

**Postal Revenues Earned from Workshared Activities**

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May 12, 2003

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## Postal Revenues Earned from Workshared Activities

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### 1.0 Introduction

The U. S. Postal Service allows extensive downstream access to its network. Mailers and private sector intermediary firms used by mailers that take advantage of such access generally are said to engage in “worksharing.”<sup>1</sup> Lower rates for workshared mail first were introduced in 1976, when a small economic incentive was offered for presorted First-Class Mail. Since then, worksharing opportunities have grown substantially. They now include virtually all upstream activities and all classes of mail, with the major exception that mailers as of yet have no incentive to enter First-Class Mail closer to its final destination. The economic incentives extended to mailers to perform upstream activities in competition with the Postal Service are described by Elcano, *et al* as

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<sup>1</sup> The principal mailer-performed or purchased worksharing activities in the United States now consist of barcoding, sorting and transporting mail to destinating facilities. Since the first two activities, when performed by independent entities, occur before the mail is entered with the Postal Service, they are customarily referred to, respectively, as “prebarcoding” and “presorting.” See Cohen, Ferguson, Waller and Xenakis (2001) for a more detailed discussion of worksharing.

“liberalization” of the postal system. They point out that this is the route by which the postal market in the United States has been opened to competition, not by having head-to-head competition for delivery of targeted products in targeted geographic locales – as has occurred, for example, in Sweden.

In the year 2000, approximately 67 percent of all mail was workshared to some degree.<sup>2</sup> According to Elcano, German and Pickett (2000), “[t]aken together, worksharing has a value of \$11.7 billion per year.” This estimate represents the sum of price reductions given mailers by the Postal Service, yet is less than what it would have cost the Postal Service to do the work itself.<sup>3</sup> Cohen, *et al* (2001) have estimated that the Postal Service saved \$15.3 billion in costs from worksharing in 1999. Since the lower rates for worksharing are optional, it is reasonable to assume that the private sector spent less than the \$11.7 billion received in price reductions to do the work. In other words, the private sector spent less than \$11.7 billion to do work that would have cost the Postal Service \$15.3 billion. Offering lower rates to the private sector for worksharing was a bold and imaginative move by the Postal Service, which resulted in several important effects.

First, the Postal Service has decided that the monopoly statutes do not apply to upstream work, hence competing for such work is legal.

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<sup>2</sup> Postal Service (2002), App. C, p. C-3.

<sup>3</sup> This is true because the price reductions given to mailers have tended, at least thus far, to be less than the Postal Service’s estimated savings. See Section 2.0, *infra*, for more discussion on the way the Postal Service prices worksharing.

Second, the lower rates for workshared mail have encouraged competition for the upstream portion of the postal value chain, which is often thought of as not characterized by meaningful economies of scale or scope. As a result, the upstream portion of the postal network is no longer the monopoly it once was. Today, “consolidators and third-party logistics companies [that specialize in mail] are an emerging, rapidly growing component of the shipping industry.”<sup>4</sup>

Third, by harnessing the capital, flexibility and productivity of the private sector, the competition introduced by worksharing has been a major factor in reducing effective rates and the total cost of mailing, thereby helping to maintain the volume of mail and economic viability of the delivery network.

Fourth, because the cost of the worksharing undertaken by the private sector has been substantially less than both the price reductions and the Postal Service’s cost, social efficiency for the nation has improved.

The purpose of this paper is to explore further certain issues that arise from liberalization of the postal system. In particular, this paper will focus on the pricing of those upstream postal services that now are regarded as competitive (*i.e.*, mail processing and transportation), and demonstrate a methodology to estimate revenues that the Postal Service derives from processing and transporting mail that is only partially workshared, or not workshared at all. These revenues from mail processing and transportation can then be compared

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<sup>4</sup> Postal Service (2002), App. C, p. C-5.

with the cost of providing the respective services. Any such comparison, however, is beyond the scope of this paper.

The approach taken here, of focusing on revenues that a postal administration receives in return for services provided, may be somewhat novel in the realm of postal economics. In most business firms, however, this approach is not uncommon. The authors are of the opinion that in a liberalized environment postal administrations and postal regulators could benefit from adopting such a perspective.

## **2.0 Current Postal Rate Setting in the United States**

Before discussing the methodology proposed for estimating revenues attributable to competitive upstream services, it is useful to review briefly how rates have been set since the Postal Service began liberalizing downstream access to its network.

First, the Postal Service and the Postal Rate Commission do not establish separate, explicit prices for any upstream postal services. Rather, published prices for postal products reflect “bundled” services – *i.e.*, they include the implicit price for final delivery by carriers *plus* the price for all other upstream services rendered.

Second, for mail that has comparable shape and weight, and is within the same subclass (*e.g.*, Standard Mail), published rates reflect differences that are

based on the amount of worksharing performed.<sup>5</sup> The differences in rates generally are shown in the rate schedule as worksharing “discounts.” These discounts are based on the Postal Service’s estimate of its avoided attributable costs, or “savings,” when the work is performed by the private sector instead of the Postal Service.

Third, the rate for workshared mail is computed by subtracting all applicable discounts from the rate for comparable mail that is not workshared. This method of deriving rates has been described aptly as “top down” pricing. Starting at the top – *i.e.*, with the highest rate charged for mail with the least amount of worksharing – mailers can achieve successively lower rates when they (or other private sector intermediaries) perform increasing amounts of worksharing.

Fourth, when determining worksharing discounts, the underlying rationale to which the Postal Service and the Postal Rate Commission subscribe generally is the Efficient Component Pricing Rule (“ECPR”), sometimes referred to as “lowest combined cost.”<sup>6</sup> Under ECPR, worksharing discounts should reflect differences in the Postal Service’s long-run marginal cost (LRMC) for the

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<sup>5</sup> When different shapes within a subclass give rise to cost differentials, a cost-based rate structure may also include shape-based rate differentials.

<sup>6</sup> See Postal Service (2002), App. L, p. L-6. In practice, neither the Postal Service nor the Postal Rate Commission adhere slavishly to ECP. Usually, however, they each make some effort to justify departures from ECP.

activities in question.<sup>7</sup> More explicitly, within each class of mail the applicable discount between each link in the postal value chain should be set equal to differences in the LRMC (or avoided long-run cost) of the two links. The Postal Rate Commission uses differences in attributable cost to approximate differences in LRMC. This approach is also described by Crew and Kleindorfer (1995) as “Top-down Efficient Component Pricing.” The ECPR thus serves as the intellectual cornerstone for the implicit rates which the USPS charges for intermediate services.

### **3.0 Top Down versus Bottom Up Pricing**

As described in Section 2.0, postal rates are quoted from the top down. Top down pricing starts with a bundled rate for mail that has the least amount of worksharing (and, correspondingly, the highest unit attributable cost), and then deducts discounts from that rate.

The same rate structure just as easily can be analyzed from the bottom up, however. That is, a rate for the least expensive mail to handle could be quoted explicitly. Additional fees or surcharges then would be added for mail that requires more costs to be incurred by virtue of the additional work that needs to

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<sup>7</sup> See Crew and Kleindorfer (1995) and the references therein for more discussion of the ECP rule. LRMC for a competitive product or service corresponds generally to what Baumol and Sidek (1994) describe as the average incremental cost (“AIC”) for an entire service. Both LRMC and AIC include any fixed costs that must be incurred on behalf of that product alone, and both assume that costs of plant and equipment are adjusted so as to minimize cost at each level of output.



be performed by the Postal Service.<sup>8</sup> To illustrate, explicit charges for any intermediate services that may be required, such as barcoding, sortation and transportation, could be added on to a base rate to determine the appropriate rate for all levels of additional service performed by the Postal Service. Bottom up pricing is thus unbundled pricing. It is also the reverse of top down pricing, and is generally the way prices for competitive services are quoted in competitive industries. The two approaches are contrasted in Table 1; see Appendix B for a detailed example based on rates for Standard ECR commercial mail.

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<sup>8</sup> The printing industry, which each year provides postal administrations with periodicals and advertising mail, is customarily prepared to quote incremental prices for optional services, such as folding, collating, binding, etc.

**Table 1**  
**Summary of Rate Setting**  
**Under Top Down and Bottom Up Methods**

	<b>TOP-DOWN</b>	<b>BOTTOM-UP</b>
<b>Cost Basis</b>	Compute Postal Service's <i>cost savings from avoiding</i> specified work	Compute Postal Service's <i>additional cost of performing</i> specified work
<b>Rate Setting</b>	Offer <i>discount</i> based on cost savings	Impose <i>surcharge</i> based on additional costs incurred

The end result from both top down and bottom up pricing should be equivalent, *provided that the same rate differentials for the same activities are utilized.*<sup>9</sup> A simple arithmetic example illustrates the equivalence of the top-down and bottom-up approaches. Consider pieces of mail with comparable shape and weight, and in the same subclass (*i.e.*, comparable content and service standard), and having the rate relationships shown in Table 2.

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<sup>9</sup> Discounts developed under the top-down approach are based on a narrow definition of worksharing that excludes various costs imposed by the Postal Service's entry requirements. In First-Class Mail, for example, mailers must comply with Move Update requirements (electronic address verification), but the cost of this activity is excluded from the worksharing cost estimate; see Gillotte (2002) for more discussion. The bottom-up approach would not include Move Update as an additional cost for mail that already has been verified.

**Table 2**

**Hypothetical Example Showing the Equivalence  
of Top Down and Bottom Up Approaches**

<b>Activity</b>	<b>Rate Element</b>
<b>Sorting</b>	5¢
<b>Transportation</b>	5¢
<b>Delivery</b>	10¢ (includes contribution to institutional costs)
<b>TOTAL</b>	20¢

One could, with equal logic, (i) establish a bundled rate of 20 cents, with worksharing discounts of 5 cents each to cover some or all of the “avoided costs” of sorting and transportation, or (ii) establish an unbundled access charge of 10 cents for delivery, with surcharges of 5 cents each to cover some or all of the attributable costs of sorting and transportation.<sup>10</sup>

From the mailers’ viewpoint, the reality is that for mail of similar weight, shape, etc., the *differences* in the published rates – however arrived at, and by

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<sup>10</sup> See Appendix B for a more detailed example illustrating the equivalence of presenting rates from a top down or bottom up perspective.

whatever means – represent prices charged by the Postal Service for providing upstream services.<sup>11</sup> A generic term for discounts or surcharges that represent the implicit price charged for individual links in the postal value chain is *rate differentials*. The size of these rate differentials in relation to the underlying costs helps determine the contribution to residual costs by each piece of mail.

The preceding illustration demonstrates that top down and bottom up pricing, at least in theory, are capable of arriving at the same result. The two approaches do encourage somewhat different mind sets, however, and viewing postal rates from the bottom up may provide insights that would be less apparent from top down pricing. The above discussion assumed that avoided costs or savings (in a top-down system) or component costs (in a bottom up system) are known with total accuracy and complete certainty. That obviously is not the case, and one critical difference between a top-down versus a bottom-up system may be the treatment of uncertainty.

In a top-down pricing system, the average unit cost for using the entire postal delivery network typically is assumed to be known with a high degree of accuracy, whereas the estimated avoided costs, or “savings,” are considered to be somewhat less certain. In order to allow for such uncertainty, it has become customary for the Postal Service and the Postal Rate Commission deliberately to understate the estimate of savings when translating costs into discounts from

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<sup>11</sup> In the United States, the published rate schedules for periodicals, advertising mail and parcels contain a DDU entry rate that is for delivery only; *i.e.*, presorted bulk mail that is entered at the delivery unit. All higher rates included the Postal Service’s fee for performing intermediate upstream activities.

base rates. Such understatements have tended to be cumulative, both over time and when savings from more than one source are combined. Under this top-down approach, one immediate result of uncertainty is that as between (i) mail that uses the entire postal network and (ii) mail that uses only a small portion of the network, *the estimated difference in rates is compressed*. In the top-down pricing approach, this deliberate underestimate of avoided costs is often described as a “conservative” approach.

If a bottom up pricing system were used, there is reason to believe that the reverse situation most likely would tend to prevail. The base rate, and the underlying cost for that rate, would be for mail entered at a destinating delivery unit (“DDU”). An appropriate amount would be added to cover transportation cost for mail entered immediately upstream. If such mail required additional sortation, the cost for that would also be added. For mail that is entered yet further upstream in the postal network, one would have to add on still more cost components and their corresponding surcharges. As the adding up process moves further and further upstream, the appropriate amount of cost to include would become progressively less certain. No matter how elaborate and detailed, studies of additional costs (like avoided cost studies) would be only estimates, subject to some degree of uncertainty. Because it is not altogether clear exactly how much to add, when one is in a bottom up pricing mode, the most reasonable procedure likely would be to add a little extra margin for safety. In a bottom up pricing approach, this deliberate overestimate would be described as “conservative.” Under a bottom-up approach, the end result of uncertainty as

between (i) mail that uses all of the postal network and (ii) mail that uses only a small part of the network, is that *the estimated difference between rates is expanded*. To sum up, when taking into account the uncertainty of cost estimates for intermediate links in the postal value chain, the rates resulting from using bottom up pricing can differ dramatically from the rates resulting from using top down pricing. And whatever is deemed “conservative” under one approach gets stood on its head under the other approach.

A real world illustration can be drawn from actual Postal Service experience to illustrate the different results that can be obtained from using top down and bottom up pricing. For three major classes of mail – advertising, parcels and periodicals – the Postal Service offers discounts for destination entry and uses top down pricing to develop the discounted rates. Under the top down approach currently used, the rate differential is stated as a “discount,” the concern is not to “give away” too much, and the rate differential *is less than or equal to* the estimated difference in transportation costs; *i.e.*, the passthrough of the estimated avoided costs (or savings) is not more than 100 percent. For each of these three classes, almost invariably the rate differential for entering the mail either farther from or nearer to the final place of delivery reflects *no more than* 100 percent of the estimated cost of transportation – *i.e.*, the Postal Service’s estimate of costs avoided from not having to transport the mail.<sup>12</sup>

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<sup>12</sup> The top down approach to rate setting, when establishing discounts, could add the subclass markup to the estimate of avoided costs, thereby increasing the rate differentials. In practice, however, this has not  
(continued...)

For Priority Mail, the Postal Service uses what can be considered as a bottom up approach, where detailed cost estimates are developed for each rate cell. For any given weight, the various Priority Mail rate cells correspond to zones that reflect progressively higher distances. The difference in cost between zones reflects the cost of transporting Priority Mail that is entered either farther from or nearer to the final destination. Rates are determined by adding a substantial percentage markup to the estimated costs for each rate cell. Historically, this markup has ranged from 70 to over 100 percent. Consequently, for pieces of Priority Mail of identical weight, the rate differentials from one zone to the next reflect *substantially more than* the estimated difference in transportation costs.<sup>13</sup>

The result for Priority Mail is of course exactly opposite to transportation rate differentials for advertising mail, parcels and periodicals, discussed above. In the bottom up approach used for Priority Mail, transportation costs are viewed as “additive” (as opposed to “avoided”). Consequently, the concern is to avoid undercharging for the additional costs, and as a result rate differentials reflect substantially more than the underlying cost differentials.

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<sup>12</sup>(...continued)  
occurred.

<sup>13</sup> The bottom up approach to rate design starts with developing an explicit unit cost estimate for each rate cell within the subclass (estimates of costs avoided, or “savings,” are noticeable by their absence), and then proceeds to develop rates from those unit costs. Attention is thus focused on the cost of services provided to users of each rate cell. It is not a requirement of the bottom up approach that the unit cost in each rate cell be increased by any percentage amount, much less by an equal percent markup; that is a separate decision.

As one might expect from the preceding example, top down pricing lends itself to and encourages a somewhat different mindset than occurs with bottom up pricing. Top down pricing seems to presume a monopoly situation, from which the incumbent monopolist relents its grip on the market and deigns to “grant” a discount to mailers. Bottom up pricing presumes full liberalization of the market for upstream services, competitive pricing by the Postal Service for those services that it provides, and adds appropriate rate differentials (or surcharges) that should be designed to cover at least the cost of additional services provided. Under a bottom up pricing structure, nothing is treated as a discount that is “given” to mailers.<sup>14</sup>

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<sup>14</sup> The American Postal Workers Union (“APWU”) has characterized worksharing discounts as “subsidies” that are “given” to the direct mail industry in an advertisement published in the *Washington Post* (July 1, 2002); also see Advertising Mail Marketing Association, POSTCOM BULLETIN 31-02 (July 26, 2002), pp. 3-4.



#### **4.0 Determining Revenues Attributable to Workshared Activities**

The procedure for determining revenues attributable to workshared activities takes as its starting point all rate differentials established for the various worksharing activities within a subclass; *i.e.*, the rate differentials are taken as the amount that the Postal Service charges for performing the associated activity. In other words, presort differentials are presumed to reflect the Postal Service's charge for sorting, while differentials for destination entry reflect the Postal Service's charge for transporting mail (including cross-docking costs). Viewing rate differentials as the price charged by the Postal Service for providing stipulated competitive services, as is done here, essentially reflects a bottom up view of the rate structure.

In the existing rate schedules for the different classes of mail, all rate differentials for worksharing are separate and strictly additive. That is, to obtain the total rate differential, one adds the applicable rate differentials for presortation (and/or prebarcoding) to any applicable rate differential for destination entry. Mail that enjoys a lower rate by virtue of both presortation and destination entry does not receive any special compound discount that exceeds the sum of the individual discounts.

In certain classes of mail – notably, Standard, and two package services, Parcel Post, and Bound Printed Matter – the Postal Service has an explicit rate for mail that is (i) presorted to carrier route and, for Standard, in walk sequence, and (ii) is entered locally at a destination delivery unit (“DDU”). Within each respective subclass these are the lowest rates available to mailers – *i.e.*, they

reflect the maximum discounts – and in order to take advantage of these rates mail must bypass completely all upstream mail processing facilities as well as the entire postal transportation network. For such mail, the only service provided by the Postal Service is delivery (including possible in-office tasks such as casing by carriers at the DDUs). In the Standard, Parcel Post, and Bound Printed Matter subclasses, therefore, the estimation of revenue attributable to workshared activities is relatively straightforward. It is computed as the difference between (i) the total revenues actually received for each respective subclass and (ii) what would have been paid if all mail had been entered at DDUs in the prescribed maximum presort condition; *i.e.*, at the minimum rate.<sup>15</sup> All revenue in excess of the minimum rate is treated as payment for activities subject to worksharing.

In other subclasses, the lowest available rate does not reflect the same maximal degree of worksharing. For example, the rates for First-Class Mail offer presort discounts, but the Postal Reorganization Act requires that rates be geographically uniform, hence no discounts are available for destination entry. A similar situation exists with respect to Media Mail. The Periodicals subclass is a mixed situation; destination entry discounts apply to the advertising portion, but no destination entry discount applies to editorial matter. In these other subclasses it was therefore necessary to employ slightly different procedures to

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<sup>15</sup> This approach implicitly assumes that the Postal Service charges all similar mail the same rate for delivery. In other words, it does not offer an implicit discount for mail that buys upstream services from the Postal Service. See Haldi (2002) for more discussion of this issue.

develop comparable estimates of the revenue attributable to workshared activities.

Succinctly, in the case of First-Class Mail, worksharing revenues are credited with an amount equal to all attributable transportation costs. This adjustment assures that the worksharing revenues in Table 1 cover all transportation costs; *i.e.*, any shortfall between worksharing revenues and costs will be the result of presort rate differences that do not cover mail processing costs. See Appendix A for a full description of the estimation procedures that were used for each subclass.

Table I provides a comprehensive summary of this effort to distinguish between revenues derived from the rate differentials charged for competitive workshared activities and revenues derived from other services provided by the Postal Service. Total CRA revenues for FY 2000 are reproduced in Table I, column 1. Revenues attributable to delivery, including all other non-workshared services such as operation of the retail network, collection, addressing services, etc. are shown in column 2. Revenues derived from the rate differentials for competitive upstream activities are shown in column 3. Column 4 provides references to the various tables in the Appendix that contain supporting detail for the summary data shown on each indicated row in Table I.

Table I

**Allocation of CRA Revenues to Delivery and Worksharing Activities  
FY2000**

	(1) 2000 Revenue (mill)	(2) Revenues for Delivery & Other Svcs (mill)	(3) Work- Sharing Revenues (mill)	(4) Appendix Table Source:
First-Class Mail:				
Single-Piece Letters	21,774.1			
Presort Letters	12,553.0			
Total Letters	34,327.1	24,871.6	9,455.5	1-A
Single-Piece Cards	559.4			
Presort Cards	446.7			
Total Cards	1,006.1	637.6	368.5	1-B
Fees	182.7	182.7	0.0	
Total First-Class	<b>35,515.9</b>	<b>25,691.9</b>	<b>9,824.0</b>	
Priority Mail	<b>4,837.1</b>	<b>2,567.2</b>	<b>2,269.9</b>	1-C
Express Mail	<b>996.1</b>	<b>143.1</b>	<b>853.0</b>	1-D
Mailgram	<b>1.5</b>	<b>1.5</b>	<b>0.0</b>	
Periodicals:				
In County	76.7	62.9	13.8	2-A
Outside County	2,076.3	1,371.8	704.5	2-B
Fees	17.7	17.7	0.0	
Total Periodicals	<b>2,170.7</b>	<b>1,452.5</b>	<b>718.2</b>	
Standard Mail:				
Enhanced Carrier Route	5,095.8	4,330.1	765.7	3-A
Regular	10,015.7	5,823.3	4,192.4	3-B
Fees	81.8	81.8	0.0	
Total Standard	<b>15,193.3</b>	<b>10,235.2</b>	<b>4,958.1</b>	
Package Services:				
Parcel Post	1,041.9	456.2	585.7	4-A
Bound Printed Matter	502.9	274.7	228.2	4-B
Media Mail	365.1	57.6	307.5	4-C
Fees	2.4	2.4	0.0	
Total Package Services	<b>1,912.3</b>	<b>790.9</b>	<b>1,121.4</b>	
International Mail (outgoing)	<b>1,700.2</b>	<b>0.0</b>	<b>1,700.2</b>	
<b>Total Mail</b>	<b>62,327.1</b>	<b>40,882.2</b>	<b>21,444.9</b>	

Table I

**Allocation of CRA Revenues to Delivery and Worksharing Activities  
FY2000**

	(1) <b>2000 Revenue (mill)</b>	(2) <b>Revenues for Delivery &amp; Other Svcs (mill)</b>	(3) <b>Work- Sharing Revenues (mill)</b>	(4) <b>Appendix Table Source:</b>
Special Services:				
Registry	72.3			
Ancillary	3.2			
Total Registry	75.5			
Certified	377.4			
Ancillary	301.4			
Total Certified	678.8			
Insurance	105.2			
Ancillary	2.2			
Total Insurance	107.4			
COD	21.5			
Money Orders	271.5			
Stamped Cards	2.0			
Stamped Envelopes	13.4			
Special Handling	0.1			
Post Office Box	684.2			
Other	17.1			
Total Special Svcs	<b>1,871.5</b>	<b>1,598.6</b>	<b>272.9</b>	
Misc. Items	277.8			
 Total Mail and Services	 <b>64,476.4</b>	 <b>42,480.8</b>	 <b>21,717.8</b>	
 Free Mail (rev forgone appropriation)	 <b>64.2</b>	 <b>8.5</b>	 <b>55.7</b>	
 Total Operating Revenue	 <b>64,540.6</b>	 <b>42,489.3</b>	 <b>21,773.5</b>	

Source: Col 1: CRA for BY 2000, Exh. USPS-11C (Docket No. R2001-1).  
Cols. 2 and 3: See Appendix A, tables listed in column 4.

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## Appendix A

### **Allocation of Revenues to Delivery and Worksharing**

This appendix explains the basis for attributing revenues to either (i) delivery and other services, or (ii) workshared activities, as shown in Table I, columns 2 and 3, respectively. The focus here is on revenues derived from the rate differentials (*i.e.*, presort, automation, and destination entry discounts) charged by the Postal Service for workshared services of sorting, barcoding, and transportation. Delivery can be considered as a sort of residual catchall, including all other services and general overhead activities.<sup>16</sup> The attribution for each major subclass is supported by a separate table. The organization of the tables contained in this appendix is generally similar, and is as follows.

The first part of each table shows the RPW revenues for FY 2000. These revenues coincide of course, with the CRA revenues contained in Table 1, column 1.

The second part shows the relevant rates that were in effect in FY 2000 and that were used in subsequent computations. In general, it was not necessary to replicate the entire rate structure for any subclass.

The third part shows RPW volumes, as reported in the billing determinants, and makes an initial computation of revenues attributable to delivery and other services.

In some of the tables, an adjustment to the initial computation of revenues attributable to delivery and other services is necessary. This occurs, for instance, with those subclasses that do not have explicit rate differentials for destination entry. Once the final revenues attributable to delivery and other services have been determined for a subclass, they are deducted from total CRA revenues of that subclass to obtain the revenues attributable to workshared activities.

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<sup>16</sup> For ease of reference, the term “delivery” as used in this appendix should be interpreted to include other services (*e.g.*, address correction services) as well as retail counters, collection routes, and all institutional overhead costs.

## First-Class Letters: Table 1-A

Total RPW revenues for First-Class Letter Mail in FY 2000, some \$32.3 billion, is shown in Table 1-A, Section 1.

Rates for First-Class letters and flats are shown in Table 1-A, Section 2. The rates shown in bold are used in Section 3.

Section 3 of Table 1-A shows First-Class letter mail volumes in the first five columns. The lowest applicable rate is shown in column 6, and *unadjusted* revenues for delivery are computed in column 7. The rates used correspond to the lowest rates shown in bold in Section 2; *i.e.*, the automation carrier route presort rates for letters, and the automation presort rate for flats. This \$28.3 billion is the revenue that the Postal Service would have received if all First-Class letter mail had been prebarcoded and presented in automation carrier route presort condition. It should be noted that none of the revenues derived from the nonstandard surcharge are allocated to delivery, the presumption being that the automation surcharge is for extra handling costs incurred during mail processing, and not during delivery.

Section 4 of Table 1-A makes a total of three adjustments to reduce the revenues allocated to delivery and, correspondingly, increase the revenues allocated to worksharing activities. The first two adjustments (on rows a and b) arise from the fact that First-Class Mail has no rate for destination entry.

- Revenues equal to the amount of all transportation costs in cost segment 14 that are *attributed* to First-Class letter mail (\$1,092 million) are shifted from delivery to mail processing (row a), to account for the fact that the provision of long-distance transportation is built into all rates for First-Class Mail.
- The second adjustment (row b) arises from certain bulk handling costs that are associated with transportation costs. As a first approximation, an adjustment equal to 33 percent of transportation costs (\$360 million) is made. This adjustment derives from the computations for destination entry for Standard Mail, as developed in LR-J-68 in Docket No. R2001-1. There, the avoided non-transportation costs for DDU, DSCF and DBMC entry as a percentage of avoided transportation costs were equal, respectively, to 32.9, 30.96 and 21.03 percent (row b).

The effect of the first two adjustments combined is to compute an implicit destination entry discount for First-Class Mail on a basis similar to that used for Standard mail – *i.e.*, actual transportation cost, including all mail handling costs for cross docking at intermediate transportation hubs prior to the DDU. The



effect of these first two adjustments is to assure that revenues for transportation cover all attributable transportation costs.

The third adjustment arises from the fact that First-Class automation presorted letters are DPS'd by clerks and mailhandlers before being given to carriers. An adjustment of 2 cents per letter-shaped piece of mail is made on row c, in the amount of \$1,944 million.<sup>17</sup> No such adjustment is made for flats because after clerks and mailhandlers presort flats to carrier route, they are then are cased to delivery sequence by letter carriers.

Section 5 of Table 1-A shows *adjusted* delivery revenues, \$24.9 billion, which are the unadjusted delivery revenues of \$28.3 billion shown in section 3 less the total adjustments of \$3.4 billion shown in section 4.

Section 6 of Table 1-A shows total revenues allocated to mail processing and transportation combined, \$9.4 billion. These are total RPW revenues shown in section 1 (\$34.3 billion) less the adjusted delivery revenues (\$24.9 billion) shown in section 5.

Revenues for extra ounces in the amount of \$4,930 million, are included under total revenues, as shown in Table 1, section 3. These weight-related revenues are attributed to delivery. In section 4, however, a partially offsetting adjustment in the amount of \$1,452 million, is credited to worksharing revenues. This latter amount is equal to all attributable transportation costs plus cross-docking costs equal to 33 percent of attributable transportation costs, which costs are considered to be weight related. Since no weight related costs are recognized in the presort discounts for either First-Class Mail or Standard Mail, the balance of the revenues for extra ounces is credited to delivery.

#### **First-Class Cards: Table 1-B**

This table parallels Table 1-A. Total RPW revenues for First-Class Card Mail, \$1.0 billion, is shown in Section 1 of Table 1-B.

Rates for First-Class cards are shown in Section 2 of Table 1-B. Only one rate, that for automation carrier route presort cards, shown in bold, is used in Section 3.

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<sup>17</sup> The figure of 2 cents per piece used here is somewhat arbitrary, and is presumed to be quite generous in light of the fact that the Postal Service's automated equipment can process letters at rates in excess of 30,000 per hour.

Section 3 shows the billing determinants (volumes) in the first five columns, and uses the rate shown in column 6 to compute *unadjusted* revenues for delivery in column 7 (\$773 million).

Section 4 makes three adjustments, similar to those made in Table 1-A, to reduce the revenues allocated to delivery and, correspondingly, increase the revenues allocated to workshared activities by some \$135 million.

Section 5 shows *adjusted* delivery revenues for First-Class cards (\$638 million), which are the unadjusted delivery revenues of \$773 million shown in section 3 less the adjustments of \$135 million shown in section 4.

Section 6 shows that \$368 million of First-Class card revenues are allocated to workshared activities. These are total revenues shown in section 1, \$1,006 million, less the \$638 million of adjusted delivery revenues shown in section 5.

### **First-Class Fees**

The entirety of First-Class fee revenue (\$182.7 million), which amounted only to 0.5 percent of total First-Class Revenues, has been allocated to delivery and other services on the basis that some of the fees are for use of the address management system, while other fees are for permits (*i.e.*, none of the fees are for workshared activities).

### **Priority Mail: Table 1-C**

Total Priority Mail revenues in FY 2000, \$4,837.1 million, are shown in section 1, and total volume is shown in section 2.

The workpapers of the Postal Rate Commission in docket No. R97-1 are used to develop a rate for delivery only, following the basic procedures of rate development for Priority Mail. The rates have a piece and a pound portion. The pound portion is based on transportation costs plus 2 cents per pound of non-transportation. The assumption was made that one-fourth of the 2 cents per pound (0.5 cents) is for carriers handling heavier pieces. Rates were developed for the local zone (which goes up to zone 3) with no transportation but with the 0.5 cents per pound. The rate for a 1 pound piece turns out to be \$2.43. Including the rate for all heavier pieces, weighted by volumes, the average rate for delivery turns out to be 2.439 per piece. This is the amount shown in section 3, row a, of Table 1-C.

Subsequently, in Docket No. MC2001-2, presort discounts were recommended for Priority Mail, on an experimental basis. The discount for 3-digit presort is 16 cents, and for 5-digit presort is 25 cents, and the difference is thus 9 cents. Since there is basically one sort difference between 3 and 5 digit, and one sort between 5 digit and carrier route, it is reasonable to assume that if a

carrier route discount existed, it would be 34 cents (*i.e.*, 25 cents plus 9 cents). Development of this estimated discount is shown in section 3b of Table 1-C. The resulting rate for Priority Mail entered at a delivery unit is 2.099, as shown in section 3c. Fees for Priority Mail are approximately \$0.001 per piece, so the final rate for delivery only is \$2.10, as shown in section 3e.

The revenues for delivery are developed in section 4, and the balance, 47 percent of total revenues, is attributed to mail processing and transportation, as shown in section 5.

### **Express Mail: Table 1-D**

Total Express Mail revenues in FY 2000 are shown in section 1, and total volume is shown in section 2. The most-used category of Express Mail is Post Office to Addressee. There exists, however, another category, Post Office to Post Office, where the addressee is required to pick up the piece. Basically, the PO to PO rate is a non-delivery rate, so the difference between PO to Addressee and PO to PO is the charge for delivery. For every weight in the rate Express Mail rate table (1 to 70 pounds), the difference between the two is \$2.05. This is shown in section 3 of Table 1-D. The revenues for delivery are developed in sections 4-6, and the balance, shown in section 7, is attributed to mail processing and transportation. In light of the expedited handling and premium transportation that Express Mail receives, the share of revenues for mail processing and transportation is high, 86 percent.

### **Mailgram**

Mailgram revenue, which is not significant, has been allocated to delivery, because mailgrams are usually entered at, or close to, DDU, and they require virtually no mail processing.

### **In County Periodicals: Table 2-A**

The total amount of In-County Periodicals revenues, \$76.7 million, is shown in section 1. The volume, 897 million pieces, is shown in section 2. Section 3 uses data from the billing determinants to develop the rate for a composite piece presorted to carrier route and entered at the DDU. The final rate for all periodicals has both a weight component and a piece component. These are combined to arrive at a final DDU delivery rate of 6.842 cents per piece. Sections 4 and 5 develop total revenues for delivery, and in section 6 the balance of total CRA revenues is allocated to mail processing (presumably in-county publications do not require any long-distance purchased transportation).

### **Outside County Periodicals: Table 2-B**

The total amount of In-County Periodicals revenues, \$2,076.3 million, is shown in section 1. The volume of Regular, Nonprofit and Classroom combined, 9,468 million pieces, is shown in section 2.

Sections 3 and 4 contain data used in section 5 to develop the rate for a composite piece presorted to carrier route and entered at the DDU. The final rate for all periodicals has both a weight component and a piece component, shown in rows d and o, respectively, of section 5. These are combined to arrive at a final DDU delivery rate of 14.31877 cents per piece, shown on row p of section 5.

Sections 6 and 7 develop total revenues for delivery, \$1,372 million, and in section 8 the balance of total CRA revenues, \$705 million, is allocated to mail processing and purchased transportation.

### **Enhanced Carrier Route Mail: Table 3-A**

Total RPW revenues for commercial and nonprofit ECR mail, \$5.1 billion, are shown in Section 1 of Table 3-A.

Saturation DDU entry rates for ECR letters and flats are shown in Section 2 of Table 3-A. The first column shows the DDU entry rates for commercial ECR mail, and the second column shows the DDU entry rates for nonprofit ECR mail. These are the lowest rates applicable to Standard letters and flats. In order to obtain these rates, the mail must be presorted to carrier route, in walk sequence, and the mail must be entered at the destination delivery unit ("DDU"). Other than possible casing by the carrier, this mail does not require the Postal Service to incur any other mail processing or transportation costs. In other words, the rates paid for this mail are for delivery only.

Section 3 of Table 3-A shows the FY 2000 mail volumes for commercial and nonprofit ECR mail, respectively.

Section 4 of Table 3-A uses the saturation DDU entry rates shown in section 3 to compute the delivery revenues for all ECR mail, \$4.3 billion. This is the revenue that the Postal Service would have received if all commercial and nonprofit ECR mail had been presorted to carrier route and entered at DDUs. Since these rates reflect destination entry discounts, no adjustment is necessary (as was the case, for example, with First-Class letters).

Section 5 of Table 3-A shows total revenues that are attributed to the workshared activities of mail processing and transportation, \$0.8 billion. These are computed as a residual of the total CRA revenues shown in section 1 (\$5.1 billion) less the delivery revenues shown in section 4 (\$4.3 billion). As might be expected, the share of all ECR revenues that are derived from the competitive upstream activities of mail processing and transportation is comparatively small, only 15 percent.

## **Standard Mail – Table 3-B**

Total RPW revenues for commercial and nonprofit Standard mail, \$10.0 billion, are shown in Section 1 of Table 3-B.

Saturation DDU entry rates for ECR letters and flats are shown in Section 2 of Table 3-A. The first column shows the DDU entry rates for commercial ECR mail, and the second column shows the DDU entry rates for nonprofit ECR mail. These are the lowest rates applicable to any Standard letters and flats. In order to obtain these rates, the mail must be presorted to carrier route, in walk sequence, and the mail must be entered at the destination delivery unit (“DDU”). Other than possible casing by the carrier, such mail does not require the Postal Service to incur any mail processing or transportation costs. In other words, the rates paid for such mail are for delivery only. By definition, no mail in the commercial or nonprofit Standard subclasses qualify for these low rates, and all mail in the commercial and nonprofit Standard subclasses pays rates higher than the lowest rate available to ECR.

Section 3 of Table 3-B shows the billing determinants (mail volumes) for commercial and nonprofit Standard mail, respectively.

Section 4 of Table 3-B uses the saturation DDU entry rates shown in section 3 to compute the delivery revenues for all commercial and nonprofit Standard mail, \$5.8 billion. This is the revenue that the Postal Service would receive if all commercial and nonprofit ECR mail were presorted to carrier route and entered at DDUs.

Section 5 of Table 3-B shows that \$4.2 billion of revenues are allocated to mail processing and transportation. These are computed as a residual of the total \$10.0 billion of RPW revenues shown in section 1, less the delivery revenues of \$5.8 billion shown in section 4. For the Standard subclasses, the share of all revenues derived from providing competitive upstream workshared activities is considerably larger than it is for ECR; *i.e.*, 42 percent, as opposed to only 15 percent for ECR.

## **Standard Fees**

Standard Mail fee revenue (\$81.8 million), which is about 0.5 percent of total revenues for Standard Mail, has been allocated to delivery and other services on the basis that the fees are primarily for permits (*i.e.*, none of the fees are for workshared activities).

## **Parcel Post: Table 4-A**

Parcel Post has a DDU entry rate for all weights. This rate, which reflects no transportation or upstream mail processing, is multiplied by the total volume in

each weight cell to arrive at the revenues for delivery. All other revenues from Parcel Post are presumed to be for mail processing and transportation.

#### **Bound Printed Matter: Table 4-B**

Total revenues for Bound Printed Matter, \$50.3 million, are shown in Table 4-B, section 1. Rate for Bound Printed Matter are shown in section 2, and bulk and single piece volumes are shown in section 3.

Single piece BPM revenues are allocated to delivery by multiplying the total FY 2000 volume of single piece BPM (27,247,584 pieces) by the 90 percent of the minimum local rate (\$1.14) for a piece of minimum weight (1.5 lbs). A piece entered locally should require minimal mail processing and transportation.

Upstream revenues for single piece BPM are computed as the residual between total revenues and delivery revenues. The procedure used here means that all weight-related charges in excess of 1.5 pounds, and all zone-related charges in excess of the local rate – including any markup on those additional charges – are credited to the upstream mail processing and transportation functions.

Bulk BPM revenues are allocated to delivery by multiplying the total FY 2000 volume of bulk BPM (532,970,549 pieces) by the piece rate (\$0.463) for a carrier route presorted piece. Such a piece, when entered locally, should require minimal mail processing and transportation.

Upstream revenues for bulk BPM are computed as the residual between total revenues and delivery revenues. The procedure used here means that (i) all presort-related charges in excess of the lowest carrier route presort rate, (ii) all weight-related charges, including the minimum per pound charge (2.8 cents per pound) for mail entered locally, and (iii) all zone-related charges in excess of the local rate – including any markup on any of these additional charges – are credited to the upstream mail processing and transportation functions.

#### **Media Mail: Table 4-C**

Media Mail includes Special and Library Mail. Both pay the same rate. Unadjusted revenues for delivery are computed at the minimum 5-digit presort rate for the first pound. An adjustment is required, however, to account for the fact that Media Mail is unzoned, and the even the minimum 5-digit presort rate for the first pound includes transportation.

#### **International Mail**

The revenues shown in the CRA under international mail are revenues from originating and outgoing international mail only. By definition, such mail does not receive any delivery services from the Postal Service, and most or all of the revenue is seemingly for mail processing and transportation services. Accordingly, all revenue for international mail has been attributed to those two worksharing activities.<sup>18</sup>

### **Special Services**

Total revenues from Special Services have been allocated using the split factors developed in Table 5. As shown in that table, the split factors are based on piggybacked direct labor costs.

Direct labor costs can be a somewhat imperfect indicator of special services costs. For example, with respect to Stamped Cards, virtually all of the costs appear in cost segment 16, component 16.1, where the cost of buying printed cards is recorded.

The procedure here is more than fair as regards the development of revenues allocated to mail processing (Special Services do not incur any purchased transportation costs). Total piggybacked mail processing cost amounted to \$184.5 million, as shown in Table 5, Section B, column 4, while revenues allocated to worksharing in Table 1 amounted to \$363.9 million.

### **Free Mail**

The Postal Service provides free mail delivery for the blind, for which service it is reimbursed by an annual appropriation from Congress. In addition, over a period of 40 years the Postal Service is receiving an annual appropriation for revenue forgone, as part of an agreement to terminate that subsidy some years ago. Together, the total appropriation received in FY 2000 amounted to \$64.2 million.

In this case, the amount of delivery costs for Free Mail were computed (\$8.5 million) and deducted from the appropriation. The balance of the appropriation was credited to upstream worksharing services. This procedure undoubtedly overstates upstream revenues, but the amounts involved are not large.

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<sup>18</sup> Not all revenue from outgoing international mail is for mail processing and transportation. Some portion of that revenue must be paid to other postal administrations in the form of terminal dues. At the same time, the Postal Service also receives terminal dues from other postal administrations for processing and delivering mail which they originate and send to the United States.

Table 1-A

**First-Class Letter Revenues for Delivery and Mail Processing  
FY 2000**

	Billing Determinants Section							Total Revenue
	A-1 Single-Piece	A-2	A-3	A-4	(5)	(6)	(7)	
<b>1 RPW Revenues (000)</b>	21,774,114	1,542,992	10,743,643	266,321				34,327,070

**2 Rates (cents):**

Letters:

First ounces - light pieces	33.0	30.5	27.0	23.8
First ounces - heavy pieces		25.9	22.4	19.2
First Ounces, QBRM	30.0			
Additional Ounces	22.0	22.0	22.0	22.0

Flats:

First ounces - light pieces			30.0	
First ounces - heavy pieces			25.4	
Additional Ounces			22.0	

Nonstandard surcharge, Flats

	11.0	5.0	5.0	
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Table 1-A (con't)

**First-Class Letter Revenues for Delivery and Mail Processing**

**FY 2000**

3 Mail Volume	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Single-pc Non-presort Pieces (000)	Non-Auto Presort Pieces (000)	Auto Presort Pieces (000)	Auto Car Rte Presort Pieces (000)	TOTAL VOLUME (000)	Revenue per Piece For Delivery	Total Revenues For Delivery
Letters:							
First ounces - light pieces	51,975,772	4,191,415	39,664,208	1,071,031	96,902,426	0.238	23,062,777
First ounces - heavy pieces		231,566	74,083	4,302	309,951	0.192	59,511
Total First Ounces		4,422,981	39,738,291	1,075,333	97,212,377		
First Ounces, QBRM	392,172				392,172	0.238	93,337
Additional Ounces	19,450,643	903,247	1,066,014	46,661	21,466,565	0.220	4,722,644
Flats:							
First ounces - light pieces			249,125		249,125	0.300	74,738
First ounces - heavy pieces			189,742		189,742	0.254	48,194
Total First Ounces			438,867		438,867		
Additional Ounces			942,015		942,015	0.220	207,243
Nonstandard pieces	463,057	44,566	87,571			0	0
Unadjusted Revenues for Delivery							28,268,444
4 Less Adjustments:							
a. Transportation costs attributed to First-Class Letters (Exh. USPS-11A, p. 3)							1,092,192
b. Bulk handling costs (at 33% of transportation costs)							360,423
c. DPS and other sortation, at 2 cents/pc (97,212,377 * 0.02)							1,944,248
Total adjustments							3,396,863
5 Adjusted delivery revenues							24,871,582
6 Adjusted mail processing revenues							9,455,488
							Delivery revenues per piece 0.256
							Mail Processing & Transportation revenues per piece 0.097

Source for rates, total revenue and volume data: Docket No. R2001-1, Billing Determinants, LR-J-98.

Table 1-B

**First-Class Card Revenues for Delivery and Mail Processing  
FY 2000**

	Billing Determinants Section					Total Revenue
	A-5 Single-Piece Non-presort Cards	A-6 Non-Automated Presort Cards	A-7 Automated Presort Cards	A-8 Automation Carrier Route Presort Cards	(7)	
<b>1. RPW Revenues (000)</b>	559,432	123,333	310,905	12,464		1,006,134

**2. Rates (cents):**

Cards:	Rate (cents)
Single pc except QBRM	20.0
QBRM Cards	18.0
Letters (1st unit)	33.0
Non-Auto Presort	18.0
Basic Auto	16.6
3-digit Auto Presort	15.9
5-digit Auto Presort	14.6
Carrier Rte Presort	14.1

Source for rates, total revenue and volume data: Docket No. R2001-1, Billing Determinants, LR-J-98.

Table 1-B (con't)

**First-Class Card Revenues for Delivery and Mail Processing  
FY 2000**

3. Mail Volume &	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Single- Piece	Non- presort Pieces (000)	Automated Presort Pieces (000)	Automation Carrier Route Presort Pieces (000)	TOTAL CARD VOLUME (000)	Revenue per Piece For Delivery + Trans (\$)	Total Revenues For Delivery + Trans + DPS
Units at card rate, except QBRM	2,531,873				2,531,873	0.141	356,994
QBRM Cards	68,384				68,384	0.141	9,642
Letters (1st unit)	119,041				119,041	0.141	16,785
Nonauto Presort Cards		688,129			688,129	0.141	97,026
Basic Auto Cards			461,677		461,677	0.141	65,096
3-digit Auto Cards			913,723		913,723	0.141	128,835
5-digit Auto Cards			609,484		609,484	0.141	85,937
Carrier Route presort Cards				88,394	88,394	0.141	12,464
				-----	5,480,705		772,779
Unadjusted Revenues for Delivery							
<b>4. Less Adjustments:</b>							
a. Transportation costs attributed to First-Class Cards (Exh. USPS-11A, p. 3)							19,208
b. Bulk handling costs (at 33% of transportation costs)							6,339
c. DPS and other sortation, at 2 cents/pc (97,212,377 * 0.02)							109,614
							-----
Total adjustments							135,161
							-----
<b>5 Adjusted delivery revenues</b>							<b>637,619</b>
<b>6 Adjusted mail processing revenues</b>							<b>368,515</b>
							Delivery revenues per piece 0.116
							Mail Processing & Transportation revenues per piece 0.067

Table 1-C

**Priority Mail Revenues for Delivery and Mail Processing  
FY 2000**

1. <b>RPW/CRA Revenues (millions)</b>	4,837.1
2. <b>Mail Volume (pieces)</b>	1,222,454,000
3. <b>Rate for Delivery:</b>	
a. Average rate for delivery to local zone, weighted by volumes (Source: PRC workpapers)	2.439
b. Docket No. MC2001-1:	
Discount for 5-digit presort	0.250
Discount for 3-digit presort	0.160
Difference (implied discount for additional sort to carrier route)	0.090
Estimated discount for carrier route presort	0.340
c. Rate for Delivery only	2.099
d. Avg Per Piece fee for Priority Mail	0.001
e. Final Rate for Delivery only	2.100
4. <b>Unadjusted Revenues for Delivery (millions)</b>	
Volume x Final Rate	<b>2,567.2</b>
5. <b>Mail processing revenues</b>	
CRA Total revenues - Delivery revenues	<b>2,269.9</b>
Delivery revenues per piece	2.100
Mail Processing & Transportation revenues per piece	1.857

Table 1-D

**Express Mail Revenues for Delivery and Mail Processing  
FY 2000**

<b>1 RPW/CRA Revenues (millions)</b>	996.1
<b>2. Mail Volume (pieces)</b>	
Post Office to Addressee	70,208,395
<b>3. Rate for Delivery:</b>	
a. Rate for Next Day, Post Office to Addressee, 70 lbs.	113.80
b. Rate for Next Day, Post Office to Post Office, 70 lbs.	111.75
c. Rate for Delivery only, all weights up to 70 lbs.	2.05
<b>4. Unadjusted Revenues for Delivery (millions)</b>	143.9
Volume x Final Rate	
<b>5. Adjustment factor, PO to addressee</b>	99.44%
<b>6. Adjusted Revenues for Delivery (millions)</b>	<b>143.1</b>
<b>7. Mail processing revenues (millions)</b>	<b>853.0</b>
Delivery revenues per piece	2.039
Mail Processing & Transportation revenues per piece	12.149

Table 2-A

**In-County Periodical Revenues for Delivery and Mail Processing  
FY 2000**

1. <b>RPW/CRA Revenues (millions)</b>		76.7
2. <b>Mail Volume (pieces)</b>		897,069,000
3. <b>Composite DDU Rate for Delivery:</b>		
a. Average weight per piece (lbs.)		0.29205
b. DDU pound rate (cents)		10.7
c. DDU Pound rate per piece (cents)		3.1249
d. Carrier route presort rate (cents per piece)		4.300
e. Per piece discount for DDU entry		0.400
f. Unadjusted DDU rate for delivery only (piece rate + pound rate -- cents per piece)		7.025
g. Less: High density discount (cents per piece)		-0.114
h. Less: Saturation discount (cents per piece)		-0.069
i. Final DDU Rate for Delivery only (cents per piece)		6.842
4. <b>Revenues for Delivery (millions)</b>		
Volume x Final DDU Rate		61.4
Fees		1.5
5. <b>Total Revenues for Delivery (millions)</b>		<b>62.9</b>
6. <b>Mail processing revenues (millions)</b>		
CRA Total revenues - Total Delivery revenues		<b>13.8</b>
	Delivery revenues per piece	0.070
	Mail Processing & Transportation revenues per piece	0.015

Table 2-B

**Outside County Periodical Revenues for Delivery and Mail Processing  
FY 2000**

<b>1. RPW/CRA Revenues (millions)</b>	2,076.3
<b>2. Mail Volume (000):</b>	
a. Regular	7,250,346
b. Non-profit	2,153,400
c. Classroom	63,969
	-----
d. TOTAL	9,467,715
<b>3. Data Inputs</b>	
a. Average weight of advertising per composite piece (lbs.)	0.2046
b. Average weight of editorial matter per composite piece (lbs.)	0.2606
c. Pieces of NP & Classroom per composite piece	0.23
d. Pounds of NP & Classroom per composite piece	0.14476
e. Avg High Density pieces per composite piece	0.00788
f. Avg Saturation pieces per composite piece	0.00372
g. Avg Editorial pieces per composite piece	0.64675
h. Pieces NP & Classroom editorial per composite piece	0.2087
i. Pounds NP & Classroom editorial per composite piece	0.04991
<b>4. Rates</b>	
a. DDU pound rate for advertising (cents/lb.)	15.5
b. Unzoned pound rate for editorial (cents/lb.)	16.1
c. Carrier Route presort rate (cents/pc.)	12.2
d. DDU piece discount (cents/pc.)	1.3
e. High Density presort discount (cents/pc.)	1.9
f. Saturation presort discount (cents/pc.)	3.7
g. Editorial discount (cents/pc.)	5.9

Table 2-B (con't)

**Outside County Periodical Revenues for Delivery and Mail Processing  
FY 2000**

<b>5. Composite DDU Rate for Delivery:</b>		
a. All advertising pounds at DDU rate	3.17130	
b. All editorial pounds in composite piece	4.19566	
c. 5% reduction for NP	-0.04018	
d. Subtotal: Pound component for composite piece	7.32678	
e. Carrier Route DDU piece rate	12.20000	
f. 5% reduction for NP	-0.14030	
g. Per piece DDU discount for composite piece	-1.30000	
h. 5% reduction for NP	0.01495	
i. Discount for portion of composite DDU that is High Density	-0.01497	
j. 5% reduction for NP	0.00017	
k. Discount for portion of composite DDU that is Saturation	-0.01376	
l. 5% reduction for NP	0.00016	
m. Editorial per piece discount for composite piece	-3.81583	
n. 5% reduction for NP	0.06157	
o. Subtotal: Piece component for composite piece	6.99199	
p. FINAL DDU entry rate for composite piece	14.31877	
<b>6. Unadjusted Revenues for Delivery (millions)</b>		
Volume x Final Rate	1,355.7	
Fees	16.2	
<b>7. Adjusted Revenues for Delivery (millions)</b>	<b>1,371.8</b>	
<b>8. Mail processing revenues</b>		
CRA Total revenues - Delivery revenues	<b>704.5</b>	
	Delivery revenues per piece	0.145
	Mail Processing & Transportation revenues per piece	0.074



Table 3-A

**ECR Revenues for Delivery and Mail Processing  
FY 2000**

Docket No. R2001-1, LR-J-98 Billing Determinants Section G-5, p. 2                      G-5, p. 4			
	<b>Commercial Subclass</b>	<b>Nonprofit Subclass</b>	<b>Total</b>
<b>1. RPW Revenues:</b>	4,879,448,313	216,343,056	5,095,791,369
<b>2. Saturation DDU Entry Rates (delivery only)</b>			
Letters	0.104	0.046	
Non-letters, pc-rated	0.114	0.058	
Non-letters, lb-rated			
per pc	0.003	0.024	
per lb	0.537	0.164	
<b>3 Mail Volume</b>			
Letters	10,265,185,319	1,548,105,018	11,813,290,337
Non-letters, pc-rated	13,515,754,295	1,134,108,229	14,649,862,524
Non-letters, lb-rated			
Pieces	8,995,059,717	242,424,708	9,237,484,425
Pounds	2,868,004,453	72,178,082	
	-----		
Total Pieces	32,775,999,331	2,924,637,955	35,700,637,286
<b>4. Revenue from Delivery, using Saturation DDU rates</b>			<b>Total ECR &amp; NECR Revenues from delivery</b>
	<b>Commercial Revenues</b>	<b>Nonprofit Revenues</b>	
Letters	1,067,579,273	71,212,831	1,138,792,104
Non-letters, pc-rated	1,540,795,990	65,778,277	1,606,574,267
Non-letters, lb-rated			
Pieces	26,985,179	5,818,193	32,803,372
Pounds	1,540,118,391	11,837,205	1,551,955,597
	-----		
Total Delivery Revenues	4,175,478,833	154,646,507	<b>4,330,125,340</b>
<b>5. Mail processing revenues</b>			<b>765,666,029</b>
		Delivery revenues per piece	0.121
		Mail Processing & Transportation revenues per piece	0.021

Table 3-B

**Standard Mail Revenues for Delivery and Mail Processing  
FY 2000**

				Docket No. R2001-1, LR-J-98 Billing Determinants Section G-5, p. 1		G-5, p. 3		
				<b>Commercial Subclass</b>	<b>Nonprofit Subclass</b>	<b>Total</b>		
<b>1. RPW Revenues:</b>				8,618,799,615	1,396,917,478	10,015,717,093		
<b>2. Saturation DDU Entry Rates (delivery only)</b>								
	Letters			0.104	0.046			
	Non-letters, pc-rated			0.114	0.058			
	Non-letters, lb-rated							
		per pc		0.003	0.024			
		per lb		0.537	0.164			
<b>3 Mail Volume</b>								
	Letters			28,467,369,056	9,384,936,209	37,852,305,265		
	Non-letters, pc-rated			7,164,366,240	1,358,144,863	8,522,511,103		
	Non-letters, lb-rated							
		Pieces		7,399,117,188	582,576,372	7,981,693,560		
		Pounds		2,734,063,308	189,646,327			
				-----	-----	-----		
		Total Pieces		43,030,852,484	11,325,657,444	54,356,509,928		
<b>4. Revenue from Delivery, using Saturation DDU rates</b>							<b>Total ECR &amp; NECR Revenues from delivery</b>	
				<b>Commercial Revenues</b>	<b>Nonprofit Revenues</b>			
	Letters			2,960,606,382	431,707,066	3,392,313,447		
	Non-letters, pc-rated			816,737,751	78,772,402	895,510,153		
	Non-letters, lb-rated							
		Pieces		22,197,352	13,981,833	36,179,184		
		Pounds		1,468,191,996	31,101,998	1,499,293,994		
				-----	-----	-----		
		Total Delivery Revenues		5,267,733,481	555,563,298	<b>5,823,296,779</b>		
<b>5. Mail processing revenues</b>							<b>4,192,420,314</b>	
								0.107
								0.077

Table 4-A

**Parcel Post Revenues for Delivery and Mail Processing  
FY 2000**

1. **RPW/CRA Revenues (millions)** 1,041.9

2. **Parcel Post Volume, Rates and Revenue from Delivery**

<b>Weight (pounds)</b>	<b>Total Volume</b>	<b>DDU Rate</b>	<b>DDU Revenue</b>
2	93,486,697	1.10	102,835,367
3	68,598,534	1.35	92,608,021
4	40,097,725	1.42	56,938,770
5	27,549,745	1.48	40,773,623
6	18,943,202	1.53	28,983,099
7	13,773,695	1.58	21,762,438
8	10,235,762	1.63	16,684,292
9	6,841,620	1.69	11,562,338
10	5,141,841	1.74	8,946,803
11	4,515,227	1.78	8,037,104
12	4,313,705	1.83	7,894,080
13	2,841,176	1.88	5,341,411
14	2,101,628	1.91	4,014,109
15	2,219,722	1.95	4,328,458
16	2,053,864	2.00	4,107,728
17	1,575,929	2.03	3,199,136
18	1,227,973	2.08	2,554,184
19	1,100,566	2.11	2,322,194
20	1,004,300	2.15	2,159,245
21	920,431	2.19	2,015,744
22	913,984	2.22	2,029,044
23	838,596	2.26	1,895,227
24	750,775	2.29	1,719,275
25	490,907	2.33	1,143,813
26	681,862	2.36	1,609,194
27	387,840	2.40	930,816
28	385,058	2.43	935,691
29	346,578	2.47	856,048
30	317,613	2.49	790,856
31	235,047	2.53	594,669
32	259,269	2.56	663,729
33	236,692	2.59	613,032
34	165,299	2.63	434,736
35	179,583	2.66	477,691
36	130,999	2.69	352,387
37	79,659	2.71	215,876
38	83,707	2.75	230,194
39	146,661	2.78	407,718
40	55,302	2.81	155,399

Table 4-A (con't)

**Parcel Post Revenues for Delivery and Mail Processing  
FY 2000**

**2. Parcel Post Volume, Rates and Revenue from Delivery (con;t)**

<b>Weight (pounds)</b>	<b>Total Volume</b>	<b>DDU Rate</b>	<b>DDU Revenue</b>
41	47,742	2.84	135,587
42	85,392	2.86	244,221
43	77,270	2.90	224,083
44	104,151	2.92	304,121
45	90,808	2.95	267,884
46	40,564	2.99	121,286
47	51,902	3.02	156,744
48	33,070	3.04	100,533
49	20,921	3.07	64,227
50	36,036	3.10	111,712
51	55,999	3.13	175,277
52	17,342	3.16	54,801
53	40,758	3.18	129,610
54	21,465	3.20	68,688
55	16,678	3.24	54,037
56	9,074	3.27	29,672
57	9,583	3.29	31,528
58	16,010	3.33	53,313
59	13,432	3.34	44,863
60	19,512	3.37	65,755
61	29,846	3.40	101,476
62	10,676	3.43	36,619
63	4,494	3.45	15,504
64	11,152	3.48	38,809
65	2,174	3.51	7,631
66	2,298	3.54	8,135
67	5,041	3.56	17,946
68	2,546	3.58	9,115
69	1,008	3.61	3,639
70	2,885	3.65	10,530
Balloon	3,658,581	1.95	7,134,233
Oversized	370,591	8.69	3,220,436
<b>TOTAL</b>	<b>320,137,774</b>		<b>456,165,554</b>

**3. Mail processing revenues (millions) 585.7**

Delivery revenues per piece 1.425

Mail Processing & Transportation revenues per piece 1.830

Table 4-B

**Bound Printed Matter Revenues for Delivery and Mail Processing  
FY 2000**

	Billing Determinants Section		
	H-3	H-2	
	<b>Single Piece BPM</b>	<b>Presort BPM</b>	<b>Total BPM Revenue</b>
<b>1 RPW Revenues (000)</b>	49,532,249	453,369,438	502,901,687

**2 Bulk BPM Rates (cents):**

----- Per Piece -----			
		Carrier	Per
Zone	Basic	Route	Pound
Local	0.54	<b>0.463</b>	<b>0.028</b>
1&2	0.72	0.643	0.051
3	0.72	0.643	0.073
4	0.72	0.643	0.112
5	0.72	0.643	0.171
6	0.72	0.643	0.233
7	0.72	0.643	0.307
8	0.72	0.643	0.371

**3 Mail Volume**

	----- Pieces -----			Pounds
Zone	Basic	Carrier Route	Bulk Total	
Local	22,421,043	58,462,605	80,883,648	212,646,835
1&2	208,339,566	60,738,146	269,077,712	683,522,721
3	60,380,877	6,705,652	67,086,529	168,876,585
4	42,170,034	2,338,120	44,508,154	106,462,880
5	32,821,621	808,580	33,630,201	70,678,793
6	12,854,453	202,924	13,057,377	24,670,463
7	9,697,020	457,534	10,154,554	20,525,232
8	14,233,442	338,932	14,572,374	26,728,977
<b>Total</b>	402,918,056	130,052,493	532,970,549	1,314,112,486
 Single Piece			27,247,584	69,518,434
 <b>Total Volume</b>			560,218,133	1,383,630,920

Table 4-B (con't)

**Bound Printed Matter Revenues for Delivery and Mail Processing  
FY 2000**

	<b>Total BPM Revenue</b>
<b>4. Revenues for Delivery</b>	
Bulk BPM: Per piece, at minimum carrier route rate	246,765,364
Single piece BPM	27,956,021
	-----
Total revenues for delivery	<b>274,721,385</b>
<b>5. Mail processing revenues</b>	<b>228,180,302</b>
Delivery revenues per piece	0.490
Mail Processing & Transportation revenues per piece	0.407

Table 4-C

**Media Mail Revenues for Delivery and Mail Processing  
FY 2000**

	Billing Determinants Section				Total Revenue
	H-4 Single Piece Special	H-5 Presort Special	H-6 Single Piece Library	H-7 Presort Library	
1 <b>RPW Revenues (000)</b>	241,304,113	76,639,688	46,312,090	810,966	365,066,857
2 <b>Rates (cents):</b>					
First Pound:					
Presort Level A (5-digit)		<b>0.64</b>		<b>0.64</b>	
Presort Level B					
Barcoded		0.92		0.92	
Non-barcoded		0.95		0.95	
2 through 7 pounds		0.45		0.45	
Eighth pound and over		0.28		0.28	
3 <b>Mail Volume</b>					Total Pieces
Total pieces	147,715,595	68,218,144	27,628,239	484,190	244,046,168
4. <b>Revenue from Delivery,     using 5-digit Presort Rate</b>					
First pound	94,537,981	43,659,612	17,682,073	309,882	156,189,548
5. <b>Less: Adjustments</b>					
a. Transportation costs attributed to Media Mail (Exh. USPS-11A, p. 3)					75,865,000
b. Bulk handling costs (at 30% of transportation costs)					22,759,500
					----- 98,624,500
6. <b>Adjusted delivery revenues</b>					<b>57,565,048</b>
7. <b>Mail processing revenues</b>					<b>307,501,809</b>
					Delivery revenues per piece 0.236
					Mail Processing & Transportation revenues per piece 1.260

Table 5

Special Services Split Factors

A. Downstream Costs

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	In-Office City Carrier Cost	Street Time City Carrier Cost	Total In-Office City Carrier Cost	Piggy'd In-Office City Carrier Cost (1.355)	City Carrier Street Cost	Piggy'd City Carrier Street Cost (1.236)	Total Piggy'd City Carrier Cost	Total Rural Carriers	Piggy'd Rural Carrier Cost 1.236	Window Service Cost	Piggy'd Window Service Cost 1.443	Total Piggy'd Downstream Volume Variable Cost
Registry	1,047	5,337	6,384	8,650	2,496	3,085	11,735	2,486	3,073	5,450	7,864	22,672
Certified	33,174	64,095	97,269	131,799	63,512	78,501	210,300	63,512	78,501	58,025	83,730	372,531
Insurance	1,669	5,306	6,975	9,451	8,063	9,966	19,417	8,063	9,966	27,901	40,261	69,644
COD	642	2,391	3,033	4,110	2,561	3,165	7,275	2,561	3,165	1,500	2,165	12,605
Money Orders	0	0	0	0	1,254	1,550	1,550	1,254	1,550	100,863	145,545	148,645
Stamped Cards	0	0	0	0	0	0	0	0	0	0	0	0
Stamped Envelopes	0	0	0	0	0	0	0	0	0	3,033	4,377	4,377
Special Handling	0	0	0	0	0	0	0	0	0	445	642	642
P. O. Boxes	0	0	0	0	0	0	0	0	0	70,585	101,854	101,854
Other	441	86	527	714	86	106	820	27	33	21,288	30,719	31,572
	36,973	77,215	114,188	154,725	77,972	96,373	251,098	77,903	96,288	289,090	417,157	764,543



Table 5 (con't)

Special Services Split Factors

B. Upstream Costs

	(1)	(2)	(3)	(4)	(5)	(1)	(2)	(3)
	Direct	Volume	Total	Piggy'd	Piggy'd	Percent to:		Total
	Volume	Variable	Volume	Volume	Downstream	Variable		Volume
	Variable	Volume	Variable	Variable	+	Mail		Variable
	Mail	Volume	Mail	Processing	Piggy'd	Processing	Mail	Mail
	Processing	Clerks,	Processing	Cost	Mail	Processing	Processing	Cost
	Cost	CAG K	Cost	(1.535)	Processing	Delivery		
	(3.1)	(4.0)		Cost	Cost			
Registry	35,824	56	35,880	55,076	77,748	70.84%	29.16%	84,619
Certified	28,605	45	28,650	43,978	416,509	10.56%	89.44%	346,156
Insurance	1,566	2	1,568	2,407	72,051	3.34%	96.66%	88,701
COD	1,038	2	1,040	1,596	14,201	11.24%	88.76%	14,305
Money Orders	4,892	8	4,900	7,522	156,167	4.82%	95.18%	157,212
Stamped Cards	0	0	0	0	0	0.00%	0.00%	3,016
Stamped Envelopes	147	0	147	226	4,602	4.90%	95.10%	12,046
Special Handling	480	1	481	738	1,380	53.48%	46.52%	1,854
P. O. Boxes	3,424	5	3,429	5,264	107,118	4.91%	95.09%	545,314
Other	44,051	69	44,120	67,724	99,297	68.20%	31.80%	163,825
	120,027	188	120,215	184,530	949,073	19.44%	80.56%	1,417,048

C. SPLIT FACTORS

D. Revenue Allocation

Total Revenues	1,871.5
Less Product Specific Costs:	
Total Vol. Variable Cost	1,417.0
Piggy'd Labor Costs	<u>-949.1</u>
Revenues Net of Product Specific Costs	-468.0
	-----
Upstream share	1,403.5
Downstream share	272.9
Downstream plus product specific costs	1,130.6
	1,598.6

## Appendix B

### **Top Down and Bottom Up Pricing**

This appendix uses the Enhanced Carrier Route (“ECR”) rates that were put into effect after PRC Docket No. R2001-1 to illustrate how rates can be presented in either a top down or a bottom up mode. The rates are shown in Table B-1. Part 1 shows ECR rates from a top down perspective, and Part 2 shows ECR rates from a bottom up perspective. Table 1 illustrates that the two approaches can result in the same set of rates, only viewed differently.

The purpose here is to focus attention on rate differentials – as opposed to “discounts” or “surcharges” – and have these differentials viewed as the rates charged by the Postal Service for the upstream services that it provides.

#### **1. Top Down Rates**

The rates themselves are shown in the first four columns and rows of Part 1 of the table. The highest rate is shown in the upper left-hand corner, and the lowest rate appears in the bottom right-hand corner. Presort rate differentials are shown in column 5, and destination entry differentials are shown in row 5. In top down pricing, the cumulative rate differentials generally are viewed as resulting from discounts that are “given” to mailers in return for sorting or transporting their mail to the extent indicated.

#### **1. Bottom Up Rates**

In Part 2, the rates again are shown in the first four columns and rows. Here, however, the lowest rate available to mailers is displayed in the upper left-hand corner, and the highest rate appears in the bottom right-hand corner. Presort rate differentials again are shown in column 4, and destination entry differentials are shown in row 5. In bottom up pricing, the cumulative rate differentials can be viewed as resulting from surcharges or add-ons that are imposed on mailers who decide to rely on the Postal Service to provide the indicated sorting and transportation services.

Table B-1

**ENHANCED CARRIER ROUTE RATES FOR LETTERS**

**1. Rates from Top Down Perspective**

	(1)	(2)	(3)	(4)	(5)	(6)
	Destination Entry				Presort	Cumulative
	None	BMC	SCF	DDU	Differential	Presort
						Differential
1. <b>Basic</b>	0.194	0.173	0.168	0.162	> 0.023	0.023
2. <b>Automation Basic</b>	0.171	0.150	0.145	0.139	> 0.007	0.030
3. <b>High Density</b>	0.164	0.143	0.138	0.132	> 0.012	0.042
4. <b>Saturation</b>	0.152	0.131	0.126	0.120		
5. <b>Dest. Entry Differential</b>	▼ 0.021	▼ 0.005	▼ 0.006			
6. <b>Cumulative Differential:</b>	0.021	0.026	0.032			

**2. Rates from Bottom Up Perspective**

	(1)	(2)	(3)	(4)	(5)	(6)
	Destination Entry				Presort	Cumulative
	DDU	SCF	BMC	None	Differential	Presort
						Differential
1. <b>Saturation</b>	0.120	0.126	0.131	0.152	> 0.012	0.012
2. <b>High Density</b>	0.132	0.138	0.143	0.164	> 0.007	0.019
3. <b>Automation Basic</b>	0.139	0.145	0.150	0.171	> 0.023	0.042
4. <b>Basic</b>	0.162	0.168	0.173	0.194		
5. <b>Dest. Entry Differential</b>	▼ 0.006	▼ 0.005	▼ 0.021			
6. <b>Cumulative Differential:</b>	0.006	0.011	0.032			

Source: Postal Rate Commission, Docket No. R2001-1, *Opinion & Recommended Dec* Appendix I, p. 13, Standard Mail, Rate Schedule 322.