

POSTAL SERVICE COSTS OF WORKSHARED ACTIVITIES

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May 13, 2003

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1.0 Introduction

The U. S. Postal Service allows extensive downstream access to its network. Mailers and other private sector organizations that take advantage of such access generally are said to engage in “worksharing.”¹ Lower rates for workshared mail first were offered in 1976, when a small economic incentive was instituted for presorted First-Class Mail. Since then, worksharing opportunities have grown substantially. They now include virtually all upstream activities – notably, mail processing and transportation – and all classes of mail, with the major exception that mailers as 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 “liberalization” of the postal system. They point out that this is the route by which

¹ The principal worksharing activities in the U. S. 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.

the postal market in the United States has been opened to competition, rather than by having competition for delivery of selected products in targeted geographic locales – as has occurred, for example, in Sweden. In the United States today, these upstream services are provided by a large number of independent intermediary firms – e.g., consolidators, presort bureaus, and third-party logistics companies. This paper therefore regards mail processing and transportation as two services that the Postal Service provides in a competitive market. The purpose of this paper is to focus on the cost of providing those competitive services, as opposed to the cost of specific postal products. The cost of mail processing and transportation then can be compared with the revenues that the Postal Service generates by providing them. Any such comparison, however, is beyond the scope of this paper.²

In the U. S. Postal Service's accounting system, costs are recorded and aggregated in twenty different segments.³ Within each cost segment, costs generally are broken down into components and sub-components.⁴ As might be expected, the Postal Service has thousands of individual accounts into which specific costs are recorded. At the aggregate level, the Postal Service regularly

² See Haldi and Olson (2002).

³ The segments are numbered 1 through 20, but segments 5 and 9 are not currently used, hence in practice only 18 segments are used.

⁴ In a few segments, the magnitude of recorded costs is small, and these segments may contain few or no components; see, for example, segments 4, 8, 17 and 19 in Tables A-1 and A-2 in the appendix.

publishes a Cost and Revenue Analysis (“CRA”) Report that summarizes costs and revenues for each subclass of mail.

Within each cost segment, the CRA shows those costs considered to be (i) volume variable or (ii) institutional (discussed in section 2.0). The Postal Service also prepares another version of the CRA, known as the Postal Rate Commission (“PRC”) version, that shows those costs to be (i) attributable and (ii) institutional (discussed in section 3.0).

Finally, in rate cases, the Postal Service also submits testimony that estimates the incremental cost of providing various postal products and services. As discussed in section 4.0 *infra*, the concept of incremental costs includes all attributable costs, but conceptually it can be even broader.

Based on the above discussion, the cost of providing competitive workshared services can be measured in terms of volume variable cost, attributable cost, and incremental cost. For FY 2000, Table 1 shows the estimates for each of these respective costs.

Table 1
Postal Service Costs for Competitive Workshared Activities
FY 2000
(\$, billions)

Cost	Mail Processing	Transpor- tation	Total
Volume Variable	\$19.6	\$4.0	\$23.6
Attributable	22.0	4.3	26.3
Incremental	23.6	4.7	28.3

Source: Tables 2, 3 and 4.

Attributable and incremental costs, as a percentage of volume variable costs shown in Table 1 above, are as follows:

Cost Ratio	Mail Processing	Transpor- tation	Total
Attributable/Vol. Variable	112.2%	107.5%	111.4%
Incremental/Vol. Variable	120.4%	117.5%	120.4%

2.0 Volume Variable Cost

Within each cost segment, the Postal Service estimates the portion that is volume variable. The Postal Service's volume variable costs for FY 2000, by segment and component, are shown in the appendix, Table A-1. Volume variable costs can be classified further as either indirect or direct, and this further breakdown is shown in Table A-1, columns 2 and 3, respectively. When distributed to the classes and subclasses of mail, volume variable costs are the basis for estimating the marginal cost of each postal product.

The Postal Service has an elaborate system by which indirect costs are distributed to direct costs. The ratios of all indirect costs distributed to each item of direct costs are defined as "piggyback factors."⁵ These factors conveniently summarize the net result of the rather complex distribution procedure. The piggyback factors applicable to each of the various direct costs are also shown in the appendix, Table A-1, column 4; they range from none to 1.535.

Piggybacked volume variable costs are shown in Table A-1, column 5. As shown there, the sum of these piggybacked costs, \$9,963 million, is \$675 million, or 6.3 percent, less than total indirect costs (\$10,638 million). Using the indicated piggyback factors to estimate total workshared costs, as is done in Table 2, thus results in a slight underestimate of total workshared costs.

⁵ Piggyback factors are typically quoted as the sum of direct costs plus indirect costs divided by direct costs (*i.e.*, as 1 + the percentage of indirect costs).

The estimated volume variable costs of workshared activities is shown in Table 2. The largest item by far is the cost of clerks and mailhandlers, cost segment 3. The direct volume variable labor cost of mail processing amounted to \$12.3 billion, and the indirect volume variable costs were an additional \$6.6 billion, for a total volume variable cost of \$18.9 billion. In addition, cost segment 4, CAG-K clerks, despite their titles, are considered functionally to be mail processing, and these add \$6.7 million to the preceding total. Finally, the volume variable cost of operating Priority Mail Processing Centers (PMPCs), \$668 million, included under cost segment 16, is also a cost of providing mail processing services, hence this amount also needs to be included. Some small portion of the volume variable costs of postmasters EAS-23 (cost segment 2) and below may be related to mail processing, but they are ignored here.⁶

Volume variable purchased transportation costs, in cost segment 14, which amounted to \$4.0 billion, are subject to worksharing (destination entry) discounts, hence these costs are also part of competitive upstream services.

The computation of destination entry discounts includes a portion of cost segment 8, vehicle service drivers, hence these costs properly could be considered among the cost of workshared activities.⁷ For purposes of the analysis here, however, the small portion of cost segment 8 that is included in the

⁶ See PRC Docket No. 2001-1, library reference USPS-J-1, p. I-2.

⁷ See PRC Docket No. 2001-1, library reference USPS-J-68, Appendix B, Table 6, Postal-Owned Vehicle Costs.

pricing (via discounts) of intermediate services is excluded from the volume variable cost of transportation services.

In sum, in FY 2000 the volume variable cost of providing mail processing and transportation services are conservatively estimated at \$19.6 and \$4.0 billion, respectively, and combined these total approximately \$23.6 billion.⁸

⁸ Proportionally distributing the indirect volume variable costs not distributed by the piggybacks to direct costs would increase the total costs in Table 2 by approximately 1.9 percent, or \$446 million.

Table 2

**Volume Variable Cost of Workshared Activities
FY 2000
(\$, 000)**

Seg. No.	Cost Segment	(1) Direct Volume Variable Costs	(2) USPS Piggy- back factor	(3) Indirect Volume Variable Costs	(4) Total Costs
3	Clerks & Mailhandlers Mail processing	12,308,222	0.535	6,584,899	18,893,121
4	Clerks, CAG K	4,388	0.535	2,348	6,736
16	Supplies & Services Other (PMPCs)	667,337	–	0	<u>667,737</u>
	Subtotal, mail processing				19,567,594
14	Purchased Transportation	4,041,537	–	0	<u>4,041,537</u>
	TOTAL, MAIL PROCESSING & TRANSPORTATION				23,609,131

Source: Appendix, Table A-1.

3.0 Attributable Cost

Attributable costs include virtually all volume variable costs.⁹ In addition, a number of other costs that are considered to be caused by the provision of individual postal products or services – *i.e.*, product specific costs – are classified as attributable. It should be noted, however, that some attributed product specific costs, such as advertising, are not attributable (nor incremental) to the worksharing activities of mail processing and transportation.

The Postal Service's attributable costs for FY 2000, by segment and component, are shown in the appendix, Table A-2, column 1. Attributable costs also are classified as either indirect or direct, and this breakdown is shown in columns 2 and 3, respectively, of Table A-2.

Indirect attributable costs are likewise distributed to direct attributable costs by a process that is similarly elaborate, and piggyback factors that conveniently summarize the result of this distribution are also computed. The piggyback factors applicable to the various direct attributable costs are shown in the appendix, Table A-2, column 4; they range from none to 1.5739.

Piggybacked attributable costs are shown in Table A-2, column 5. The sum of these piggybacked costs, \$11,114 million, is \$914 million less than total indirect costs (\$12,028 million). Using the indicated piggyback factors to

⁹ The chief exception is certain Alaska air transportation costs, which Postal Service treats as volume variable, while the PRC classifies those costs as institutional.

estimate total workshared costs, as is done here in Table 3, thus results in a slight underestimate.

The estimated attributable costs of workshared activities is shown here in Table 3. The direct attributable labor cost of mail processing – *i.e.*, the cost of clerks and mailhandlers, cost segment 3 – amounted to \$13.7 billion, while indirect attributable costs were \$7.5 billion, for a total attributable cost of \$21.2 billion. In addition, cost segment 4, CAG-K clerks, are considered to be mail processing, and these add \$6.8 million to the preceding total. Finally, the attributable cost of operating Priority Mail Processing Centers (PMPCs), \$745 million, included under cost segment 16, is also a cost of providing mail processing services, hence this amount also is included. Some small portion of the attributable costs of postmasters EAS-23 and below probably are related to mail processing, but they are ignored here.¹⁰

Attributable purchased transportation costs, segment 14, which amounted to \$4.3 billion, are subject to worksharing (destination entry) discounts, hence are part of competitive upstream services. The computation of discounts for destination entry includes a portion of cost segment 8, vehicle service drivers, hence these costs properly could be considered among the cost of workshared activities.¹¹ For purposes of the analysis here, however, the small portion of cost

¹⁰ See PRC Docket No. 2001-1, library reference USPS-J-1, p. I-2.

¹¹ See PRC Docket No. 2001-1, library reference USPS-J-68, Appendix B, Table 6, Postal-Owned Vehicle Costs.

segment 8 that is included in the pricing (via discounts) of intermediate services is excluded from the attributable cost of transportation services.

In sum, in FY 2000 the attributable cost of providing mail processing and transportation services is conservatively estimated at \$22.0 and \$4.3 billion, respectively, and combined these total \$26.3 billion.¹²

¹² Proportionally distributing the indirect attributable costs not distributed by the piggybacks to direct costs would increase the total costs in Table 3 by 2.4 percent, or \$621 million.

Table 3

**Attributable Cost of Workshared Activities
FY 2000
(\$, 000)**

Seg. No.	Cost Segment	(1) Direct Attribu- table Costs	(2) PRC Piggy- back factor	(3) Indirect Attribu- table Costs	(4) Total Costs
3	Clerks & Mailhandlers Mail processing	13,676,381	0.552	7,542,280	21,218,661
4	Clerks, CAG K	4,388	0.552	2,420	6,808
16	Supplies & Services Other (PMPCs)	744,513	–	0	<u>744,513</u>
	Subtotal, mail processing				21,969,982
14	Purchased Transportation	4,277,080	–	0	<u>4,277,080</u>
	TOTAL MAIL PROCESSING & TRANSPORTATION				26,247,062

Source: Appendix, Table A-2.

4.0 Incremental Cost

The primary role of incremental cost is to test for cross subsidy.

Incremental cost measures the total cost caused by providing a product, such as Priority Mail, or a service, such as mail processing. By definition, therefore, the incremental cost of products or services should equal or exceed their attributable cost, and in the postal arena it is to be expected that incremental cost generally will exceed attributable cost. For this reason, incremental cost is the standard cost measure used by the Postal Service and the PRC to test for cross-subsidy and to ensure that the revenue from a product or service cover the total cost of providing it.

As stated previously, the focus in this investigation is not on individual classes of mail, many of which face little or no competition for final delivery, but on the liberalized upstream services of mail processing and transportation, where the Postal Service now competes, and faces increasing competition. Incremental costs are defined here as attributable costs plus those non-attributed institutional costs that would cease to exist if the Postal Service no longer engaged in processing and transporting mail; *i.e.*, if the private sector delivered all mail directly to destinating delivery units, presorted to carrier route.¹³ Institutional, or

¹³ To think of the Postal Service as neither processing nor transporting mail could be a mental stretch. As an alternative hypothetical, one could imagine splitting, or unbundling, the Postal Service (as occurred with AT&T) whereby it would be separated into one organization that would provide mail processing and transportation to destinating plants, and another organization that would be responsible for all other functions; *e.g.*, collecting and delivering mail, operating post offices, maintaining address correction services, (continued...)

fixed, costs that are specific to either mail processing or transportation are considered to be incremental to the provision of each respective service. At the same time, however, incremental costs that are specific to mail processing or transportation may be common to some or all of the individual classes and subclasses of mail. Any such common costs would not be incremental to a specific class of mail.

The question posed here – how to estimate the incremental cost of worksharing and transportation – obviously is in the nature of a hypothetical, and cannot be investigated with econometric methods customarily used to analyze historical data. As noted previously, the incremental cost of mail processing and transportation includes all of their respective attributable costs. In addition, incremental cost can include some of the \$23.2 billion of institutional costs that were not attributed in FY 2000.

For FY 2000, it is conservatively estimated that the incremental cost of providing mail processing and transportation services was, respectively, \$1.6 and \$0.4 billion *more than* attributable costs; see Table 5, columns 4 and 5. This \$2.0 billion considered to be part of the incremental cost of mail processing and transportation amounts to only 8.6 percent of the Postal Service's total non-attributed costs of \$23.2 billion. As explained below, it considered to be a conservative estimate. When \$2.0 billion is added to attributable costs of \$26.3

¹³(...continued)

etc. The total cost of operating the first organization, including all of its administrative and overhead costs, would be the incremental cost of mail processing and transportation.

billion, the incremental costs of these workshared activities totals approximately \$28.3 billion. The procedures used to develop this estimate of incremental cost is described in more detail below.

Table 4

**Incremental Cost of Workshared Activities
FY 2000
(\$, 000)**

Mail Processing:

Attributable mail processing cost (Table 3)	21,969,982
Additional costs incremental to mail processing (Table 5)	<u>1,658,993</u>
Total incremental mail processing cost	23,628,975

Transportation:

Attributable Transportation cost (Table 3)	4,277,080
Additional costs incremental to transportation (Table 5)	<u>444,295</u>
Total incremental transportation cost	4,721,375

TOTAL INCREMENTAL MAIL PROCESSING & TRANSPORTATION COST	28,350,350
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4.1 Incremental Mail Processing Costs

For FY 2000, attributable and institutional costs are shown in Table 5, columns 2 and 3, respectively. The focus of this investigation is on the institutional costs shown in column 3, to determine which of those relate specifically to mail processing and transportation.

Under cost segment 2, supervisors and technicians, all of the non-attributed costs for mail processing, central mail markup, and general supervision of mail processing are treated as incremental. Approximately 40 percent of the non-attributed costs for higher level supervisors, supervisor training, and joint supervision of clerks and carriers is treated as incremental.¹⁴ To be conservative, none of the non-attributed costs of administration and support (\$24.3 million) or “other” (\$814.8 million) were considered incremental to mail processing or transportation.

Under cost segment 3, all of the non-attributed labor costs for (i) mail processing (\$515.5 million) and (ii) time and attendance (\$97.5 million) are treated as incremental. To be conservative, none of the non-attributed costs of administrative clerks (\$702.6 million) were classified as incremental to mail processing or transportation.

¹⁴ The 40 percent was arrived at by adding the direct labor costs of clerks and mailhandlers (segment 3), city carriers (segment 6 & 7), vehicle service drivers (segment 8), and rural carriers (segment 10), and taking the mail processing costs within segment 3 as a percent of the total. To be conservative, the result (41.2 percent) was rounded down to 40 percent. This 40 percent factor is applied where appropriate to cost segments to determine the level of institutional costs in each.

Under cost segment 4, all of the non-attributed costs for CAG-K clerks (\$2.7 million) is treated as incremental to mail processing.

Under cost segment 11, 40 percent of all non-attributed costs or maintaining buildings and equipment (\$347 million) are treated as incremental to mail processing.

Under cost segment 15, 40 percent of all non-attributed costs of fuel and utilities (\$69 million) are treated as incremental to mail processing. At the same time, in order to be conservative, none of the non-attributed costs of communications (\$368.1 million) were classified as incremental to mail processing or transportation.

Under cost segment 16, 40 percent of all non-attributed costs of (i) custodial & building and (ii) equipment are treated as incremental to mail processing. To be conservative, however, none of the non-attributed costs of the "other" category (\$1,105.9 million) were classified as incremental to mail processing or transportation.

Under cost segment 18, 40 percent of all current non-attributed labor-related costs (*i.e.*, repriced annual leave, holiday leave, civil service retirement, workers comp, and unemployment comp) are treated as incremental to mail processing, while none of the retiree and annuitant costs are treated as incremental to mail processing. To be conservative, none of the non-attributed costs of headquarters (\$589.2 million), area administration (\$174.5 million), the postal inspection service (\$365.4 million), supplies and services (\$220.8 million), or miscellaneous support (\$104.6 million) were classified as incremental to mail

processing or transportation, despite the fact that costs of administering the extensive transportation network are contained in cost segment 18.

Under cost segments 19 and 20, none of the non-attributed costs of general management systems (\$21.2 million), equipment depreciation (\$429.7 million), or vehicle depreciation (\$148.7 million) were classified as incremental to mail processing or transportation.

Finally, none of the costs in cost segments 1 (postmasters), 6 & 7 (city carriers), 8 (vehicle service drivers), or 10 (rural carriers) are treated as incremental to mail processing or transportation.

4.2 Incremental Transportation Costs

Under cost segment 14, all of the non-attributed costs for purchased transportation, are treated as incremental. If the Postal Service did not have to renegotiate, administer and coordinate the many hundreds or thousands of transportation contracts that it has with numerous independent providers, it seems likely that in addition to the transportation cost embodied in the contracts themselves, other savings would accrue among various costs now classified as institutional.¹⁵ The authors have not identified the specific cost segments and components in which these costs are recorded. As noted above, however, in connection with the discussion of costs segments 2, 3, 15, 16, 17, 18, 19 and 20, no allowance or estimate for this item has been made.

¹⁵ For example, labor costs of those employees who administer the purchased transportation system, the cost of space that they occupy, etc.

To sum up, no costs of owning and operating Postal Service vehicles – *i.e.*, vehicle depreciation in cost segment 20 and vehicle service drivers in cost segment 8 – are classified as incremental to “upstream” transportation.

Table 5

**Additional Costs Incremental to
Mail Processing & Transportation, By Segment and Component
FY 2000
(\$, 000)**

Seg No.	Cost Segment	(1)	(2)	(3)	(4)	(5)
		Total Costs	Attribu- table Costs	Institu- tional Costs	INCREMENTAL Mail Processing	Transpor- tation
1	Postmasters	1,773,011	315,941	1,457,070		
	EAS 23 & below	1,733,081	315,941	1,417,140		
	EAS 24 & above	39,930	0	39,930		
2	Supervisors & Techs	3,664,887	1,957,156	1,707,731		
	Mail processing	959,304	924,483	34,821	34,821	
	Central mail markup	46,837	43,137	3,700	3,700	
	Window Service	198,240	93,224	105,016		
	Admin & support	69,895	45,546	24,349		
	City delivery carriers	883,128	447,867	435,261		
	Expedited delivery	11,028	4,748	6,280		
	Rural delivery carriers	21,903	10,658	11,245		
	Vehicle Service	34,345	20,758	13,587		
	Employee & labor rlns.	191	124	67		
	Higher level supervisors	204,509	63,476	141,033	56,413	
	Gen'l supervision mail processing	305	294	11	11	
	Gen'l supervision collect/delivery	129	65	64		
	Supervisor training	51,397	28,016	23,381	9,352	
	Quality Control revenue project	37,810	36,439	1,371		
	Joint supv clerks/carriers	331,056	238,321	92,735	37,094	
	Other	814,810	0	814,810		
3	Clerks & mailhandlers	18,746,399	16,230,079	2,516,320		
	Mail processing	14,191,505	13,676,381	515,124	515,124	
	Window service	2,266,492	1,065,834	1,200,658		
	Administrative clerks	1,949,730	1,247,177	702,553		
	Time and attendance	279,771	182,310	97,461	97,461	
	Product specific	10,961	10,961	0		
	Expedited delivery	47,940	47,416	524		
4	Clerks Cag-K	7,075	4,388	2,687	2,687	

Table 5 (con't)

**Additional Costs Incremental to
Mail Processing & Transportation, By Segment and Component
FY 2000
(\$, 000)**

Seg No.	Cost Segment	(1)	(2)	(3)	(4)	(5)
		Total Costs	Attribu- table Costs	Institu- tional Costs	INCREMENTAL COSTS Mail Processing	Transpor- tation
6&7	City Del carriers	13,139,989	6,663,850	6,476,139		
	In-office direct labor	3,517,539	3,100,352	417,187		
	CAG K	225	198	27		
	In-office support	640,119	564,200	75,919		
	Street SCS Access (PRC)	432,243	432,243	0		
	Street Single Subcl Load (PRC)	130,529	130,529	0		
	Other Load (PRC)	658,008	0	658,008		
	Route	2,570,708	110,366	2,460,342		
	Access	2,017,976	156,847	1,861,129		
	Elemental Load	1,313,180	1,266,874	46,306		
	Street Support	1,859,462	902,241	957,221		
8	Vehicle Svc Drivers	518,561	313,418	205,143		
10	Rural carriers	4,233,564	1,882,731	2,350,833		
	Evaluated routes	3,534,066	1,723,211	1,810,855		
	Other routes	334,917	159,520	175,397		
	Equip Maint Allowance	364,581	0	364,581		
11	Custodial Maint Svc	2,560,323	1,641,795	918,528		
	Custodial personnel	915,438	578,229	337,209	134,884	
	Contract cleaners	66,216	41,825	24,391	9,756	
	Operating equip maintenance	1,155,762	754,615	401,147	160,459	
	Plant & Bldg equip maint	422,907	267,126	155,781	62,312	
12	Motor Veh Svc	772,463	225,415	547,048		
	Personnel	328,609	86,032	242,577		
	Supplies & materials	394,063	112,941	281,122		
	Vehicle hire	49,791	26,442	23,349		

Table 5 (con't)

**Additional Costs Incremental to
Mail Processing & Transportation, By Segment and Component
FY 2000
(\$, 000)**

Seg No.	Cost Segment	(1)	(2)	(3)	(4)	(5)
		Total Costs	Attribu- table Costs	Institu- tional Costs	INCREMENTAL Mail Processing	TRANSPOR- tation
13	Misc Op. Costs	356,582	8,021	348,561		
	Contract stations	69,351	0	69,351		
	Carfare	54,915	4,594	50,321		
	Driveout	5,387	3,282	2,105		
	Tolls & ferriage	1,475	0	1,475		
	Fed Res & comml Banks	75,497	0	75,497		
	Employee awards	59,159	0	59,159		
	Equipment shops	34,555	145	34,410		
	CAG L rental allowance	20	0	20		
	Other local operations	56,223	0	56,223		
14	Purchased Transport	4,721,375	4,277,080	444,295		444,295
	Domestic air	1,577,145	1,577,145	0		
	Domestic Alaska air	105,634	7,470	98,164		
	Highway	2,154,968	1,741,199	413,769		
	Railroad	276,737	275,028	1,709		
	Domestic water	29,755	27,598	2,157		
	International	577,136	648,640	-71,504		
15	Building Occupancy	1,555,946	1,016,058	539,888		
	Rents	720,874	720,874	0		
	Fuel & utilities	466,339	294,559	171,780	68,712	
	Communications & other	368,733	625	368,108		
16	Supplies & Services	3,317,285	1,977,900	1,339,385		
	Stamps & dispensers	174,301	173,873	428		
	Money Orders	1,647	1,647	0		
	Stamped cards & envelopes	4,978	4,978	0		
	Supply personnel	18,069	0	18,069		
	Custodial & Building	125,468	79,251	46,217	18,487	
	Equipment	394,765	288,804	105,961	42,384	
	Track & trace	602	559	43		
	Other	2,446,880	1,340,973	1,105,907		
	Advertising	150,568	87,808	62,760		
	Remote encoding	7	7	0		
17	Research & Develop.	42,395	0	42,395		

Table 5 (con't)

**Additional Costs Incremental to
Mail Processing & Transportation, By Segment and Component
FY 2000
(\$, 000)**

Seg No.	Cost Segment	(1)	(2)	(3)	(4)	(5)
		Total Costs	Attribu- table Costs	Institu- tional Costs	INCREMENTAL COSTS Mail Processing	Transpor- tation
18	Admin & Area Opns.	5,377,065	2,418,225	2,958,840		
	Headquarters	609,363	20,238	589,125		
	Money Order Division	2,161	2,161	0		
	Area administration	174,476	0	174,476		
	Postal Inspection Service	419,950	54,536	365,414		
	Supplies & services	261,349	40,573	220,776		
	Miscellaneous support	108,728	4,147	104,581		
	Insp Exp & Employee losses	1,576	0	1,576		
	Reimbursements	-3,806	0	-3,806		
	Individual awards	6,968	0	6,968		
	Misc Personal compensation	296	0	296		
	Money Orders	205	205	0		
	Repriced annual leave	95,800	60,831	34,969	13,988	
	Holiday leave	7,800	4,953	2,847	1,139	
	Civil service retirement	1,327,314	842,817	484,497	193,799	
	Workers Comp	931,230	453,980	477,250	190,900	
	Unemployment Comp	37,736	23,962	13,774	5,510	
	Retiree health benefits	743,504	472,110	271,394		
	Annuitant life insurance	6,700	4,254	2,446		
	Annuitant/COLA principal	682,632	433,458	249,174		
	Annuity protect program	-36,917	0	-36,917		
19	Genl Mgt Systems	21,240	0	21,240		
20	Other Accrued Exp.	3,972,678	2,639,779	1,332,899		
	Equipment depreciation	1,088,791	659,122	429,669		
	Vehicle depreciation	197,111	48,417	148,694		
	Building and Leasehold Dep'n	743,019	743,019	0		
	Indemnities	131,864	36,092	95,772		
	Interest expense	1,834,963	1,153,129	681,834		
	Other Expenses & credits	-23,070	0	-23,070		
GRAND TOTAL		64,780,838	41,571,836	23,209,002	1,658,993	444,295

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Appendix

Piggyback Factors for Volume Variable and Attributable Costs

A-1. Volume Variable Cost

The Postal Service's total volume variable costs, as reported in the CRA for FY 2000, amounted to \$37.8 billion, and the breakdown of these costs by segment and component is shown in Table A-1, column 1.¹⁶ The further breakdown of volume variable costs as either indirect or direct is shown in columns 2 and 3, respectively, of Table A-1. Indirect volume variable costs amounted to \$10.6 billion, while direct volume variable costs amounted to \$27.2 billion.

The computed piggyback factors applicable to each item of volume variable direct cost are shown in Table A-1, column 4; they range from none to 1.535. Certain direct costs, such as those for purchased transportation in Segment 14, that are not considered to incur any indirect costs have no applicable piggyback factor.

The amount of indirect volume variable costs that are piggybacked onto the direct volume variable costs is shown in Table A-1, column 5. These piggybacked costs total approximately \$10.0 billion, which fails to account for a small amount (\$675 million, or 6.3 percent) of total indirect costs.

¹⁶ Non-volume variable "other" (institutional) costs amounted to \$27.0 billion in FY 2000.

Table A-1

**Volume Variable Costs By Segment and Component
FY 2000
(\$, 000)**

Seg No.	Cost Segment	(1) Volume Variable Costs	(2) Indirect	(3) Direct	(4) USPS Piggy- back	(5) Piggy'd Vol. Var. Costs
1	Postmasters	315,941	0	315,941		94,150
	EAS 23 & below	315,941	0	315,941	1.298	94,150
	EAS 24 & above	0	0	0		0
2	Supervisors & Techs	1,747,217	1,703,887	43,330		0
	Mail processing	787,400	787,400	0		0
	Central mail markup	43,330	0	43,330	none	0
	Window Service	93,726	93,726	0		0
	Admin & support	41,224	41,224	0		0
	City delivery carriers	418,724	418,724	0		0
	Expedited delivery	4,748	4,748	0		0
	Rural delivery carriers	10,532	10,532	0		0
	Vehicle Service	20,756	20,756	0		0
	Employee & labor rlns.	113	113	0		0
	Higher level supervisors	57,257	57,257	0		0
	Gen'l supervision mail processing	250	250	0		0
	Gen'l supervision collect/delivery	61	61	0		0
	Supervisor training	24,993	24,993	0		0
	Quality Control revenue project	31,012	31,012	0		0
	Joint supv clerks/carriers	213,091	213,091	0		0
	Other	0	0	0		0
3	Clerks & mailhandlers	14,247,195	759,862	13,487,333		7,042,803
	Mail processing	12,308,222	0	12,308,222	1.535	6,584,899
	Window service	1,033,644	0	1,033,644	1.443	457,904
	Administrative clerks	753,380				
	Claims & Inquiry			2,579	none	0
	Other			122,249	none	0
	All other		628,552			0
	Time and attendance	131,310	131,310	0		0
	Product specific	0	0	0		0
	Expedited delivery	20,639	0	20,639	none	0
4	Clerks Cag-K	4,388	0	4,388	1.535	2,348

Table A-1 (con't)

**Volume Variable Costs By Segment and Component
FY 2000
(\$, 000)**

Seg No.	Cost Segment	(1) Volume Variable Costs	(2) Indirect	(3) Direct	(4) USPS Piggy- back	(5) Piggy'd Vol. Var. Costs
6&7	City Del carriers	6,229,387	0	6,229,387		2,211,432
	In-office direct labor	3,100,352	0	3,100,352	1.355	1,100,625
	CAG K	198	0	198	1.355	70
	In-office support	564,200	0	564,200	1.355	200,291
	Street SCS Access (PRC)	0	0	0		0
	Street Single Subcl Load (PRC)	0	0	0		0
	Other Load (PRC)	0	0	0		0
	Route	110,366	0	110,366	1.355	39,180
	Access	338,050	0	338,050	1.355	120,008
	Elemental Load	1,274,974	0	1,274,974	1.355	452,616
	Street Support	841,247	0	841,247	1.355	298,643
8	Vehicle Svc Drivers	313,419	0	313,419	1.553	173,321
10	Rural carriers	1,860,225	0	1,860,225		439,013
	Evaluated routes	1,702,711	0	1,702,711	1.236	401,840
	Other routes	157,514	0	157,514	1.236	37,173
	Equip Maint Allowance	0	0	0		
11	Custodial Maint Svc	1,525,655	1,525,655	0		0
	Custodial personnel	560,792	560,792	0		0
	Contract cleaners	40,564	40,564	0		0
	Operating equip maintenance	665,229	665,229	0		0
	Plant & Bldg equip maint	259,070	259,070	0		0
12	Motor Veh Svc	177,827	177,827	0		0
	Personnel	65,667	65,667	0		0
	Supplies & materials	90,348	90,348	0		0
	Vehicle hire	21,812	21,812	0		0
13	Misc Op. Costs	8,013	8,013	0		0
	Contract stations	0	n.a.	0		0
	Carfare	4,671	4,671	0		0
	Driveout	3,342	3,342	0		0
	Tolls & ferrriage	0	0	0		0
	Fed Res & comml Banks	0	0	0		0
	Employee awards	0	0	0		0
	Equipment shops	0	0	0		0
	CAG L rental allowance	0	0	0		0
	Other local operations	0	0	0		0

Table A-1 (con't)

**Volume Variable Costs By Segment and Component
FY 2000
(\$, 000)**

Seg No.	Cost Segment	(1) Volume Variable Costs	(2) Indirect	(3) Direct	(4) USPS Piggy- back	(5) Piggy'd Vol. Var. Costs
14	Purchased Transport	4,041,537	0	4,041,537		0
	Domestic air	1,341,604	0	1,341,604	none	0
	Domestic Alaska air	7,470	0	7,470	none	0
	Highway	1,741,197	0	1,741,197	none	0
	Railroad	275,028	0	275,028	none	0
	Domestic water	27,598	0	27,598	none	0
	International	648,640	0	648,640	none	0
15	Building Occupancy	1,004,825	1,004,825	0		0
	Rents	719,149	719,149	0		0
	Fuel & utilities	285,676	285,676	0		0
	Communications & other	0	0	0		0
16	Supplies & Services	1,769,861	921,063	848,798		0
	Stamps & dispensers	168,016	0	168,016	none	0
	Money Orders	1,647	0	1,647	none	0
	Stamped cards & envelopes	10,832	0	10,832	none	0
	Supply personnel	0	0	0		0
	Custodial & Building	76,861	76,861	0		0
	Equipment	247,742	247,742	0		0
	Track & trace	559	0	559	none	0
	Other	1,264,197	596,460	667,737	none	0
	Advertising	0	0	0		0
	Remote encoding	7	0	7	none	0
17	Research & Develop.	0	0	0		0

Table A-1 (con't)

**Volume Variable Costs By Segment and Component
FY 2000
(\$, 000)**

Seg No.	Cost Segment	(1) Volume Variable Costs	(2) Indirect	(3) Direct	(4) USPS Piggy- back	(5) Piggy'd Vol. Var. Costs
18	Admin & Area Opns.	2,129,725	2,129,725	0		0
	Headquarters	0	0	0		0
	Money Order Division	0	0	0		0
	Area administration	0	0	0		0
	Postal Inspection Service	52,891	52,891	0		0
	Supplies & services	0	0	0		0
	Miscellaneous support	0	0	0		0
	Insp Exp & Employee losses	0	0	0		0
	Reimbursements	0	0	0		0
	Individual awards	0	0	0		0
	Misc Personal compensation	0	0	0		0
	Money Orders	0	0	0		0
	Repriced annual leave	55,016	55,016	0		0
	Holiday leave	4,479	4,479	0		0
	Civil service retirement	762,245	762,245	0		0
	Workers Comp	410,580	410,580	0		0
	Unemployment Comp	21,671	21,671	0		0
	Retiree health benefits	426,976	426,976	0		0
	Annuitant life insurance	3,848	3,848	0		0
	Annuitant/COLA principal	392,019	392,019	0		0
	Annuity protect program	0	0	0		0
19	Genl Mgt Systems	0	0	0		0
20	Other Accrued Exp.	2,443,058	2,406,966	36,092		0
	Equipment depreciation	579,548	579,548	0		0
	Vehicle depreciation	36,394	36,394	0		0
	Building and Leasehold Dep'n	743,018	743,018	0		0
	Indemnities	36,092	0	36,092	none	0
	Interest expense	1,048,006	1,048,006	0		0
	Other Expenses & credits	0	0	0		0
		-----	-----	-----		-----
	GRAND TOTAL	37,818,273	10,637,823	27,180,450		9,963,067
						-10,637,823
	Indirect volume variable costs not captured by piggybacks		-6.34%			-674,756
	Piggy'd indirect costs as % of total indirect					106.8%

A-2. Attributable Cost

The Postal Service's attributable costs, as reported in the PRC version of the CRA for FY 2000, totaled \$41.6 billion, and the breakdown of these costs by segment and component is shown in Table A-2, column 1.¹⁷ The further breakdown of attributable costs as either indirect or direct is shown in columns 2 and 3 respectively, of Table A-2. Indirect attributable costs amounted to \$12.0 billion, and direct attributable costs amounted to \$29.6 billion.

The Postal Rate Commission ("PRC") piggyback factors applicable to each item of direct attributable cost are shown in Table A-2, column 4; they range from none to 1.5739. Certain direct costs, such as those for purchased transportation in Segment 14, that are not considered to incur any indirect costs have no applicable piggyback factor.

The indirect attributable costs that are piggybacked onto the direct attributable costs are shown in Table A-2, column 5. They total approximately \$11.1 billion, which fails to account for a small amount (\$914 million, or 7.6 percent) of total indirect attributable costs.

¹⁷ Non-attributable costs, also known as institutional costs, amounted to \$23.2 billion in FY 2000.

Table A-2

**Attributable Costs By Segment and Component
FY 2000
(\$, 000)**

Seg No.	Cost Segment	(1) Attribu- table Costs	(2) Indirect	(3) Direct	(4) PRC Piggy- back	(5) Piggy'd Attrib. Costs
1	Postmasters	315,941	0	315,941		73,899
	EAS 23 & below	315,941	0	315,941	1.2339	73,899
	EAS 24 & above	0	0	0		
2	Supervisors & Techs	1,957,156	1,914,019	43,137		0
	Mail processing	924,483	924,483	0		0
	Central mail markup	43,137	0	43,137	none	0
	Window Service	93,224	93,224	0		0
	Admin & support	45,546	45,546	0		0
	City delivery carriers	447,867	447,867	0		0
	Expedited delivery	4,748	4,748	0		0
	Rural delivery carriers	10,658	10,658	0		0
	Vehicle Service	20,758	20,758	0		0
	Employee & labor rlns.	124	124	0		0
	Higher level supervisors	63,476	63,476	0		0
	Gen'l supervision mail processing	294	294	0		0
	Gen'l supervision collect/delivery	65	65	0		0
	Supervisor training	28,016	28,016	0		0
	Quality Control revenue project	36,439	36,439	0		0
	Joint supv clerks/carriers	238,321	238,321	0		0
	Other	0	0	0		0
3	Clerks & mailhandlers	16,230,079	1,304,659	14,925,420		7,998,625
	Mail processing	13,676,381	0	13,676,381	1.551482	7,542,280
	Window service	1,065,834	0	1,065,834	1.428157	456,345
	Administrative clerks	1,247,177				
	Claims & Inquiry		0	2,579	???	0
	Other		0	122,249	none	0
	All other		1,122,349	0		0
	Time and attendance	182,310	182,310	0		0
	Product specific	10,961	0	10,961	none	0
	Expedited delivery	47,416	0	47,416	none	0
4	Clerks Cag-K	4,388	0	4,388	1.551482	2,420

Table A-2 (con't)

**Attributable Costs By Segment and Component
FY 2000
(\$, 000)**

Seg No.	Cost Segment	(1) Attribu- table Costs	(2) Indirect	(3) Direct	(4) PRC Piggy- back	(5) Piggy'd Attrib. Costs
6&7	City Del carriers	6,663,850	0	6,663,850		2,381,645
	In-office direct labor	3,100,352	0	3,100,352	1.331101	1,026,531
	CAG K	198	0	198	1.331101	66
	In-office support	564,200	0	564,200	1.331101	186,807
	Street SCS Access (PRC)	432,243	0	432,243	1.389531	168,372
	Street Single Subcl Load (PRC)	130,529	0	130,529	1.389531	50,845
	Other Load (PRC)	0	0	0		0
	Route	110,366	0	110,366	1.389531	42,991
	Access	156,847	0	156,847	1.389531	61,097
	Elemental Load	1,266,874	0	1,266,874	1.389531	493,486
	Street Support	902,241	0	902,241	1.389531	351,451
8	Vehicle Svc Drivers	313,418	0	313,418	1.573915	179,875
10	Rural carriers	1,882,731	0	1,882,731		477,467
	Evaluated routes	1,723,211	0	1,723,211	1.253604	437,012
	Other routes	159,520	0	159,520	1.253604	40,455
	Equip Maint Allowance	0	0	0		
11	Custodial Maint Svc	1,641,795	1,641,795	0		0
	Custodial personnel	578,229	578,229	0		0
	Contract cleaners	41,825	41,825	0		0
	Operating equip maintenance	754,615	754,615	0		0
	Plant & Bldg equip maint	267,126	267,126	0		0
12	Motor Veh Svc	225,415	225,415	0		0
	Personnel	86,032	86,032	0		0
	Supplies & materials	112,941	112,941	0		0
	Vehicle hire	26,442	26,442	0		0
13	Misc Op. Costs	8,021	7,876	145		0
	Contract stations	0	n.a.	0		0
	Carfare	4,594	4,594	0		0
	Driveout	3,282	3,282	0		0
	Tolls & ferriage	0	0	0		0
	Fed Res & comml Banks	0	0	0		0
	Employee awards	0	0	0		0
	Equipment shops	145	0	145	none	0
	CAG L rental allowance	0	0	0		0
	Other local operations	0	0	0		0

Table A-2 (con't)

Attributable Costs By Segment and Component						
FY 2000						
(\$, 000)						
Seg No.	Cost Segment	(1) Attribu- table Costs	(2) Indirect	(3) Direct	(4) PRC Piggy- back	(5) Piggy'd Attrib. Costs
14	Purchased Transport	4,277,080	0	4,277,080		0
	Domestic air	1,577,145	0	1,577,145	none	0
	Domestic Alaska air	7,470	0	7,470	none	0
	Highway	1,741,199	0	1,741,199	none	0
	Railroad	275,028	0	275,028	none	0
	Domestic water	27,598	0	27,598	none	0
	International	648,640	0	648,640	none	0
15	Building Occupancy	1,016,058	1,015,433	625		0
	Rents	720,874	720,874	0		0
	Fuel & utilities	294,559	294,559	0		0
	Communications & other	625	0	625	none	0
16	Supplies & Services	1,977,900	964,515	1,013,385		0
	Stamps & dispensers	173,873	0	173,873	none	0
	Money Orders	1,647	0	1,647	none	0
	Stamped cards & envelopes	4,978	0	4,978	none	0
	Supply personnel	0	0	0		0
	Custodial & Building	79,251	79,251	0		0
	Equipment	288,804	288,804	0		0
	Track & trace	559	0	559	none	0
	Other	1,340,973	596,460	744,513		0
	Advertising	87,808	0	87,808	none	0
	Remote encoding	7	0	7	none	0
17	Research & Develop.	0	0	0		0

Table A-2 (con't)

**Attributable Costs By Segment and Component
FY 2000
(\$, 000)**

Seg No.	Cost Segment	(1) Attribu- table Costs	(2) Indirect	(3) Direct	(4) PRC Piggy- back	(5) Piggy'd Attrib. Costs
18	Admin & Area Opns.	2,418,225	2,350,901	67,324		0
	Headquarters	20,238	0	20,238	none	0
	Money Order Division	2,161	0	2,161	none	0
	Area administration	0	0	0		0
	Postal Inspection Service	54,536	54,536	0		0
	Supplies & services	40,573	0	40,573	none	0
	Miscellaneous support	4,147	0	4,147	none	0
	Insp Exp & Employee losses	0	0	0		0
	Reimbursements	0	0	0		0
	Individual awards	0	0	0		0
	Misc Personal compensation	0	0	0		0
	Money Orders	205	0	205	none	0
	Repriced annual leave	60,831	60,831	0		0
	Holiday leave	4,953	4,953	0		0
	Civil service retirement	842,817	842,817	0		0
	Workers Comp	453,980	453,980	0		0
	Unemployment Comp	23,962	23,962	0		0
	Retiree health benefits	472,110	472,110	0		0
	Annuitant life insurance	4,254	4,254	0		0
	Annuitant/COLA principal	433,458	433,458	0		0
	Annuity protect program	0	0	0		0
19	Genl Mgt Systems	0	0	0		0
20	Other Accrued Exp.	2,639,779	2,603,687	36,092		0
	Equipment depreciation	659,122	659,122	0		0
	Vehicle depreciation	48,417	48,417	0		0
	Building and Leasehold Dep'n	743,019	743,019	0		0
	Indemnities	36,092	0	36,092	none	0
	Interest expense	1,153,129	1,153,129	0		0
	Other Expenses & credits	0	0	0		0
		-----	-----	-----		-----
	GRAND TOTAL	41,571,836	12,028,300	29,543,536		11,113,931
						-12,028,300
	Indirect costs not captured by piggybacks		-7.60%			-914,369