CD)
- USPS-LR-L-23/R2006-1 Supplemental Statistical Programs Policies and Data Collection Instructions (1 CD)
- USPS-LR-L-27/R2006-1 TRACS-Commercial Air Subsystem / Statistical and Computer Documentation (Source Code and Data on CD-ROM)
- USPS-LR-L-28/R2006-1 TRACS-CODES Computer System Documentation and Source Code (w/CD-ROM)
- USPS-LR-L-29/R2006-1 TRACS-Network Air Subsystem / Statistical and Computer Documentation (Source Code and Data on CD-ROM)
- USPS-LR-L-30/R2006-1 TRACS-Highway Subsystem / Statistical and Computer Documentation (Source Code and Data on CD-ROM)
- USPS-LR-L-31/R2006-1 TRACS-Freight Rail Subsystem / Statistical and Computer Documentation (Source Code and Data on CD-ROM)

1 DIRECT TESTIMONY  
2 OF  
3 HERBERT B. HUNTER, III  
4

AUTOBIOGRAPHICAL SKETCH

5 My name is Herbert B. Hunter, III. I am a Mathematical Statistician in  
6 Revenue and Cost Systems, Finance at the Postal Service headquarters in  
7 Washington, D.C. I began my career with the Postal Service in 1972 and have held  
8 positions in Revenue and Cost Systems since 1983.

9 In my present position, and in my previous positions as Operations Research  
10 Analyst and Senior Mathematical Statistician in the Office of Revenue and Cost  
11 Systems, I have worked on the design and development of statistical surveys, and  
12 have had oversight responsibility for improving existing data collection systems used  
13 by the Postal Service to produce ongoing estimates of revenue, mail volume, costs,  
14 and service performance. I have been the project manager for the Transportation  
15 Cost System (TRACS) since May 2004, and have appeared as a witness on behalf of  
16 the Postal Service in Docket Nos. R2005-1, R2001-1, R2000-1, and MC96-2. I have  
17 provided technical support to the Postal Service on rollforward costs, and revenue  
18 and mail volumes, in Docket Nos. R97-1, R94-1, R90-1, R87-1, and R84-1.

19 I received a B.S. in mathematics from George Mason University in Virginia in  
20 1984 and have completed additional graduate courses in applied statistics at George  
21 Mason University and George Washington University in Washington, D.C. I am a  
22 member of the American Statistical Association.

## PURPOSE AND SCOPE

1           The purpose of my testimony is to describe the Transportation Cost System  
2 (TRACS), which is a statistical information system used by the Postal Service in this  
3 docket to distribute Base Year (BY) purchased transportation costs to individual mail  
4 categories. TRACS is comprised of four independent subsystems: Highway, Freight  
5 Rail, Commercial Air, and Network Air. These four subsystems are continuous  
6 ongoing surveys, each with its own survey design and estimation methodology.  
7 My testimony covers the general design of each TRACS subsystem used by the  
8 Postal Service to develop estimates of related total costs by major mail category for  
9 BY 2005. The BY 2005 cost estimates along with confidence interval estimates are  
10 shown in Tables 1-8 of my testimony. The library references associated with, and  
11 discussed in, my testimony are all Category 1 library references.

12           My testimony relies on no input data from other witnesses. TRACS data are  
13 provided to the Base Year Costs witness Milanovic (USPS-T-9) and the  
14 Transportation Costs witness Kelley (USPS-T-15).

1 I. HIGHWAY

2 The TRACS-Highway subsystem produces separate distribution key estimates  
3 for four types of purchased highway contracts: Inter-BMC<sup>1</sup>, Intra-BMC, Inter-SCF<sup>2</sup>,  
4 and Intra-SCF. The costs for each contract type are derived from one or more  
5 accounts. The universe under study is all mail whose contract costs accrue to the  
6 following highway accounts:

7 Inter-BMC: Account Number 53131 (regular Inter-BMC);

8 Intra-BMC: Account Number 53127 (regular Intra-BMC);

9 Inter-SCF: Account Numbers 53124 (regular Inter-SCF), 53609 (regular  
10 inter-P&DC), 53614 (regular inter-cluster), and 53618 (regular  
11 inter-area);

12 Intra-SCF: Account Numbers 53121 (regular intra-SCF), 53601 (regular  
13 intra-P&DC), and 53605 (regular intra-district).

14 The primary sampling unit (PSU) for all four contract types is the route-trip-  
15 stop-day, which is defined as all mail unloaded from a truck at one facility on a  
16 specific trip, on a specific day. The survey design is essentially the same for all  
17 contract types, though each has its own sampling frame. Each highway sampling  
18 frame is a list of stop-days<sup>3</sup>. Constructing the sampling frames involves three major  
19 steps. In the first step, routing and operational information is extracted from the

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<sup>1</sup> Bulk Mail Center.

<sup>2</sup> Sectional Center Facility.

<sup>3</sup> Abbreviated name for route-trip-stop-days.

1 National Air and Surface System (NASS)<sup>4</sup> for all highway contract routes that are  
2 expected to be in operation in the upcoming quarter. The information extracted from  
3 NASS includes the route number, the trip number, the facilities where the vehicle  
4 stops, and the days of a week when the trip operates. In the second step, account  
5 information is extracted from the Highway Pay Master File<sup>5</sup> for the same contract  
6 routes. Account information is used to group the contracts into the four contract  
7 types. In the third and final step, ZIP Code and facility type are extracted from the  
8 NASS Facility File<sup>6</sup> for each stop on a route. Facility information is used for stratifying  
9 the sampling frame, as well as for administering the survey.

10 The sample design consists of three stages. In the first stage, within each  
11 contract type, stop-days are stratified based on the type of facility and whether the  
12 trip is inbound or outbound. A systematic random sample of stop-days is selected  
13 from each stratum. In the second stage, for each selected stop-day, a subsample of  
14 wheeled containers, pallets and loose items<sup>7</sup> off-loaded at the test facility is selected.  
15 From selected containers, a third stage sample of items is selected. For pallets and  
16 loose items selected at the second stage, there is no third stage sample, and all  
17 selected mail is recorded.

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<sup>4</sup> See Section III and Appendix I-1 of TRACS Highway Subsystem Statistical and Computer Documentation, filed as USPS-LR-L-30, for additional details regarding NASS.

<sup>5</sup> See Section III and Appendix I-2 of TRACS Highway Subsystem Statistical and Computer Documentation, filed as USPS-LR-L-30, for additional details regarding the Pay Master File.

<sup>6</sup> See Section III and Appendix I-3 of TRACS Highway Subsystem Statistical and Computer Documentation, filed as USPS-LR-L-30, for additional details regarding NASS Facility File.

<sup>7</sup> Items include pieces, parcels, bundles, sacks, trays, or tubs. Items that are not in wheeled containers or on pallets are called loose items.

1 Weight and volume information for each mail category is recorded for the  
2 contents of sampled items. For sampled pallets, the dimensions of the pallet and the  
3 proportion of the pallet's space occupied by each mail category are recorded. For  
4 developing estimates of cubic-foot-miles, data collectors also record the facility where  
5 the item, or the pallet, was loaded onto the vehicle (to establish miles traveled), and  
6 the percentage of vehicle floor space occupied by palletized mail, containerized  
7 items, and loose items (to establish cubic-feet utilized). Data are recorded directly  
8 into portable microcomputers using the Computerized On-Site Data Entry System  
9 (CODES) software. From the sample data, the cubic-foot-miles for each contract  
10 type are estimated by mail category.

11 Distribution key estimates are calculated by dividing the total cubic-foot-miles  
12 for each mail category by the total cubic-foot-miles. Separate distribution keys  
13 calculated for each quarter, for each of the four contract types, are used to distribute  
14 quarterly costs by contract type. Estimated annual costs, shown in Tables 1-4, are  
15 the sums of the quarterly costs. The estimated confidence intervals for annual costs,  
16 also shown in Tables 1-4, are derived from the estimated coefficients of variation  
17 (CVs) of the quarterly distribution keys.

18 A more detailed description of the TRACS-Highway sample design and  
19 estimation methodology is contained in Sections I-VII of Library Reference USPS-LR-  
20 L-30, TRACS Highway Subsystem Statistical and Computer Documentation. TRACS  
21 data collection procedures are detailed further in Chapter 5 of Handbook F-65, filed  
22 as Library Reference USPS-LR-K-21/R2005-1, with supplemental instructions in

1 Library Reference USPS-LR-L-23, Supplemental Statistical Programs Policies and  
2 Data Collection Instructions. The CODES software, used on laptop computers to  
3 record the data, is documented in Section 1 of Library Reference USPS-LR-L-28.

## 4 II. FREIGHT RAIL

5 The TRACS-Freight Rail subsystem produces distribution key estimates for  
6 the Inter-BMC freight rail account (53143). The universe under study is all mail  
7 whose freight rail costs accrue to this account. The PSU for the freight rail  
8 subsystem is the origin-destination-day, which is defined as all mail being transported  
9 from a given origin BMC to a given destination on a given day. While the Postal  
10 Service contracts for highway transportation by route, with one route consisting of  
11 multiple trips and stops, freight rail contracts entail just one origin and one  
12 destination. A trip between the origin and the destination facility is referred to as a  
13 rail movement.

14 The freight rail sampling frame is a list of all origin-destination-days (PSUs) for  
15 which the destination BMC is not a mail bag depository or mailer's plant, and for  
16 which the movement is not used exclusively for empty equipment. The freight rail  
17 sampling frame is developed using 12 weeks of historical records from the Rail  
18 Management Information System (RMIS).<sup>8</sup> The information extracted from RMIS  
19 includes the origin BMC, the destination facility, the date of arrival, the number of  
20 tractor trailer vans on the movement, and the cost of the movement.

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<sup>8</sup> See Section III-1 and Appendix I-2 of TRACS Freight Rail Subsystem Statistical and Computer Documentation, filed as USPS-LR-L-31, for additional details regarding RMIS.

1           The sample design consists of four stages. In the first stage, a random  
2 sample of origin-destination-days is selected from the sampling frame. In the second  
3 stage, one van is randomly selected from the vans in the selected PSU. In the third  
4 stage, a subsample of wheeled containers, pallets and loose items off-loaded from  
5 the test van is selected. From selected containers, a fourth stage sample of items is  
6 selected. For pallets and loose items selected at the third stage, there is no fourth  
7 stage sample, and all selected mail is recorded. The freight rail sample design at the  
8 third and fourth stages is the same as the highway sample design at the second and  
9 third stages.

10           Weight and volume information by mail category is recorded for the contents  
11 of sampled items. For sampled pallets, the dimensions of the pallet and the  
12 proportion of the pallet's space occupied by each mail category are recorded. Data  
13 collectors also record the percentage of van floor space occupied by palletized mail,  
14 containerized items, and loose items. Data are recorded directly into portable  
15 microcomputers using CODES software.

16           The sample data are expanded by mail category to the cubic-foot-miles of the  
17 test van. The cost for the trip is multiplied by the cubic-foot-mile proportions to  
18 estimate mail category costs for the trip. The costs for tested trips are then  
19 expanded to represent all trips in the quarter.

20           Distribution key estimates are calculated by dividing the expanded costs for a  
21 mail category by the total expanded costs. Separate distribution keys calculated for  
22 each quarter are used to distribute quarterly costs. Estimated annual costs, shown in

1 Table 5, are the sums of the quarterly costs. The estimated confidence intervals for  
2 the annual costs, also shown in Table 5, are derived from the estimated CVs of the  
3 quarterly distribution keys.

4 A more detailed description of the TRACS-Rail sample design and estimation  
5 methodology is contained in Sections I-VII of Library Reference USPS-LR-L-31,  
6 TRACS Freight Rail Subsystem Statistical and Computer Documentation. TRACS  
7 data collection procedures are detailed further in Chapter 6 of Handbook F-65, filed  
8 as Library Reference USPS-LR-K-21, with supplemental instructions in Library  
9 Reference USPS-LR-L-23, Supplemental Statistical Programs Policies and Data  
10 Collection Instructions. The CODES software, used on laptop computers to record  
11 the data, is documented in Section 1 of Library Reference USPS-LR-L-28.

### III. COMMERCIAL AIR

12 The TRACS-Commercial Air subsystem produces distribution key estimates  
13 for commercial air transportation cost accounts. The universe under study is all mail  
14 transported under purchased transportation contracts on passenger airlines from a  
15 domestic origin to a domestic destination. It does not include mail transported by air  
16 taxi, Alaska, Hawaii, HASP, Christmas, or Network Air services. The PSU is a flight-  
17 day, and is defined as all mail dispatched from the specified origin on a given day via  
18 a particular airline and flight with the same first-leg destination reflected on the  
19 routing label or dispatch and routing (D&R) tag on each mail item being transported.  
20 The sampling frame is constructed by extracting recent dispatch records from the

1 Plan vs. Actual (PVA) file.<sup>9</sup> The PVA file maintains historical routing information  
2 (carrier, origin, destination, and date of the flight) about an individual dispatch, and  
3 specifies the gross weight and predominant mail class for all items in the dispatch.

4 The sample design consists of two stages. In the first stage, a stratified  
5 random sample of flight-days is selected from the sampling frame. In the second  
6 stage, for each selected flight-day, a subsample of mail items dispatched for that  
7 flight is selected for detailed sampling.

8 Dispatch information is recorded for each selected mail item. Weight and  
9 volume information is then recorded by mail category for the contents of the selected  
10 items. The dispatch information is used in the expansion process to link the sample  
11 data with dispatch records in the PVA file. TRACS sample data are recorded directly  
12 into a portable microcomputer using CODES software.

13 The sample data are expanded by mail category and primary mail class (as  
14 indicated on the routing tags affixed to the mail items) to the pound-miles of mail for  
15 the test flight and then to the total pound-miles of mail for each stratum for the  
16 quarter. PVA records are used to determine the pound-miles of mail for the test  
17 flight, as well as the total pound-miles of mail for the quarter for each primary mail  
18 class. The expanded pound-miles for a mail category are obtained by adding fully  
19 expanded pound-miles across all primary mail classes.

20 Distribution key estimates are calculated by dividing the expanded pound-  
21 miles for a mail category by the total expanded pound-miles. Separate distribution

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<sup>9</sup> See Section III and Appendix I-A of TRACS Commercial Air Subsystem Statistical and Computer

1 keys calculated for each quarter are used to distribute quarterly costs. Estimated  
2 annual costs, shown in Table 6, are the sums of the quarterly costs. The estimated  
3 confidence intervals for annual costs, also shown in Table 6, are derived from the  
4 estimated CVs of the quarterly costs.

5 A more detailed description of the TRACS-Air sample design and estimation  
6 methodology is contained in Sections I-VIII of Library Reference USPS-LR-L-27,  
7 TRACS Commercial Air Subsystem Statistical and Computer Documentation.  
8 TRACS data collection procedures are detailed further in Chapter 8 of Handbook F-  
9 65, filed as Library Reference USPS-LR-K-21, with supplemental instructions in  
10 Library Reference USPS-LR-L-23, Supplemental Statistical Programs Policies and  
11 Data Collection Instructions. The CODES software, used on laptop computers to  
12 record the data, is documented in Section 1 of Library Reference USPS-LR-L-28.

#### 13 IV. NETWORK AIR

14 There are two major air networks: Network Air Day Turn, and Network Air  
15 Night Turn. The day turn network normally operates six days per week, while the  
16 night turn network normally operates five days per week. Both networks are serviced  
17 by Federal Express (FedEx) through its main hub located in Memphis, Tennessee.

18 The TRACS-Network Air subsystem is a continuous, ongoing statistical  
19 sampling system comprised of two component subsystems: the Network Air Day  
20 Turn subsystem, and the Network Air Night Turn subsystem. These two network air  
21 subsystems are designed to produce distribution key estimates for network air

1 transportation cost accounts. Two distribution keys are produced: one based on  
2 cubic-feet for the day turn network, and the other based on pounds for the night turn  
3 network.

4         The universe under study for the TRACS-Network Air subsystem is all mail  
5 moved on the day turn and night turn networks. It does not include mail transported  
6 on commercial airlines or by air taxi, Alaska, Hawaii, HASP, or Christmas network  
7 services. The sample design, data collection procedures and estimation  
8 methodology for each subsystem are similar, except for the inclusion of a density  
9 factor developed to convert estimated pounds of mail to estimated cubic-feet of mail  
10 in the day turn subsystem.

11         The PSU is a facility-day which is defined as all mail that is scanned at a  
12 particular facility on a specific day during the quarter, and which travels on the same  
13 first-leg network flight to the hub, where it is then placed on another network flight  
14 leaving the hub. The sampling frame for each subsystem is a list of facility-days,  
15 which is constructed by extracting a recent history of each network's flight data from  
16 a postal administrative database called the Enterprise Data Warehouse (EDW).

17         The sample design consists of two stages: at the first stage, the PSUs are  
18 grouped into sampling strata and a random sample of facility-days is selected within  
19 each stratum; at the second stage, for each selected facility-day, a subsample of mail  
20 items transported by the network to the hub is selected for detailed sampling.

21         Routing information for the network flight, including the origin and destination  
22 cities, and the dispatch date and time, is recorded for each selected mail item.

1 Weight and volume information by mail category is then recorded for the contents of  
2 each selected mail item. The routing information is used in the expansion process to  
3 link the sample data with records in the EDW file. TRACS sample data are recorded  
4 directly into a portable microcomputer using CODES software.

5 For each sampled PSU, the sample pounds of mail are expanded to the total  
6 pounds of mail for the facility and test day. For each facility, total sample pounds for  
7 each mail category are then expanded to the total pounds of mail for the facility and  
8 quarter by primary mail class (as indicated on the routing tags affixed to the mail  
9 items), for each subsystem. A final expansion is made to the total pounds of mail for  
10 each primary mail class and sampling stratum combination, for each subsystem.  
11 Total pounds of mail for the expansion process are obtained from the EDW. For the  
12 day turn subsystem, primary mail class density factors are developed using day turn  
13 cubic-feet and weight data obtained from the EDW. The density factors are applied  
14 to the expanded pounds by primary mail class to obtain expanded cubic-feet. The  
15 final expanded pounds and cubic-feet totals for the night turn and day turn  
16 subsystems, respectively, are obtained for each mail category by summing the fully  
17 expanded pounds, or cubic-feet, across the primary mail classes.

18 Distribution key estimates for each subsystem are calculated by dividing the  
19 total expanded pounds or cubic-feet for each mail category by the total expanded  
20 pounds or cubic-feet. Separate distribution keys for each subsystem are developed  
21 each postal quarter to distribute volume variable costs to mail categories. Estimated  
22 annual cost totals for each mail category shown in Tables 7-8 are obtained by

1 summing the estimated cost totals across quarters. The estimated confidence  
2 intervals for the estimated annual costs shown in Tables 7-8 are derived from the  
3 estimated CVs of the quarterly costs.

4 A more detailed description of the TRACS-Network Air sample design and  
5 estimation methodology is found in Sections I-VII of Library Reference  
6 USPS-LR-L-29, TRACS Network Air Subsystem Statistical and Computer  
7 Documentation. TRACS data collection procedures are detailed in Chapter 8 of  
8 Handbook F-65, filed as Library Reference USPS-LR-K-21, with supplemental  
9 instructions in Library Reference USPS-LR-L-23, Supplemental Statistical Programs  
10 Policies and Data Collection Instructions. The CODES software, used on laptop  
11 computers to record the sample data, is documented in Section 1 of Library  
12 Reference USPS-LR-L-28.

## APPENDIX

### List of Tables

Table 1. BY05 Inter-BMC Highway Estimated Costs and Confidence Intervals

Table 2. BY05 Intra-BMC Highway Estimated Costs and Confidence Intervals

Table 3. BY05 Inter-SCF Highway Estimated Costs and Confidence Intervals

Table 4. BY05 Intra-SCF Highway Estimated Costs and Confidence Intervals

Table 5. BY05 Freight Rail Estimated Costs and Confidence Intervals

Table 6. BY05 Commercial Air Estimated Costs and Confidence Intervals

Table 7. BY05 Network Air Day Turn Estimated Costs and Confidence Intervals

Table 8. BY05 Network Air Night Turn Estimated Costs and Confidence Intervals

Table 1. BY05 Inter-BMC Highway Estimated Costs and Confidence Intervals

<b>Mail Category</b>	<b>CV</b>	<b>Lower 95% C.L. (\$1,000)</b>	<b>Cost (\$1,000)</b>	<b>Upper 95% C.L. (\$1,000)</b>
1C Single-Piece Letters	0.109	9,324	11,844	14,364
1C Presort Letters	0.141	4,833	6,670	8,507
1C Single-Piece Cards	0.230	52	94	137
1C Presort Cards	0.322	32	88	144
Priority Mail	0.108	8,136	10,322	12,508
Express Mail	0.293	31	73	114
Periodicals	0.057	34,796	39,206	43,616
Standard Mail ECR	0.109	9,693	12,314	14,936
Standard Mail Regular	0.044	79,924	87,397	94,870
Parcel Post	0.048	90,432	99,766	109,100
Bound Printed Matter	0.100	8,699	10,821	12,944
Media Mail	0.048	34,829	38,460	42,091
US Postal Service	0.232	848	1,555	2,263
Free Mail	0.300	236	575	913
International Mail	0.205	5,811	9,712	13,614
<b>Total</b>			<b>328,898</b>	

Table 2. BY05 Intra-BMC Highway Estimated Costs and Confidence Intervals

<b>Mail Category</b>	<b>CV</b>	<b>Lower 95% C.L. (\$1,000)</b>	<b>Cost (\$1,000)</b>	<b>Upper 95% C.L. (\$1,000)</b>
1C Single-Piece Letters	0.101	12,467	15,560	18,653
1C Presort Letters	0.131	5,112	6,876	8,639
1C Single-Piece Cards	0.455	32	296	560
1C Presort Cards	0.206	32	53	75
Priority Mail	0.078	20,768	24,525	28,283
Express Mail	0.183	539	840	1,142
Periodicals	0.086	18,163	21,828	25,493
Standard Mail ECR	0.118	10,263	13,356	16,449
Standard Mail Regular	0.055	65,546	73,388	81,231
Parcel Post	0.054	84,443	94,370	104,298
Bound Printed Matter	0.079	20,127	23,812	27,497
Media Mail	0.070	26,445	30,673	34,901
US Postal Service	0.206	1,366	2,289	3,212
Free Mail	0.327	219	610	1,000
International Mail	0.326	1,336	3,708	6,081
<b>Total</b>			<b>312,186</b>	

Table 3. BY05 Inter-SCF Highway Estimated Costs and Confidence Intervals

<b>Mail Category</b>	<b>CV</b>	<b>Lower 95% C.L. (\$1,000)</b>	<b>Cost (\$1,000)</b>	<b>Upper 95% C.L. (\$1,000)</b>
1C Single-Piece Letters	0.055	160,261	179,763	199,266
1C Presort Letters	0.111	101,433	129,733	158,032
1C Single-Piece Cards	0.253	1,016	2,016	3,016
1C Presort Cards	0.278	1,454	3,199	4,944
Priority Mail	0.076	147,151	172,748	198,344
Express Mail	0.165	2,716	4,012	5,307
Periodicals	0.089	40,892	49,546	58,200
Standard Mail ECR	0.187	6,922	10,922	14,921
Standard Mail Regular	0.117	38,626	50,093	61,560
Parcel Post	0.146	20,618	28,902	37,185
Bound Printed Matter	0.214	3,951	6,814	9,677
Media Mail	0.169	5,946	8,891	11,837
US Postal Service	0.221	2,440	4,308	6,177
Free Mail	0.387	573	2,378	4,182
International Mail	0.342	5,841	17,743	29,646
<b>Total</b>			<b>671,067</b>	

Table 4. BY05 Intra-SCF Highway Estimated Costs and Confidence Intervals

<b>Mail Category</b>	<b>CV</b>	<b>Lower 95% C.L. (\$1,000)</b>	<b>Cost (\$1,000)</b>	<b>Upper 95% C.L. (\$1,000)</b>
1C Single-Piece Letters	0.044	106,404	116,473	126,541
1C Presort Letters	0.090	45,490	55,187	64,884
1C Single-Piece Cards	0.096	1,551	1,912	2,273
1C Presort Cards	0.181	1,374	2,131	2,888
Priority Mail	0.047	146,392	161,382	176,371
Express Mail	0.137	6,004	8,215	10,426
Periodicals	0.055	64,514	72,344	80,173
Standard Mail ECR	0.138	32,602	44,736	56,869
Standard Mail Regular	0.056	99,370	111,740	124,110
Parcel Post	0.080	46,698	55,340	63,982
Bound Printed Matter	0.108	17,325	21,983	26,641
Media Mail	0.140	10,086	13,886	17,686
US Postal Service	0.179	4,089	6,305	8,522
Free Mail	0.280	943	2,094	3,245
International Mail	0.206	7,524	12,623	17,722
<b>Total</b>			<b>686,351</b>	

Table 5. BY05 Freight Rail Estimated Costs and Confidence Intervals

<b>Mail Category</b>	<b>CV</b>	<b>Lower 95% C.L. (\$1,000)</b>	<b>Cost (\$1,000)</b>	<b>Upper 95% C.L. (\$1,000)</b>
1C Single-Piece Letters	0.263	74	153	232
1C Presort Letters	0.478	2	32	63
1C Single-Piece Cards	1.001	-	-	-
1C Presort Cards	1.001	-	16	46
Priority Mail	0.261	97	199	300
Express Mail	-	-	-	-
Periodicals	0.056	6,489	7,289	8,090
Standard Mail ECR	0.085	3,914	4,700	5,487
Standard Mail Regular	0.026	28,005	29,526	31,047
Parcel Post	0.030	22,055	23,428	24,801
Bound Printed Matter	0.092	1,923	2,344	2,766
Media Mail	0.041	9,788	10,649	11,511
US Postal Service	0.395	29	131	232
Free Mail	0.453	9	78	147
International Mail	0.114	1,573	2,027	2,481
<b>Total</b>			<b>80,573</b>	

Table 6. BY05 Commercial Air Estimated Costs and Confidence Intervals

<b>Mail Category</b>	<b>CV</b>	<b>Lower 95% C.L. (\$1,000)</b>	<b>Cost (\$1,000)</b>	<b>Upper 95% C.L. (\$1,000)</b>
1C Single-Piece Letters	0.044	64,103	70,215	76,327
1C Presort Letters	0.039	103,655	112,115	120,576
1C Single-Piece Cards	0.124	361	477	593
1C Presort Cards	0.153	1,313	1,876	2,439
Priority Mail	0.084	16,737	20,046	23,356
Express Mail	0.111	2,282	2,914	3,546
Periodicals	0.121	3,543	4,641	5,739
Standard Mail ECR	0.284	621	1,399	2,177
Standard Mail Regular	0.189	3,532	5,613	7,695
Parcel Post	0.844	-	838	2,224
Bound Printed Matter	0.231	281	513	745
Media Mail	0.175	208	317	425
US Postal Service	0.495	35	1,189	2,344
Free Mail	0.406	22	106	191
International Mail	0.095	7,839	9,636	11,434
<b>Total</b>			<b>231,897</b>	

Table 7. BY05 Network Air Day Turn Estimated Costs and Confidence Intervals

<b>Mail Category</b>	<b>CV</b>	<b>Lower 95% C.L. (\$1,000)</b>	<b>Cost (\$1,000)</b>	<b>Upper 95% C.L. (\$1,000)</b>
1C Single-Piece Letters	0.017	130,075	134,522	138,968
1C Presort Letters	0.019	94,741	98,468	102,195
1C Single-Piece Cards	0.241	344	652	959
1C Presort Cards	0.155	1,490	2,139	2,789
Priority Mail	0.003	824,481	828,808	833,135
Express Mail	0.119	4,259	5,550	6,841
Periodicals	0.064	7,869	8,993	10,118
Standard Mail ECR	0.194	637	1,027	1,417
Standard Mail Regular	0.071	9,127	10,599	12,071
Parcel Post	0.089	2,825	3,421	4,018
Bound Printed Matter	0.111	1,420	1,814	2,209
Media Mail	0.084	2,355	2,818	3,282
US Postal Service	0.103	5,502	6,899	8,296
Free Mail	0.273	564	1,213	1,863
International Mail	0.057	23,397	26,314	29,232
<b>Total</b>			<b>1,133,239</b>	

Table 8. BY05 Network Air Night Turn Estimated Costs and Confidence Intervals

<b>Mail Category</b>	<b>CV</b>	<b>Lower 95% C.L. (\$1,000)</b>	<b>Cost (\$1,000)</b>	<b>Upper 95% C.L. (\$1,000)</b>
1C Single-Piece Letters	0.095	2,497	3,066	3,636
1C Presort Letters	0.171	754	1,134	1,514
1C Single-Piece Cards	0.442	1	10	18
1C Presort Cards	0.855	-	1	3
Priority Mail	0.367	103	367	630
Express Mail	0.013	79,879	82,045	84,212
Periodicals	0.226	239	430	620
Standard Mail ECR	0.587	-	19	42
Standard Mail Regular	0.187	449	709	969
Parcel Post	1.066	-	3	8
Bound Printed Matter	0.663	-	53	121
Media Mail	-	-	-	-
US Postal Service	0.070	5,052	5,860	6,668
Free Mail	0.666	-	-	-
International Mail	0.021	47,536	49,592	51,648
<b>Total</b>			<b>143,289</b>	