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

POSTAL RATE AND FEE CHANGES, 2001	Docket No. R2001-1

DIRECT TESTIMONY
OF
NANCY R. KAY
ON BEHALF OF THE
UNITED STATES POSTAL SERVICE

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LIBRARY REFERENCES

USPS-LR-J-70	Rural Carrier Analysis
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USPS-LR-J-73	Calculation of Single Subclass Stop Ratios (USPS-T-21)

DIRECT TESTIMONY

OF

NANCY R. KAY

AUTOBIOGRAPHICAL SKETCH

My name is Nancy R. Kay. I am a project director with Foster Associates, Inc., in Bethesda, Maryland. I have been with Foster Associates since 1993.

My work at Foster Associates has involved analysis of Postal costing issues, specifically in the areas of incremental cost, mail processing, post office box costs, and city and rural carrier delivery. Most recently, for Docket No. R2000-1 I presented direct and supplemental testimony on incremental cost, and rebuttal testimony on city and rural carrier costing. For Docket No. R97-1, I developed the model used to estimate incremental costs, and prepared associated workpapers and library references. I also assisted in the preparation of rebuttal testimony on rural carrier costing.

Prior to joining Foster Associates, I was a senior engineer with Quyen Systems, where I was primarily involved in analysis for the U.S. Postal Service. I participated in studies analyzing mail transportation network flows. I also created a data warehouse that was to be used in various Postal analysis projects.

I have a M.S. in Computer Science from Johns Hopkins University.

PURPOSE AND SCOPE OF TESTIMONY

The purpose of this testimony is to present incremental cost estimates for Base Year 2000 and Test Year 2003. Incremental costs are developed for each subclass and special service, as well as for groups of subclasses[1]. The procedures used to calculate incremental cost are the same as those used in Docket No. R2000-1 to calculate Base Year 1998 and fiscal year 1999 incremental costs.

Incremental costs for postal products were first presented in Docket No. R97-1 in the testimony of witness Takis (USPS-T-41). In Docket No. R2000-1, I presented incremental costs estimated with a new method (USPS-T-23). Dr. Bradley (Docket No. R2000-1, USPS-T-22) described this new method and provided the analytic basis for the calculations. I continue to use this new method in my incremental cost estimates for Base Year 2000 and Test Year 2003.

In this Docket, Dr. Bradley describes a revised method for calculating incremental cost for letter route load (USPS-T-16, Section V). That revised method is implemented in the calculation of Base Year 2000 incremental cost.

Incremental costs are used by pricing witnesses Moeller (USPS-T-28) and Mayo (USPS-T-36).

The incremental cost testimony is organized into three sections. The first section describes the procedures used to estimate incremental costs in Base Year 2000 and discusses any changes made from Base Year 1998. The second section describes the procedures used to estimate incremental costs in Test Year 2003 and discusses any changes made from Test Year 2001. The third section presents the results of the incremental costs analysis for Base Year 2000 and Test Year 2003, and discusses those results for individual subclasses and groups of subclasses.

[1] The incremental cost model, which is based on volume variable costs, incorporates the collapsing of subclass information reported by witness Meehan (USPS-T-11), such as Outside County Periodicals in place of Regular, Nonprofit, and Classroom.

The last section of my testimony pertains to rural carrier costing, and briefly discusses two library references supporting the testimony of witness Meehan (USPS-T-11).

MATERIALS ASSOCIATED WITH THIS TESTIMONY

This incremental cost testimony is accompanied by supporting workpapers and library references. My workpapers include a detailed discussion of the procedures used to calculate incremental cost for each component. Printouts of the model used to estimate incremental costs for Base Year 2000 and Test Year 2003 are included in the workpapers.

The Library References associated with this testimony are:

USPS-LR-J-70	Rural Carrier Analysis
USPS-LR-J-71	Rural Mail Count Data
USPS-LR-J-72	Supporting Materials Relating to Incremental Cost Model (USPS-T-21)
USPS-LR-J-73	Calculation of Single Subclass Stop Ratios (USPS-T-21)

I ESTIMATING INCREMENTAL COST FOR BASE YEAR 2000

This section of my testimony discusses how the general methodology for estimating incremental cost is put into practice in the estimation of Base Year 2000 incremental cost. The procedures used to estimate Base Year 2000 incremental cost are discussed in this section, while specific details on the incremental cost calculations for each cost component can be found in the workpapers to my testimony.

The procedures used to calculate incremental cost for Base Year 2000 are the same as the procedures used to calculate incremental cost in Docket No. R2000-1 for Base Year 1998. There are a few changes in actual implementation of these procedures for some cost components, due to changes in the way volume variable costs are calculated.

The five-step process used to implement the algorithm for calculating incremental cost has not changed from Base Year 1998:

Step 1: Identify each cost component. If volume variable cost calculations are done at a more disaggregated level than the cost component, then the constituent cost pools are identified.

Step 2: Identify independent and dependent components. An independent cost component has a volume variability analysis and distribution key. A dependent cost component borrows its volume variability and distribution key from another component or group of components.

Step 3: Determine the correct incremental cost procedure to use in calculating incremental cost for independent components, and calculate the incremental cost. The incremental cost calculations are based on the type of cost component.

Step 4: Calculate volume related incremental cost for dependent components.

Step 5: Identify product specific costs and add these to the volume related incremental cost.

A. Identify Cost Components

The first step in calculating incremental cost identifies each cost component used in volume variable cost calculations. I start with the cost components identified in the Base Year 1998 incremental cost model. I then analyze the workpapers of witness Meehan (USPS-T-11, Workpaper B) and the testimony of other witnesses to determine if there are any changes in variability analysis for Base Year 2000. These changes may incorporate new cost pools[2].

For example, witness Van-Ty Smith (USPS-T-13) shows that there are 54 distinct cost pools in mail processing. Each cost pool is associated with a particular mail processing operation of group of operations. The FMS and BCS have been disaggregated. The FMS cost pool has been disaggregated into two cost pools – one includes the FMS 1000 and the other includes all other FMS operations. The BCS cost pool has been disaggregated into two cost pools – one for DBCS and CSBCS, and the other includes all other BCS operations. The incremental cost model has been modified to incorporate these changes.

B. Find Independent and Dependent Components

This step examines each cost pool to determine if it has an independent variability analysis, or if it borrows its variability and distribution key from another cost pool or

[2] Postal Service costs are divided into 20 cost segments, which are in turn divided in into cost components. Cost components may be made up of costs associated with individual operations within the cost component, which are referred to as cost pools. For convenience, I will use the term cost pool to refer to both cost pools and cost components.

group of cost pools. Volume variable costs are determined in this way, so the incremental cost calculations follow that structure.

In witness Meehan's workpaper A, the Cost and Revenue Analysis (CRA) model, the total cost for a dependent cost pool is distributed to mail products using a cost-weighted distribution key. This distribution key is the sum of the costs, by mail product, for each of the cost pools in the key. The dependent cost pool also receives the cost-weighted variability of the components in the distribution key. Likewise, in witness Meehan's workpaper B, a cost pool within an individual cost component is distributed to mail products using the cost-weighted distribution key. This key is the sum of the costs, by product, in each of the cost pools comprising the key. The cost pool receives the cost-weighted variability of the cost pools in the distribution key. If a cost pool is distributed in the CRA in this manner, then I classify the cost pool as dependent.

This step also identifies the cost pools that comprise the distribution key for a dependent cost pool. This information will be used in the incremental cost calculations.

Table 1 in my workpapers lists all of the independent cost pools used in the Base Year 2000 incremental cost model. New cost pools, and cost pools used in Base Year 1998 but not in Base Year 2000 are highlighted.

Table 2 and 3 in my workpapers lists the dependent cost pools in the Base Year 2000 incremental cost model. There are no changes from Base Year 1998.

C. Determine the Correct Incremental Cost Procedure

I evaluate each independent cost pool to determine the correct incremental cost method. I categorize each cost pool into the eight types defined below[3] to determine if there are any changes from Base Year 1998.

[3]The eight types of cost components are described fully by Dr. Bradley in Docket No. R2000-1, USPS-T-22, Table 1.

- Type 1. The costs in this pool are fixed and common. There are no incremental costs for this cost pool.

- Type 2. The costs in this pool are fixed, but some or all costs are specific to one or more products. Incremental cost equals the specific fixed costs.

- Type 3. The costs in this pool are variable, but all costs are distributed to one product. The variability for the cost pool is one hundred percent. Incremental cost equals accrued cost for this cost pool.

- Type 4. The costs in this pool are variable, and all costs are distributed to one product. The variability for this cost pool is less than one hundred percent. Incremental cost equals accrued cost.

- Type 5. The costs in this cost pool are variable, distributed to more than one product, and the variability equals one hundred percent. There are non-volume variable costs intrinsic to a product. The incremental cost for the product with intrinsic costs equals the volume variable cost plus the intrinsic costs. The incremental cost for the other products equals their volume variable cost.

- Type 6. The costs in this cost pool are variable, distributed to more than one product, and the variability is less then one hundred percent. There are non-volume variable costs intrinsic to a product. The incremental cost for the product with intrinsic costs equals the volume variable cost plus the intrinsic costs. The incremental cost for the other products containing volume-variable costs are determined with the constant elasticity method[4]. If there are no volume-variable costs in the cost pool (i.e. the volume variability for the component is zero) then the incremental cost will equal the intrinsic cost.

[4] See Docket No. R2000-1, USPS-T-22, for a complete discussion on use of the constant elasticity method in calculating incremental cost.

- Type 7. The costs in this pool are variable and distributed to more than one product. The volume variability equals one hundred percent, and there are no intrinsic costs. Incremental cost for all products will equal volume variable cost.

- Type 8. The costs in this pool are variable and distributed to more than one product. The volume variability is less than one hundred percent, and there are no intrinsic costs. The incremental cost for these components will be calculated with either the constant elasticity method or, for letter route access, with single subclass stop ratios[5].

Change in type category from Base Year 1998 may require a change in the incremental cost methodology used. For example, the MECPARC cost pool in mail processing has shifted from type 8 in Base Year 1998 to type 7 in Base Year 2000. Incremental cost for this cost pool now equals volume variable cost, where it had been calculated with the constant elasticity method. Changes in letter route load volume variable cost analysis does not cause a change in component type, but the methodology changes to incorporate single subclass stop ratios along with the constant elasticity method[6].

Table 1 in my workpapers lists the type assigned to each independent cost pool in the Base Year 2000 incremental cost model. Any changes in incremental cost treatment from Base Year 1998 are highlighted.

D. Calculate Incremental Cost for Dependent Cost Pools

The incremental cost of dependent cost pools is calculated with a methodology that parallels the determination of the volume variable cost of these cost pools. Dependent

[5] Single subclass stops measure the number of stops receiving only one class or subclass of mail. The stops are caused by that class or subclass alone and are thus part of its incremental cost. The accrued cost for letter route access, multiplied by the single subclass ratio, is the cost that will be saved in this component if that subclass were eliminated.

cost pools borrow their variability and distribution keys from other cost pools. The incremental cost for a dependent cost pool will be directly proportional to the incremental cost for the related component(s), minus any product specific costs. The incremental cost for subclass *(i)* in dependent cost pool *(j)* that borrows its variability and distribution key *(DK)* from cost pool *(k),* is calculated with the following formula:

$$IC_{ij} = VVC_{ij} * \left[\frac{IC_{ik} - PS_{ik}}{VVC_{ik}} \right] \qquad (1)$$

The distribution key for a cost pool may be comprised of several cost pools. The key is generated in witness Meehan's (USPS-T-11) workpapers by summing the costs by product across these cost pools. This distribution key is used both to distribute costs to products and to determine the variability of the dependent cost pools. In this case, the volume variable costs for the dependent cost pool are first divided among the various independent cost pools that are used to form the distribution key. The incremental to volume variable cost ratio for the independent cost pool will be applied to that portion of the dependent pool costs that are associated with the independent cost pool. The last step adds up the portions of the incremental cost for the dependent cost pool by product that are associated with each independent cost pool. This is represented mathematically as:

$$IC_{ik} = \sum_{j=1}^{n} \left[VVC_{ik} * \left[\frac{VVC_{ij}}{VVC_{iDK}} \right] * \left[\frac{IC_{ij} - PS_{ij}}{VVC_{ij}} \right] \right] \qquad (2)$$

E. Identify Product Specific Costs

Product specific costs are non-volume variable costs caused by the provision of a product. Product specific costs for a mail product are incremental to that mail product. Three of the cost pool types identified in section I.C include product specific costs - specific fixed costs in type 2 cost pools and intrinsic costs in type 6 and 7 cost pools.

[6] See USPS-T-16, p. 33-36.

I use a variety of sources to identify product specific costs, including the statement of revenue and expenses (USPS-LR-J-8), witness Meehan's workpapers (USPS-T-11, Workpaper B), and special analysis (USPS-LR-J-72).

II ESTIMATING INCREMENTAL COSTS FOR TEST YEAR 2003

In this case, I follow the same methodology used in Base Year 1998 to calculate Test Year incremental costs. I use the rollforward procedure to calculate Test Year volume variable costs, which incorporates the same factors that are used to forecast Test Year volume variable and product specific costs. This means that I calculate Test Year incremental cost at the same level of detail that is available for Test Year volume variable cost.

The rollforward model, described in the testimony of witness Patelunas (USPS-T-12), works on the component, not the cost pool, level. For example, mail processing costs for all cost pools are aggregated into one component. This aggregated component goes through the rollforward process as one unit. As a result, in the Test Year there is a lack of information on volumes and cost drivers for the constituent cost pools. Therefore, Test Year incremental cost calculations for mail processing will be done at the component level.

Test Year volume-related incremental costs for subclass *(i)* in cost component *(j)* are calculated with the following formula, which 'rolls-forward' Base Year volume-related incremental cost (see Docket No. R2000-1, USPS-T-22, Section IV-C):

$$IC_{ijT} = [IC_{ij} - F_{ij}](1+g_i)(1+\pi_j)(1+\eta_j)(1+\phi_j) \qquad (4)$$

where g_i represents volume growth, π_j represents cost level changes, η_j represents non-volume workload changes, and ϕ_j represents the effect of special programs.

Non-volume variable costs do not get a volume effect in the rollforward. Test Year product specific costs are calculated by applying the appropriate rollforward factors to Base Year product specific costs.

$$F_{ijT} = F_{ij}(1+\pi_j)(1+\eta_j)(1+\phi_j) \quad (5)$$

Test Year product specific costs are added to the Test Year volume-related incremental costs. Finally, total Test Year incremental cost for subclass *(i)* is calculated by adding together the incremental cost in subclass *(i)* for all components *(j)*:

$$IC_{ijT} = \sum_{j=1}^{n}[IC_{ij} - F_{ij}](1+g_i)(1+\pi_j)(1+\eta_j)(1+\phi_j) + F_{ijT} \quad (6)$$

Changes from Test Year 2001

There are no changes in methodology from Test Year 2001 to Test Year 2003. However, there is a change in incremental cost calculation for purchased air transportation for Test Year 2003. Witness Takis (USPS-T-19) testifies that there will no longer be a premium associated with air network transportation such as the Eagle and WNET overnight networks. The new FedEx overnight network has no premium costs
connected with it. There is no change with regard to the treatment of Christmas air network (CNET) premium costs.

III RESULTS OF INCREMENTAL COST ANALYSIS

This section presents the results of the incremental cost analysis. I present results for each major subclass, plus groups of subclasses, mail classes, and special services. I also present results for a set of two-subclass combinations. Incremental cost calculations are made for Base Year 2000, Test Year 2003 before rates, and Test Year 2003 after rates.

A. General Results

Tables 1A and 2A in Attachment A show, for each subclass, group of subclasses, and special service:

- Base Year 2000 total volume variable cost
- Base Year 2000 total incremental cost
- Test Year 2003 before rates total volume variable cost
- Test Year 2003 before rates total incremental cost
- Test Year 2003 after rates total and average unit (per piece) volume variable cost
- Test Year 2003 after rates total and average unit (per piece) incremental cost

The subclasses, groups of subclasses and mail classes in Table 1A correspond to the subclasses, groups of subclasses, and mail classes presented in the Cost and Revenue Analysis report (USPS-LR-J-2). Table 2A displays incremental costs for additional selected pairs of subclasses. Total incremental cost for a particular subclass, group of subclasses, or special service is the sum of the product's incremental costs for all cost components. The workpapers to my testimony present detailed incremental cost calculations for each cost component.

There is a close similarity between average incremental cost and average volume variable (marginal) cost for the majority of subclasses. Incremental cost will be very close to volume variable cost if:

1) the amount of the driver in a subclass is not too large,
2) the volume variability is relatively high, and
3) product specific costs are not too great.

This point is illustrated in Table 2 of Docket No. R2000-1, USPS-T-22. This table shows the difference between volume variable cost and volume-related incremental cost with various proportions of the driver and percentages of variability.

B. Subclass Results

This section examines the results of the incremental cost analysis for individual subclasses. Average incremental cost for most subclasses does not vary much from average volume variable cost. Following the discussion in the previous section, in those subclasses where there is a large difference, it will be due to one of these three reasons:

- product specific costs associated with the particular subclass;
- marginal cost changes significantly as the driver changes (i.e. a low volume variability); or
- the proportion of the driver is large.

This section discusses each of the subclasses where incremental cost differs from volume variable cost, and highlights the reason for the difference. Incremental costs in this section are for Test Year 2003 after rates, unless the discussion requires costs for cost pools that are aggregated into components for Test Year incremental cost calculations. In this case, Base Year 2000 costs are provided.

1. Priority Mail and Express Mail

Table 1A shows the difference between volume variable and incremental cost for Priority Mail and Express Mail. Total incremental cost for Priority Mail is 9.5% greater than volume variable cost, while the incremental cost for Express Mail is 28.0% greater than volume cost. This difference is primarily due to product specific costs. The

following table shows the product specific costs for Priority Mail and Express Mail, by cost component.

TABLE 3.

PRODUCT SPECIFIC COSTS FOR PRIORITY AND EXPRESS MAIL (TY2003 AR), IN MILLIONS, WITHOUT CONTINGENCY ($000,000)

Cost Component	Priority Mail	Express Mail
C/S 3 Mail Processing	$ 169.0	$ 87.3
Admin Clerks	0	11.6
Expedited Delivery	0	5.1
C/S 7 City Carriers	0	14.1
C/S 14 Transportation	46.3	0
C/S 15 Rents	.4	0
C/S 16 Misc. Supplies	8.0	0
Advertising	48.4	6.6
C/S 18 Headquarters	6.7	0
Supplies & Services	12.5	0
Misc. Support	1.2	0
C/S 20 Equipment Depreciation	.1	0
TOTAL	$ 292.60	$ 124.70

Mail processing (CS 3) contributes significant product specific costs to both Priority Mail and Express Mail. For Priority Mail, the costs of providing dedicated manual Priority operations are considered incremental to that subclass, because these operations would be discontinued if Priority Mail were eliminated. With respect to Express Mail, a group of mail processing operations consists of a combination of costs that are fully volume variable and costs that are fixed. This group of cost pools contains fixed costs which are incremental to Express Mail.

Intrinsic costs associated with providing air transportation contribute to the product specific costs for Priority Mail. These premium costs, which are the costs over and above standard commercial airline costs, are product specific to Priority Mail on the Christmas Network (C-Net).

There are also product specific advertising costs for both Priority Mail and Express Mail.

2. First-Class Mail, Periodicals, Standard Mail, and Package Services

These four mail classes are discussed together because they have a common feature – none of the individual subclasses have a material amount of product specific costs.[7] Yet, the relationship between volume variable and incremental cost differs for the subclasses within these mail classes. This section will compare the difference between volume variable and incremental cost for the subclasses in First-Class, Periodicals, Standard Mail and Package Services that have the greatest volume variable cost. These are First-Class Single Piece, Periodicals Outside County, Standard ECR, and Parcel Post.

Incremental costs for First-Class Single Piece and Standard ECR mail are 4.7% and 6.1% higher than volume variable costs, respectively. However, incremental costs are only 0.8% and 1.2% higher than volume variable costs for Periodicals Outside County and for Parcel Post, respectively.

If all other conditions are equal[8], mail subclasses with a larger share of the driver will have a larger difference between volume variable cost and incremental cost. Table 4

[7] The total First-Class Mail has a small amount of product specific cost, but it is less than 0.1% of the difference between volume variable and incremental cost. There is also a small amount of product specific cost for advertising in Parcel Post, but it contributes little to the difference between incremental and volume variable cost.

[8] The assumption of 'all else being equal' is important here, because there are other factors that may contribute to the difference between volume variable and incremental cost. The presence of large amounts of product specific cost, as well as low volume variability, will also contribute to this difference.

This discussion relating RPW volume to the percentage increase in incremental cost is for illustrative purposes. For some cost components, the driver is not mail volume. For example, the driver for city carrier access costs is the number of stops. The number of these stops that are for a single subclass determines incremental cost. In the single delivery residential (SDR) cost pool for city carrier access, Standard ECR has a higher percentage of single subclass stops than First-Class Single Piece mail, leading to a larger incremental cost. Similarly, city carrier load costs are driven by shape of mail. Flat shape mail has a lower volume variability than letter shape. Standard ECR has a higher proportion of flat shape mail volume than First-Class Single Piece, leading to a higher incremental cost.

compares the RPW volumes for selected mail subclasses with the percentage increase of incremental cost over volume variable cost. The mail subclasses with a higher percentage of RPW volumes have a larger percent difference between incremental and volume variable costs.

TABLE 4
COMPARISON OF TY 2003 (AR) RPW VOLUMES WITH THE PERCENTAGE INCREASE OF INCREMENTAL OVER VOLUME VARIABLE COST

Mail Subclass	RPW Volume, in Millions	Percent of Total RPW for All Subclasses	Percentage Increase of Incremental over Volume Variable
First-Class Single Piece	46,865	22.0%	4.7%
Periodicals Outside County	9,109	4.3%	1.2%
Standard Mail ECR	36,362	17.1%	6.1%
Parcel Post	372	0.2%	0.8%

3. Special Services

This section will highlight the two special services that show a larger difference between volume variable and incremental cost – Certified and Money Orders. Incremental cost for Certified mail is 6.7% higher than volume variable cost, while incremental cost for Money Orders is 37.1% higher than volume variable cost.

Money Orders has product specific costs in two components - $1.5 million for Money Order Division in CS 18, and $6.1 million in Advertising costs in CS 16 (without contingency). These product specific costs account for nearly 12% of the difference between incremental and volume variable cost. Most of the remainder of the difference is due to the Money Orders cost pool in window service (CS 3.2). All of the volume variable cost in this cost pool is in the Money Orders special service. The incremental cost for this component will equal the accrued cost for the component (see page 7 of this testimony).

The incremental cost for Certified contains no product specific costs, yet incremental cost is 6.7% higher than volume variable cost. Most of the $22.9 million difference between incremental and volume variable cost in Base Year 2000 incremental cost comes from four city carrier (C/S 7) cost pools – Letter Route Load SDR, Letter Route Load MDR, Letter Route Load BAM, and Street Support Load[9].

Letter route load costs are driven by shape of mail, including letters, flats, parcels, accountables, collections, and deliveries. The volume variability for loading accountables is particularly low - 4.2% for single delivery residential (SDR) stops, 1.6% for multiple delivery residential (MDR) stops, and 22.4% for business and mixed (BAM) stops[10]. In addition, 45% of the driver for loading accountables is in the Certified special service. This combination of low volume variability and a large proportion of the driver in the Certified special service causes the large increase of incremental over volume variable cost.

TABLE 6.
INCREMENTAL AND VOLUME VARIABLE COSTS FOR CERTIFIED (BY 2000), IN MILLIONS ($000,000)

Cost Component	Volume Variable Cost	Incremental Cost	Difference (%)
Letter Route Load - SDR	$ 23.0	$ 31.1	29.3%
Letter Route Load - MDR	5.3	7.3	35.4%
Letter Route Load - BAM	22.3	27.1	37.3%
Street Support Load	8.5	11.0	21.2%
TOTAL	$ 59.10	$ 76.50	29.3%

[9] These cost pools are aggregated into the CS 7 Load component for use in the rollforward model. There is not enough information to determine the Test Year 2003(AR) costs in the individual cost pools. Therefore this discussion uses Base Year 2000 costs.

[10] The incremental cost for letter route load is calculated with a variation of the constant elasticity formula that takes into account the multiple shape drivers, and also incorporates single subclass stop ratios to include the effect of stops as well as volume on incremental cost. See USPS-T-16.

C. Product Groups

Table 1A contains incremental cost estimates for product groups. These product groups correspond to the groups listed in the Cost and Revenue Analysis report (USPS-LR-J-2). These include the combination of presort and non-presort First-Class letters, presort and non-presort First-Class Cards, total First-Class, total Periodicals, total Standard Mail, and total Package Services. In addition, Table 1A includes incremental cost estimates for each of the Postal Service business groups. These include Correspondence (all of First-Class Mail and Mailgrams), Advertising (Standard Mail plus Bound Printed Matter), Expedited and Package Services (Priority Mail, Express Mail, Parcel Post, and Media Mail), and Special Services.

Note that incremental costs are not summed across subclasses. The incremental cost for a group of subclasses is found by removing the portion of the driver associated with the group of subclasses. For this reason, the incremental cost for a group of subclasses will be different than the sum of the incremental costs for the individual subclasses within the group.

Table 2A displays the results of incremental cost calculations on 10 additional pairs of subclasses. These calculations demonstrate the ease with which incremental cost can be calculated for groups of subclasses.

Tables 1A and 2A present incremental costs for groups of subclasses for Base Year 2000, Test Year 2003 before rates, and Test Year 2003 after rates. The same methodology described previously is used to calculate Test Year incremental costs. I use the volume variable cost for the group of subclasses as the basis for the ratios.

IV RURAL CARRIER COSTING

I am sponsoring two library references on rural carrier costing in support of witness Meehan's (USPS-T-11) testimony.

USPS-LR-J-70 Rural Carrier Analysis
USPS-LR-J-71 Rural Mail Count Data

USPS-LR-J-70 contains the SAS program used calculate the variability of rural carrier evaluated and other routes, average weekly pieces on evaluated and other routes, and the total number of rural mail count letter and flat pieces. These items are used in witness Meehan's workpaper B, worksheets 10.0.1, 10.1.1, 10.2.1, and 10.0.3 P1.

USPS-LR-J-71 contains the rural mail count data used by the preceding SAS program. These data contains the most recent evaluation for each rural route.

ATTACHMENT A

TABLE 1A. BY2000 AND TY2003(AR) VOLUME VARIABLE AND INCREMENTAL COST FOR SUBCLASSES AND CLASSES

LINE NO.	CLASS, SUBCLASS, OR SPECIAL SERVICE	BY2000 VOLUME VARIABLE COST	BY2000 INCREMENTAL COST	TY2003(BR) VOLUME VBRIABLE COST	TY2003(BR) INCREMENTAL COST	TY2003(AR) VOLUME VARIABLE COST	TY2003(AR) INCREMENTAL COST	TY2003(AR) VOLUME VARIABLE COST PER RPW PIECE	TY2003(AR) INCREMENTAL COST PER RPW PIECE
	COLUMN NUMBER	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	**FIRST-CLASS MAIL**								
2	SINGLE PIECE LETTERS	12,477,523	13,053,671	12,678,742	13,274,687	12,426,541	13,012,190	$ 0.2652	$ 0.2777
3	PRESORT LETTERS	4,457,717	4,645,533	5,421,560	5,665,254	5,436,661	5,682,987	$ 0.1059	$ 0.1107
4	TOTAL LETTERS	16,935,240	18,143,760	18,100,302	19,436,020	17,863,203	19,187,655	$ 0.1819	$ 0.1954
5	SINGLE PIECE CARDS	513,468	527,143	575,141	590,766	559,662	574,853	$ 0.2133	$ 0.2190
6	PRESORT CARDS	137,298	137,429	162,787	162,954	145,845	145,968	$ 0.0552	$ 0.0552
7	TOTAL CARDS	650,766	665,326	737,928	754,700	705,507	721,636	$ 0.1340	$ 0.1370
8	**TOTAL FIRST**	17,586,006	19,009,446	18,838,230	20,414,231	18,568,710	20,128,807	$ 0.1795	$ 0.1946
9	**PRIORITY MAIL**	3,144,561	3,448,586	3,767,050	4,108,021	3,567,994	3,907,493	$ 3.0269	$ 3.3149
10	**EXPRESS MAIL**	373,391	666,702	543,045	682,662	494,819	633,429	$ 7.0778	$ 9.0605
11	**MAILGRAMS**	705	780	634	695	637	698	$ 0.2336	$ 0.2562
12	**PERIODICALS:**								
13	WITHIN COUNTY	75,277	76,195	78,840	79,875	78,785	79,827	$ 0.0923	$ 0.0935
14	OUTSIDE COUNTY	2,192,308	2,218,104	2,328,417	2,357,168	2,313,219	2,341,867	$ 0.2539	$ 0.2571
15	**TOTAL PERIODICALS**	2,267,585	2,296,046	2,407,257	2,439,002	2,392,004	2,423,646	$ 0.2401	$ 0.2433
16	**STANDARD MAIL:**								
17	ENHANCED CARR RTE	2,284,963	2,420,709	2,749,941	2,916,417	2,700,724	2,864,987	$ 0.0743	$ 0.0788
18	REGULAR	7,396,394	7,595,070	8,873,597	9,121,635	8,690,373	8,935,179	$ 0.1468	$ 0.1510
19	**TOTAL STANDARD MAIL**	9,681,357	10,297,279	11,623,538	12,389,743	11,391,097	12,148,613	$ 0.1192	$ 0.1272
20	**PACKAGE SERVICES:**								
21	PARCEL POST	946,884	953,829	1,158,410	1,167,686	1,040,238	1,048,946	$ 2.7999	$ 2.8233
22	BOUND PRINTED MATTER	454,067	456,548	546,063	549,139	542,200	545,267	$ 0.9212	$ 0.9264
23	MEDIA MAIL	321,224	322,119	279,129	279,928	279,052	279,858	$ 1.5028	$ 1.5071
24	**TOTAL PACKAGE SERVICES**	1,722,175	1,743,988	1,983,602	2,010,314	1,861,490	1,887,244	$ 1.6247	$ 1.6471
25	**U.S. POSTAL SERVICE**	307,906	309,243	-					
26	**FREE MAIL**	33,284	33,367	38,290	38,387	38,341	38,439	$ 0.8182	$ 0.8203
27	**INTERNATIONAL MAIL**	1,284,460	1,352,291	1,686,535	1,773,364	1,580,572	1,667,159	$ 1.3110	$ 1.3828
28	**SPECIAL SERVICES:**								
29	REGISTRY	84,619	84,735	80,198	80,311	79,598	79,708	$ 11.2510	$ 11.2439
30	CERTIFIED	346,156	369,049	447,608	477,545	454,204	484,642	$ 1.5932	$ 1.6001
31	INSURANCE	88,701	88,826	106,952	107,105	114,194	114,357	$ 1.7960	$ 1.8889
32	COD	14,305	14,329	12,588	12,610	12,608	12,630	$ 4.1772	$ 4.0742
33	MONEY ORDERS	157,212	215,547	181,638	248,921	180,181	247,016	$ 0.7894	$ 1.0822
34	STAMPED CARDS	3,016	3,016	3,085	3,085	2,885	2,885		
35	STAMPED ENVELOPES	12,046	12,046	12,969	12,970	12,978	12,978		
36	SPECIAL HANDLING	1,854	1,855	1,969	1,970	1,944	1,945		
37	POST OFFICE BOX	545,314	545,618	673,505	673,870	659,760	660,125		
38	OTHER	163,825	180,888	205,479	227,304	176,647	199,391		
39	TOTAL SPECIAL SERVICES	1,417,048	1,580,172	1,725,991	1,935,140	1,694,999	1,898,143		
40	**CORRESPONDENCE**	17,586,711	19,010,568	18,838,980	20,373,784	18,569,346	20,098,008	$ 0.1795	$ 0.1943
41	**ADVERTISING**	10,135,424	10,772,130	12,178,058	12,953,776	11,933,297	12,704,261	$ 0.1241	$ 0.1322
42	**EXPEDITED**	4,786,060	5,426,991	5,747,634	6,270,151	5,382,103	5,902,384	$ 2.9803	$ 3.2684

TABLE 2A. BY2000 AND TY2003(AR) VOLUME VARIABLE AND INCREMENTAL COST FOR SELECTED SUBCLASS COMBINATIONS

LINE NO.	CLASS, SUBCLASS, OR SPECIAL SERVICE	BY2000 VOLUME VARIABLE COST	BY2000 INCREMENTAL COST	TY2003(BR) VOLUME VBRIABLE COST	TY2003(BR) INCREMENTAL COST	TY2003(AR) VOLUME VARIABLE COST	TY2003(AR) INCREMENTAL COST	TY2003(AR) VOLUME VARIABLE COST PER RPW PIECE	TY2003(AR) INCREMENTAL COST PER RPW PIECE
	COLUMN NUMBER	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	PRIORITY & EXPRESS	3,517,975	4,117,033	4,310,095	4,792,527	4,062,813	4,542,625	$ 3.2537	$ 3.6380
2	PRIORITY & PARCEL POST	4,091,468	4,426,218	4,925,460	5,308,410	4,608,232	4,986,248	$ 2.9725	$ 3.2163
3	PRIORITY & BOUND PRINTED MATTER	3,598,651	3,916,909	4,313,113	4,672,908	4,110,194	4,468,344	$ 2.3257	$ 2.5283
4	PRIORITY & MEDIA MAIL	3,465,808	3,777,049	4,046,179	4,394,811	3,847,046	4,194,196	$ 2.8195	$ 3.0739
5	EXPRESS & PARCEL POST	1,320,275	1,621,114	1,701,455	1,851,197	1,535,057	1,683,119	$ 3.4774	$ 3.8128
6	EXPRESS & BOUND PRINTED MATTER	827,458	1,123,473	1,089,108	1,232,023	1,037,019	1,179,039	$ 1.5749	$ 1.7906
7	EXPRESS & MEDIA MAIL	694,615	988,943	822,174	962,187	773,871	913,041	$ 3.0277	$ 3.5722
8	PARCEL POST & BOUND PRINTED MATTER	1,400,951	1,416,500	1,704,473	1,724,486	1,582,438	1,601,598	$ 1.6482	$ 1.6682
9	PARCEL POST & MEDIA MAIL	1,268,108	1,279,061	1,437,539	1,450,813	1,319,290	1,331,864	$ 2.3676	$ 2.3902
10	BOUND PRINTED MATTER & MEDIA MAIL	775,291	780,468	825,192	830,989	821,252	827,045	$ 1.0607	$ 1.0682