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Summary Description of USPS Development of Costs by
Segments and Components, FY 2000

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SUMMARY DESCRIPTION OF USPS DEVELOPMENT OF COSTS BY SEGMENTS AND COMPONENTS, FY2000

This is a Category 1 library reference. It describes in summary form certain costing approaches used by the Postal Service in the FY2000 Cost and Revenue Analysis report (CRA). Differences between the FY2000 CRA and the Base Year 2000 CRA are referenced in the testimony of witness Meehan (USPS-T-11).

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PREFACE

Purpose

This document describes in summary form the approach to costing employed by the Postal Service with specific reference to the Cost and Revenue Analysis (CRA) report for Fiscal Year 2000. Costs presented in the CRA report are developed for postal rate making and related management purposes. The summary description shows dollar figures and their development from the perspective of postal costing concepts and objectives.

Basis

Postal costs are developed and presented annually. Each annual development relies on methods established in previous developments, on USPS testimony in rate case proceedings, and, in some instances, upon the recommended decisions of the Postal Rate Commission (PRC).

Costs are derived from the postal system of accounts. Factors required for their development are taken, as appropriate, from a variety of postal operational and statistical information sources. Some of these, such as the In-Office Cost System (IOCS) and the Revenue, Pieces, and Weight System (RPW), are ongoing data systems maintained for this purpose. Factors obtained from these systems are updated annually. Supporting information essential to cost development is also obtained through special studies and by tapping information sources designed for operational purposes. These sources may require careful selection of proper time periods, or appropriate adjustments, to ensure compatibility.

Objectives

Two objectives of Postal Service cost development stem from the statutory requirements, namely: that "... total income equal, as nearly as practicable, (Postal Service) costs," and that "... each class of mail or type of mail service bear the direct and indirect postal costs attributable to that class or service" Thus, one objective is to determine total costs in a detail that allows their projection to future periods. A second is to identify the costs needed for rate making. Each objective requires an understanding of the behavior of postal costs.

Identifying costs by classes, subclasses, and services is accomplished through careful examination of how costs are incurred in individual postal operations. For each subclass of mail, there are two costs that provide important information for rate making. The first is marginal cost. The marginal cost of a subclass of mail is the change in cost that results from a small change in its volume alone, with the volumes of other subclasses remaining constant. Marginal costs provide important information for rate making and other management decisions.

The incremental cost of a subclass, the other key cost information needed for rate making, is the cost incurred as a result of providing the entire annual quantity of that subclass. Equivalently, it is the cost avoided by eliminating a subclass, assuming that all other subclasses continue to be provided at their current volumes. The purpose of this cost category is to indicate whether the customers of one subclass of mail are being subsidized by the customers of other subclasses. So long as the revenue earned by a subclass exceeds its incremental cost, we can be certain that its customers are not being subsidized by the customers of other subclasses.

Concepts

The concept of cost variability with respect to marginal changes in mail volume is the foundation for determining both marginal and incremental costs. Practical calculation of the marginal cost of postal products also requires considering the availability of data, cost breakdowns provided by the postal system of accounts, the ways costs are incurred within the Postal Service, the differential effect of postal operations on particular classes and services, the complex nature of postal operations, and the changing environment in which these operations take place.

In this document, the terms "variable cost" and "volume variable cost" refer to costs that vary with small increases and decreases in volume. The volume variable portion of a specific cost component, such as mail processing or highway transportation, is equal to its total accrued cost multiplied by its "degree of variability," or "cost elasticity." The degree of variability is the ratio of the percentage change in the total costs of a category to the corresponding percentage change in volume. For example, if a ten- percent increase in the cost of a component were caused by a ten- percent increase in volume, the variability would be 1.0 (or 100 percent). If the cost increase were four percent for the same volume increase, the variability would be 0.4 (or 40 percent).¹ The degree of variability itself is most frequently expressed as a percentage and may be referenced simply as the "variability."

The relation between volume variability and marginal cost is explained in Appendix H. Essentially, volume variable costs are a means of calculating marginal costs. Volume variable costs are the product of variability and total cost. Dividing through this product by volume produces a measure of marginal cost. As a matter of practice, the Postal Service finds the volume variable cost for each of over one hundred cost elements, then sums them to arrive at overall volume variable cost for each product. These costs, expressed on a unit basis, are equal to marginal costs.

This approach requires the identification of a cost driver for each cost element. This procedure is described fully in Appendix H; summarily, however, the procedure is to determine the variability of the cost element with respect to the driver, apply that variability to the total (or accrued) element cost to find the element's overall volume variable cost, and then distribute this cost to the individual rate categories. Consider, for example, the element that contains the costs for Inter-BMC Highway Transportation. These costs are driven, or caused, by cubic-foot-miles (CFM) of transported mail. Overall Inter-BMC volume variable costs are estimated, then distributed on the basis of the proportion of CFMs for each class, subclass or rate category of mail. If, for example, First-Class Mail comprised 80 percent of the CFMs of Inter-BMC highway transportation, 80 percent of the volume-variable cost of Inter-BMC transportation would be distributed to First-Class Mail.

Factors other than volume affect cost, such as population and population density within service areas; system performance in relation to labor productivity, technological improvements, and management effectiveness; and service criteria, such as satisfaction of overnight 2- and 3-day delivery standards. The effects of these nonvolume factors are differentiated from true volume effects in the determination of volume variable costs. It is necessary to hold these exogenous factors constant to determine marginal or volume variable costs.

The incremental cost of a product is the savings that would result from discontinuing the production of that product. The key role of incremental costs in postal rate making is to perform incremental cost tests for cross-subsidization among postal products. If a product's price per unit exceeds its estimated incremental cost per unit, then there is no cross-subsidization. There is a precise relationship between incremental costs and marginal costs. Incremental cost for a product is the sum of the marginal costs for each unit produced, plus any product specific costs. Costs that are product related but do not vary with volume, such as advertising, are product specific costs. Whereas marginal costs are the measurement of the resource cost generated by the addition of another unit of output, incremental costs measure the costs generated by the provision of all units of an output, given the existing cost structure.

It is imperative that any approach to estimating incremental costs associated with a particular cost component be consistent with the analyses that determine volume variable costs for that component. In practical terms, the calculation of incremental cost for a cost component requires the following four-step algorithm. The first step is to identify any fixed costs in a cost component that are not allocable to products. Next, any product specific costs within a component are identified and allocated to the relevant product's incremental costs. The third step is to determine the amount of

¹ Many cost components have been defined to encompass activities whose level either varies with volume 100 percent or not at all.

the cost driver that would not be required when each particular class is removed. For example, in carrier load time this would imply estimating the reduction in the number of letters, flats, and parcels loaded due to the elimination of, say, First-Class Mail. The final step is to calculate the reduction in cost associated with the reduction in the cost driver for the particular cost component. When added to any product specific costs, the result is the incremental cost for the product in the cost component.

A detailed description of the approach used to estimate incremental costs for Fiscal Year 1999 is included in Appendix I. In summary, however, the approach identifies segment, component, and individual cost pool accrued costs, and then classifies each component as independent (having its own distribution key and volume variability estimate) or dependent (not meeting the two criteria for independent components and obtaining a distribution key and/or variability estimate from another component).

Incremental costs associated with independent components are then estimated using an equation-based or constant elasticity methodology, or some other technique. Incremental costs for equation-based components follow the development of volume variable costs through the use of a specific functional form for econometric estimation. The estimated parameters from these equations can be used to estimate hypothetical accrued costs for a component assuming that a particular subclass is removed. The difference between this hypothetical accrued cost and the actual accrued cost is the incremental cost for the particular subclass in that component. For independent components whose approaches in developing volume variabilities do not lend them well to incremental cost analysis, the constant elasticity assumption is used. Other techniques for independent component incremental cost development include the use of single subclass stop ratios, the identification of product specific costs as incremental to the product, and the assumption that costs that are fully volume variable are also incremental. A more detailed explanation of each of these independent component techniques is provided in Appendix I.

Dependent component incremental costs are estimated based on independent components using piggyback factors or burdens. For a particular subclass, a piggyback factor (one plus the ratio of the volume variable costs in the dependent component to those of the base component or components) is applied to the base incremental costs to arrive at the combined base and dependent component incremental costs. Similarly, for burdened components (dependent components whose base components are within the same cost segment), a factor equaling the ratio of the volume variable costs for a specific subclass in the dependent (burdened) component to those of the base component(s) is applied to the subclass incremental costs in base component(s) to arrive at the dependent component incremental costs. A more detailed explanation of these dependent component techniques is provided in Appendix I.

Costs that are not volume variable are classified as "institutional." Thus, institutional costs are a residual consisting of the difference between total accrued costs and total volume variable costs. Included in institutional costs are the residual costs of components that have variabilities between 0 and 1 and the total cost of components that do not vary with volume changes, i.e., have a variability of 0. Significant examples of costs which have a variability of 0 are one-time costs due to restructuring operations in Fiscal Year 1992 and charges associated with the Omnibus Budget Reconciliation Acts of 1991 and 1993.

Structure

For development and presentation of marginal and incremental costs, postal costs as a whole are considered at several analytical levels: cost segments, cost components and sometimes subcomponents or elements. Cost segments generally correspond to major divisions of the postal system of accounts. Two examples are Postmasters (Cost Segment 1, consisting of salaries and related expenses) and Transportation (Cost Segment 14, consisting of some 115 different accounts relating to payments for air, rail, highway, and water carriage). There are currently 18 active cost segments.

Cost components are groupings of costs that are identified for purposes of variability analysis. Most cost segments contain several different components; 57 components appear in the present development. In certain instances, it is useful further to subdivide cost components into subcomponents or elements. A dot-oriented numbering system is used to identify these cost groupings at the segment and component levels.

Organization

The main part of the document consists of cost segment descriptions containing summary tables showing accrued and volume variable costs for FY 2000; supporting data and explanations are contained in appendixes.

Cost Segment Descriptions. The cost segment descriptions are presented in formats similar to one another. Each begins with a summary of the postal activities and costs covered by the segment, including the sources of segment costs and the components adopted for subsequent analysis. A summary table containing each component's total accrued and volume variable costs for FY 1999 follows this. The description then details the development of each component in terms of its accrued costs, volume variable costs, the distribution of costs to classes and subclasses of mail and special services, and incremental costs. The numbering scheme for cost segments and components is consistent with that shown in the summary tables.

Appendices. Appendix A reports the specific postal accounts from which costs are developed. Appendix B lists the function and activity codes of the IOCS. Appendix C describes the formation of mail processing distribution keys. Appendix D shows the development of distribution key factors for volume variable stamp, card, and meter transaction window service costs in Cost Segment 3. Appendix E lists the distribution of mixed mail costs to direct mail activity codes. Appendix F itemizes categories of mail processing equipment and facility space. Appendix G is a glossary of Postal Service acronyms used in this document. Appendix H describes the conceptual basis for the marginal costs measured in the CRA. Appendix I describes the procedure by which incremental costs are calculated.

COST SEGMENT 1

POSTMASTERS

1.0 SUMMARY

The salaries, benefits, and related costs of postmasters and district managers/postmasters are covered within this cost segment.

Post offices vary from the main offices of large cities with many stations and branches to small offices in towns and rural communities.¹ Post Offices are responsible for window service and mail collection and delivery. Except for manager/postmasters of larger offices or districts, postmaster salaries are governed by the Executive Administrative Schedules (EAS) which set postmaster salaries in accordance with the EAS level of the respective office. Post office EAS levels are determined by standardized office workload criteria.

The accrued costs of this segment in FY 2000 totaled \$1,773,011 thousand.

1.0.1 Segment Costs

The accounts and booked costs analyzed in this segment are shown in the Fiscal Year 2000 Cost Segments & Components Reconciliation to Financial Statements and Account Reallocations, pages 6 & 7.

1.0.2 Component Costs

Costs of this segment are classified by component as described below; amounts are summarized in the following table (detail may not add to total due to rounding).

<u>Component</u>	<u>FY 2000 Costs (Thousands)</u>	
	<u>Total Accrued</u>	<u>Volume Variable</u>
1.1 Postmasters EAS-23 and Below	\$1,733,081	\$315,941
1.2 Postmasters EAS-24 and Above	39,930	-
TOTAL	\$1,773,011	\$315,941

1.1 POSTMASTERS EAS-23 AND BELOW

1.1.1 Description and Rationale for Classification

The costs of work by postmasters EAS-23 and below are subjected to a functional workload analysis involving the Expanded Postmaster Criteria System (EPCS). The EPCS evaluates, ranks, and classifies postmaster positions by an index of Workload Service Credits (WSC). The WSC Index provides an evaluation of postmaster workload by activity and revenue unit factors:

¹ Other installations, known as "contract stations," are not postal-owned facilities and are not staffed by postal employees. Costs for these contract stations are included in Cost Segment 13.

general delivery families served, post office boxes and caller boxes rented, possible city deliveries, administrative rural boxes, intermediate rural boxes, administrative highway contract route boxes, intermediate highway contract route boxes, administrative responsibility for other offices, and revenue units. These factors reflect various associate office functional activities performed in connection with window, lobby, and delivery services, mail processing, distribution and collection, and general administration.

The WSC factors are based on available data from individual post offices and indicate post office activity levels and levels of postmaster responsibilities. These factors, weighted by multipliers, reflect the relative contribution of each factor in the overall evaluation and determine activity and revenue workload service credits generated at each office. Total workload service credits determine postmaster grades.

The volume-variable costs of postmasters EAS-23 and below are estimated by determining the average change in minimum salary of these postmasters due to a change in WSC, i.e., a change in the level of activities in offices.

1.1.2 Accrued Costs

Postmaster costs for EAS-23 and below offices and EAS-24 and above offices are recorded in the same accounts. Accrued costs for both components are developed by first apportioning the jointly recorded costs (subaccount .101) on the basis of salary proportions. These salary proportions are calculated from the number of postmaster positions at each EAS grade in both components and actual salaries for those grades. Postmaster relief and replacement costs (subaccount .102) are then added to complete the development of accrued costs for this component.

1.1.3 Volume Variable Costs

Accrued costs for postmasters EAS-23 and below are volume variable to the same degree as they are determined to be variable from the analysis described in section 1.1.1.

1.1.4 Distribution of Costs

Volume variable costs are distributed among classes and subclasses of mail and special services on the basis of revenue relationships determined from national Revenue, Pieces, and Weight (RPW) data.²

1.1.5 Incremental Costs

Incremental costs for Postmasters EAS-23 and below are calculated using the constant elasticity method. See Appendix I for a detailed discussion of this method and all other methods used to calculate incremental costs.

1.2 POSTMASTERS EAS-24 AND ABOVE

1.2.1 Description and Rationale for Classification

These postmasters have duties and responsibilities that are not significantly related to the volume of mail flowing through offices that they direct. The salaries reflect longevity and merit as well as reporting requirements. Unlike the WSC used for postmasters EAS-23 and below,

² Non-mail category revenues, e.g., mailing fees, are excluded. Also, certain mail category revenues are excluded because they are not generally received at offices with postmasters EAS-23 and below, e.g., revenues for Mailgrams and U.S. Government mail.

no set of workload evaluation criteria for evaluating higher-level postmasters is available. In addition, postmasters at a number of large offices and district manager/postmasters have been placed under the Postal Career Executive Service (PCES) salary schedule, which does not provide for salary adjustments based on workload evaluation. Further, the number of these postmasters depends on both management design and demographics. Thus, the costs included in this component are classified as institutional.

1.2.2 Accrued Costs

Accrued costs for this component are determined as described in section 1.1.2.

1.2.3 Volume Variable Costs

Because the costs of this component are classified as institutional, no accrued costs are volume variable.

1.2.4 Incremental Costs

There are no incremental costs for Postmasters EAS-24 and above.

COST SEGMENT 2

SUPERVISORS AND TECHNICIANS

2.0 SUMMARY

This segment covers salaries, benefits, and related costs of supervisor and technical personnel work (except that related to equipment maintenance, vehicle maintenance, and custodial and supply services) at CAG A-J post offices, Processing and Distribution Centers/Facilities (P&DCs/P&DFs), Air Mail Centers/Facilities (AMCs/AMFs), Bulk Mail Centers (BMCs), Remote Encoding Centers (RECs), and Customer Service Districts. The costs for managers of postal installations other than post offices and some BMC managers are also found in this segment. In addition, this segment includes work performed by technical personnel and the work of supervising clerks, mailhandlers, delivery and collection (city delivery carriers, expedited delivery, rural carriers, and vehicle service drivers), and time and attendance personnel.

The accrued costs of this segment in FY 2000 totaled \$3,664,887 thousand.

2.0.1 Segment Costs

The accounts and booked costs analyzed in this segment are shown in the Fiscal Year 2000 Cost Segments & Components Reconciliation to Financial Statements and Account Reallocations, pages 8-10.

Accrued costs are apportioned to supervisor activities on the basis of the In-Office Cost System (IOCS) proportion of activity codes (activity codes and descriptions are shown in Appendix B). Further development of the costs for each functional component is explained in subsequent sections relating to cost development by component.

2.0.2 Component Costs

Costs of this segment are classified by component as described in the next section; amounts are summarized in the following table (detail may not add to total due to rounding).

<u>Component</u>	<u>FY 2000 Costs (Thousands)</u>	
	<u>Total Accrued</u>	<u>Volume Variable</u>
2.1 Supervision of Mail Processing	\$1,006,141	\$830,890
2.2 Supervision of Window Service	198,240	93,675
2.3 Supervision of Administrative and Support Activities	69,895	41,360
2.4 Supervision of Collection & Delivery	950,404	458,304
2.5 Technical Personnel & Other Supervisory Activities	1,440,207	327,611
TOTAL	\$3,664,887	\$1,751,840

2.1 SUPERVISION OF MAIL PROCESSING

2.1.1 Description and Rationale for Classification

The costs in this component are for the firstline supervision of mail processing operations.

The workhours, and therefore the costs, for firstline supervision are largely a function of the workhour-related costs of the supervised activities and supervisory span of control (number of employees per supervisor). Mail processing supervisors have a span of control that is essentially constant in a given work organization structure. (When measured solely in terms of number of employees per supervisor, however, span of control may change in circumstances of a changing work organization structure, such as when new programs or new technologies are implemented. In such circumstances, a more meaningful concept of span of control may focus on the amount and type of the mailflow for which the supervisor is responsible.) It is recognized that a change in employee workhours, caused by a change in mail volume, may not be accompanied immediately by a corresponding change in firstline supervisory workhours. However, for any substantial or prolonged change in the level of nonsupervisory employee effort for a given work activity, there will be an accompanying change in firstline supervisory requirements.

Accordingly, the costs of the firstline supervisory activities in this component and in other components discussed below are classified as variable to the same degree as the costs of the work activities supervised.

2.1.2 Accrued Costs

Accrued costs include the costs of firstline supervision of mail processing at CAG A-J post offices, P&DCs/P&DFs, AMCs/AMFs, BMCs, and RECs, as determined from supervisory activities at the time of IOCS observations (codes 7500 and 7750). Accrued costs also include the costs for the firstline supervision of central mail markup (code 7570) and a portion, based upon the relative proportions of crafts involved, of the costs for the firstline supervision of various combinations of crafts (code 7470).

Costs in this entire cost segment for overhead time associated with the supervision of the handling of empty equipment (code 7523) are apportioned among this cost component and the other four cost components on the basis of accrued costs for other than supervisory time.

2.1.3 Volume Variable Costs

Accrued costs for firstline supervision of mail processing activities are volume variable to the same degree as the accrued costs of mail processing personnel in Cost Segment 3.

2.1.4 Distribution of Costs

Volume variable costs are distributed to classes and subclasses of mail and special services in the same proportions as volume variable mail processing direct labor costs in Cost Segment 3.

2.1.5 Incremental Costs

The incremental costs for this component are calculated in the same way as incremental costs for mail processing personnel in segment 3.1.

2.2 SUPERVISION OF WINDOW SERVICE

2.2.1 Description and Rationale for Classification

This component includes costs for the firstline supervision of window service activities in CAG A-J post offices. As in the case of mail processing supervision, these costs are largely a function of the workhour-related costs of the supervised activity. Accordingly, these supervisory costs are classified as variable to the same degree as window service clerk costs in Cost Segment 3.

2.2.2 Accrued Costs

Accrued costs include the costs of firstline supervision of certain window service activities as determined from supervisory activities at the time of IOCS observations. Costs included are for supervision of window service (code 7170).¹ Accrued costs also include a portion, based upon the relative proportions of crafts involved, of the costs for the firstline supervision of various combinations of crafts (code 7470).

Accrued costs for overhead time are developed as described in section 2.1.2.

2.2.3 Volume Variable Costs

Accrued costs for firstline supervision of window service activities are volume variable to the same degree as costs of window service clerks in Cost Segment 3.

2.2.4 Distribution of Costs

Volume variable costs are distributed to classes and subclasses of mail and special services in the same proportions as volume variable costs of window service clerks in Cost Segment 3.

2.2.5 Incremental Costs

The incremental costs for this component are calculated in the same way as the incremental costs for window service clerks in segment 3.2.

2.3 SUPERVISION OF ADMINISTRATIVE AND SUPPORT ACTIVITIES

2.3.1 Description and Rationale for Classification

This component includes costs for the firstline supervision of administrative and support clerk activities involving personnel and time and attendance work. As in the case of mail processing supervision, these costs are largely a function of the workhour-related costs of the supervised activity. Accordingly, these supervisory costs are classified as variable to the same degree as costs for the personnel and time and attendance parts of the administrative and support activities component of Cost Segment 3.

2.3.2 Accrued Costs

Accrued costs consist of the costs of firstline supervision of the personnel (code 7610) and time and attendance (codes 7640 and 7650) parts of administrative and support clerk activities, determined from supervisory activities at the time of IOCS observations.

Accrued costs for overhead time are developed as described in section 2.1.2.

¹ Window service supervisory activities involving customer inquiries are included in component 2.5.

2.3.3 Volume Variable Costs

Accrued costs for firstline supervision of personnel and time and attendance activities are volume variable to the same degree as costs for the personnel and time and attendance part of the administrative and support activities component of Cost Segment 3.

2.3.4 Distribution of Costs

Volume variable costs are distributed to classes and subclasses of mail and special services in the same proportions as volume variable costs of personnel and time and attendance costs in the administrative and support activities component of Cost Segment 3.

2.3.5 Incremental Costs

The incremental costs for this component are calculated in the same way as the incremental costs for administrative and support activities in segment 3.3.

2.4 SUPERVISION OF DELIVERY AND COLLECTION

2.4.1 Description and Rationale for Classification

This component includes separately identified costs for the firstline supervision of city delivery carriers, expedited delivery, rural carriers, and vehicle service drivers. As in the case of mail processing supervision, these costs are largely a function of the workhour-related costs of each of the supervised activities. Accordingly, these costs are separately classified as variable to the same degree as costs for city delivery carriers (Cost Segments 6 and 7), expedited delivery (Component 3.4 of Cost Segment 3), rural carriers (Cost Segment 10), and vehicle service drivers (Cost Segment 8), respectively.

2.4.2 Accrued Costs

Accrued costs include the costs of firstline supervision of city delivery carriers (code 7420), expedited delivery (code 7220), rural carriers (code 7410), and vehicle service drivers (code 7460), as determined from supervisory activities at the time of IOCS observations. Accrued costs also include a portion, based upon the relative proportions of crafts involved, of the costs for the firstline supervision of various combinations of crafts (codes 7636 and 7637).

Accrued costs for overhead time are developed as described in section 2.1.2.

2.4.3 Volume Variable Costs

Accrued costs for the firstline supervision of city delivery carriers, expedited delivery, rural carriers, and vehicle service drivers are separately volume variable to the same degree as the costs for the supervised delivery service.

2.4.4 Distribution of Costs

Volume variable costs for the firstline supervision of city delivery carriers, expedited delivery, rural carriers, and vehicle service drivers are distributed to classes and subclasses of mail and special services in the same proportions as the volume variable costs for the supervised delivery service.

2.4.5 Incremental Costs

City delivery carrier supervision, vehicle service supervision, expedited delivery supervision, and rural delivery carrier supervision costs are variable to the same degree as the costs for each of the supervised activities. The incremental costs for these components are calculated in the same way as those of the supervised activities.

2.5 TECHNICAL PERSONNEL AND OTHER SUPERVISORY ACTIVITIES

2.5.1 Description and Rationale for Classification

This component includes costs for managers, higher-level supervisors, and technical personnel at CAG A-J post offices, P&DC/P&DFs, AMC/AMFs, BMCs, RECs, and Customer Service Districts and for other supervisory activities not included in the other four components. Examples of personnel for whom costs are included are superintendents of mail, general supervisors, customer service representatives, supervisory accounting personnel, and technical personnel such as industrial engineers and quality control technicians.

Costs for other supervisors and technicians are divided into six subcomponents involving costs for 1) general supervisors of mails and of delivery and collection, 2) employee and labor relations technical personnel, 3) higher-level supervisors, 4) supervision of training, 5) supervision of miscellaneous clerk activities, and 6) technical personnel and other supervisory activities.

Regarding costs for general supervisors of mails and general supervisors of delivery and collection, Postal Service compensation specialists indicate that the number of related positions is proportional to the number of directly reporting firstline supervisors, which in turn is proportional, in a given workplace environment, to the number of indirectly reporting craft employees. Thus, as in the case of mail processing supervision, these costs are separately classified as variable to the same degree as costs for supervised craft employees. For general supervisors of mails, the costs are for mail processing in Cost Segment 3; for general supervisors of delivery and collection, they are for window service clerks in Cost Segment 3 and city delivery carriers in Cost Segments 6 and 7.

Employee and labor relations technical personnel include safety assistants, safety specialists, safety officers, and safety managers. Also included are personnel assistants, labor relations specialists, and equal employment opportunity specialists. Their work involves staff support for such things as handling grievances and other personnel-related activities. Costs for employee and labor relations technical personnel tend to vary proportionally with the number of Postal Service personnel, which in turn largely determines postal personnel costs. The amount of effort devoted to matters not related to the number of employees, such as estimating the costs of new contract provisions, is minimal. Hence, these costs are classified as variable to the same degree as other Postal Service personnel costs.

Costs for higher-level supervisors, other than general supervisors, tend to vary to some extent with the number of indirectly reporting craft employees. Such cost variability is based on a special study that considered the number of higher-level supervisors estimated to be at various grade levels, the minimum pay at those levels, and the number of employees supervised.

Costs for the supervision of mail processing training are classified as variable to the same degree as the costs of mail processing in Cost Segment 3, and the costs for the supervision of other training are classified as variable to the same degree as the aggregate of other costs in this segment, excluding those for time and attendance, employee and labor relations, and higher-level supervision.

Costs for the supervision of miscellaneous clerk activities (the supervision of quality control and revenue protection and the joint supervision of clerks and city delivery carriers) tend to be a function of the workhour-related costs of the supervised activities. Accordingly, these supervisory costs are classified as variable to the same degree as the labor costs of quality control and revenue protection and clerks and city delivery carriers (excluding costs for clerks doing time and attendance work), respectively.

The activities performed by the technicians included in the technical personnel and other supervisory activities subcomponent do not involve supervision and are not significantly affected by the number of craft employees. Instead, these technicians are involved in such work as industrial engineering, address information system analysis, systems examination, and similar technical activities. Accordingly, the number and costs of these technicians depend largely on factors of management design, organizational structure, and service standards and are classified as institutional.

Many of the managers in this subcomponent have been placed under the Postal Career Executive Service (PCES) salary schedule, which does not provide for salary adjustments based on workload evaluation. The other managers in this subcomponent are under the EAS salary schedule. Their duties are not significantly related to the volume of mail flowing through the installations they direct. Their salaries reflect longevity and merit as well as reporting requirements. The other supervisory activities included in this sixth subcomponent involve general administrative work that is not significantly related to mail volume. Thus, these supervisory costs are classified as institutional.

2.5.2 Accrued Costs

Accrued costs for this component consist of the accrued costs of Cost Segment 2 that are not included in any of the four other components. These costs are for general supervisors of mails (code 7633), general supervisors of delivery and collection (code 7634), employee and labor relations technical personnel (code 7632), higher-level supervisors (code 7631), and other technical personnel and supervisory activities. The latter activities include training (code 7510), quality control and revenue protection (code 7480) and various additional matters (codes 7210, 7230, 7240, 7320, 7330, 7470, 7495, 7580, 7620, and 7630). Accrued costs also include a portion, based upon the relative proportions of crafts involved, of the costs for the firstline supervision of various combinations of crafts (code 7637).

Accrued costs for overhead time are developed as described in section 2.1.2.

Finally, the accrued costs for this component also include costs for uniform allowances that are not considered in the apportionment of overhead time among the five cost components.

2.5.3 Volume Variable Costs

The costs for general supervisors of mails are volume variable to the same degree as mail processing costs in Cost Segment 3.

The costs for general supervisors of delivery and collection are volume variable to the same degree as the composite of costs for window clerks in Cost Segment 3 and for city delivery carriers in Cost Segments 6 and 7.

Employee and labor relations technical personnel costs are volume variable to the same degree as the composite costs for Postal Service labor in Cost Segments 1 through 12 and a portion of Cost Segment 18.

The volume variable portion of higher-level supervisor costs is determined by applying a special

study variability factor (discussed in section 2.5.1) to the degree of attribution of the composite of salary costs in Cost Segments 2 through 12 (excluding costs of supervision of time and attendance and of employee labor relations technical personnel, costs of time and attendance clerks in Cost Segment 3, and costs of custodial and building equipment maintenance personnel in Cost Segment 11).

Costs for mail processing training are volume variable to the same degree as the costs of mail processing in Cost Segment 3; costs for other training are volume variable to the same degree as the aggregate of other costs in this segment, excluding those for time and attendance, employee and labor relations, and higher-level supervision.

Costs for the supervision of miscellaneous clerk activities (quality control and revenue protection and joint clerk and city delivery carrier activities) are volume variable to the same degree as the costs of the activities supervised.

All other costs in this cost component are classified as institutional.

2.5.4 Distribution of Costs

Costs of general supervisors of mails are distributed to classes and subclasses of mail and special services in the same proportions as mail processing costs in Cost Segment 3.

Volume variable costs of general supervisors of delivery and collection are distributed to classes and subclasses of mail and special services in the same proportions as the composite of volume variable costs for window service in Cost Segment 3 and city delivery carriers in Cost Segments 6 and 7.

Volume variable costs of employee and labor relations technical personnel are distributed to classes and subclasses of mail and special services in the same proportions as the composite of volume variable Postal Service labor costs in Cost Segments 1 through 12 and a portion of Cost Segment 18.

Volume variable costs of higher-level supervisors are distributed to classes and subclasses of mail and special services in the same proportions as the composite of volume variable salary costs in Cost Segments 2 through 12 (excluding costs of supervision of time and attendance and of employee and labor relations technical personnel costs of time and attendance clerks in Cost Segment 3, and costs of custodial and building equipment maintenance personnel in Cost Segment 11).

Volume variable costs for mail processing training are distributed to classes and subclasses of mail and special services in the same proportions as the volume variable costs of mail processing in Cost Segment 3. Volume variable costs for other training are distributed to classes and subclasses of mail and special services in the same proportions as the aggregate of other volume variable costs in this segment, excluding those for time and attendance, employee and labor relations, and higher-level supervision.

Volume variable costs for the supervision of miscellaneous clerk activities (quality control and revenue protection and joint clerk and city delivery carrier activities) are distributed to classes and subclasses of mail and special services in the same proportions as the volume variable costs of the activities supervised.

2.5.5 Incremental Costs

The incremental costs for higher level supervisors are calculated using the constant elasticity method.

Quality control supervisors costs are variable to the same degree as mail processing costs in cost segment 3.1 and administrative work costs for Express Mail in cost segment 3.3. The incremental costs for quality control supervisors are calculated in the same way as the incremental costs for these two components, in proportion to the amount of cost in each component.

The incremental costs for general supervision of mail processing are calculated in the same way as mail processing incremental costs in segment 3.1.

The incremental costs for supervision of collection and delivery, joint supervision of clerks and carriers, and training supervisors are calculated in the same way as the incremental costs for each supervised activity, in proportion to the amount of cost in each supervised activity. Employee and labor relations technical personnel incremental costs are calculated in the same way all other postal labor costs, in proportion to the amount of cost in each component.

COST SEGMENT 3

CLERKS AND MAIL HANDLERS, CAG A-J POST OFFICES

3.0 SUMMARY

This segment covers salaries, benefits, and related costs of clerk and mail handler work at CAG A-J post offices, Processing and Distribution Centers/Facilities (P&DCs/P&DFs), Air Mail Centers/Facilities (AMCs/AMFs), Bulk Mail Centers (BMCs), and Remote Encoding Centers (RECs). This work includes mail processing, window service, administrative and support activities, and expedited delivery that are performed in post offices and in more specialized and centralized mail processing centers by clerks and mailhandlers. Whereas clerk work occurs in all components in this segment, mail handler work is mainly mail processing work and involves loading, unloading, and moving mail.

The accrued costs of this segment in FY 2000 totaled \$18,746,399 thousand.

3.0.1 Segment Costs

The costs considered in this segment are developed from certain payroll and related accounts. Details of these accounts are shown in the Fiscal Year 2000 Cost Segments & Components Reconciliation to Financial Statements and Account Reallocations pages 11-13, 20, & 21. Major operations treated in this segment are mail processing, window service, administrative and support activities, and expedited delivery.

The accrued segment costs are apportioned among the major operating functions and related activities for each of the components detailed in the next section. These components, which encompass particular clerk and mail handler activities, are then considered with regard to volume variable costs and the distribution of such costs to classes and subclasses of mail and special services.

3.0.2 Component Costs

Costs of this segment are classified by component as described below (detail may not add due to rounding); amounts are summarized in the following table.

<u>Component</u>	<u>FY 2000 Costs (Thousands)</u>	
	<u>Total Accrued</u>	<u>Volume Variable</u>
3.1 Mail Processing	\$14,992,905	\$12,311,744
3.2 Window Service	2,186,617	1,033,248
3.3 Administrative and Support Activities	1,518,939	886,655
Administrative Clerks	1,285,813	754,906
Time and Attendance Clerks	222,647	131,749
Product Specific Costs	10,479	
3.4 Expedited Delivery	47,938	20,637
TOTAL a/	\$18,746,399	\$14,252,284

a/ Total accrued costs include Product Specific Costs, which are shown in Appendix I, Table I-1.

3.1 MAIL PROCESSING

3.1.1 Description and Rationale for Classification

The mail processing component encompasses three major categories of activities – distribution of mail, operations allied to distribution of mail (including collection, mail preparation, and platform operations), and miscellaneous work (including mail processing support activities).

Each of the major activity categories, in turn, consists of a large number of distinct operations. The manual, mechanized, and automated operations that comprise the distribution activity differ in the type of equipment used and characteristics of mail being sorted (shape, barcoding, etc.). The individual allied operations play different roles in the flow of mail within facilities, consist of physically different work activities, and handle different subclasses of mail. Some mail categories that would largely bypass the distribution activity (e.g., carrier-route flats) nonetheless require non-distribution handling in allied operations. Certain miscellaneous and support operations are geared toward certain subclasses of mail or special services; others provide general support services to specific groups of distribution and allied operations or to mail processing operations as a whole. This greater level of detail is represented in the cost analysis by the 52 cost pools into which mail processing activities are partitioned.

Mail processing volume variable costs by subclass of mail and special service are computed using the "volume variability/distribution key" method. In this method, a total cost amount and a cost driver are specified for each cost pool (i.e., mail processing operation). The volume variability factor is the elasticity of the total cost pool cost amount with respect to the cost driver. The product of the total cost amount and the elasticity is the total volume variable cost of the cost pool. Finally, a distribution key representing the subclass distribution of the cost driver is specified and used to assign the volume variable cost to the individual subclasses of mail and special services. The theory underlying this method is discussed in Appendix H.

The mail processing volume variable cost methodology allows that the costs in cost pools with different operational characteristics will not, in general, respond identically to changes in mail volumes on the margin. Therefore, volume variability factors are computed at the level of the cost pool and are not arbitrarily constrained to be identical. Furthermore, since mail processing cost pools differ in the types of mail being worked, the distribution keys used to assign volume variable costs to the subclasses of mail and special services are also computed separately for each cost pool.

Listed below are the 52 mail processing cost pools as they relate to three major types of facilities: the MODS 1&2, the Bulk Mail Centers, and the remaining post-offices (non-MODS).¹

¹ The BMC and non-MODS cost pool amounts do not include the clocking in and out adjustment; see Section 3.1.5.1.

		Cost Pool	Volume	Volume
		Costs	Variability	Variable
	Short name		Factor	Costs
MODS 1&2 FACILITIES				
DISTRIBUTION OPERATIONS AT PLANTS				
Automated Equipment				
1 BCS, other than CBCS/DBCS	bcs	271,818	86.0%	233,764
2 CBCS/DBCS	bcs/dbcs	907,867	89.0%	808,001
3 OCR	ocr	240,539	77.0%	185,215
Mechanized, Letters & Flats				
4 FSM other than FSM/1000	fsm	828,728	74.0%	613,259
5 FSM/1000	fsm/1000	345,774	75.0%	259,330
6 LSM,MPLSM & SPLSM W/BCR	lsm	5,169	93.0%	4,807
Mechanized, Other				
7 Mechanical Sort - Sack Outside	1SackS_m	58,731	94.0%	55,207
8 Mechanized Parcels	mecparc	7,946	96.0%	7,628
9 SPBS - Non Priority	SPBS Oth	400,738	65.0%	260,479
10 SPBS - Priority	SPBS Prio	111,414	65.0%	72,419
Manual Operations				
11 Manual Flats	manf	429,566	71.0%	304,992
12 Manual Letters	manl	1,389,399	58.0%	805,851
13 Manual Parcels	manp	77,645	44.0%	34,164
14 Manual Priority	Priority	246,484	56.0%	138,031
ALLIED OPERATIONS AT PLANTS				
15 Platform	1Platform	1,177,922	90.0%	1,060,130
16 Opening Unit - Preferred Mail	1OpPref	735,488	96.0%	706,069
17 Opening Unit - BBM	1OpBulk	326,397	96.0%	313,341
18 Bulk Presort	1Bulk pr	11,683	90.0%	10,514
19 Cancellation & Mail Preparation - metered	1CancMPP	311,404	97.0%	302,062
20 Pouching Operations	1Pouching	469,294	95.0%	445,829
21 Air Contract DCS and Incoming	1Scan	46,286	91.0%	42,120
22 Manual Sort - Sack Outside	1SackS_h	190,070	94.0%	178,665
DISTRIBUTION OPERATIONS AT ASSOCIATE				
OFFICES, STATIONS AND BRANCHES				
23 LDC 41 - Unit Distribution - Automated	LD41	31,807	96.0%	30,535
24 LDC 42 - Unit Distribution - Mechanized	LD42	1,411	96.0%	1,355
25 LDC 43 - Unit Distribution - Manual	LD43	639,214	95.0%	607,253
26 LDC 44 - Post-Office Box Distribution	LD44	154,257	95.0%	146,544
MISCELLANEOUS AND SUPPORT OPERATIONS				
27 Remote Barcoding System	LD15	292,070	100.0%	292,070
28 Business Reply / Postage Due	BusReply	33,210	94.0%	31,218
29 Express Mail	Express	90,832	57.0%	51,774
30 Mailgram	Mailgram	276	67.0%	185
31 Registry	Registry	138,321	39.0%	53,945
32 International	Intl	124,972	82.0%	102,477
33 LDC 49 - Computerized Forwarding Syst.	LD49	276,509	98.0%	270,979
34 Empty Equipment	1EEqmt	38,140	77.0%	29,368
35 Damaged Parcel Rewrap	Rewrap	14,378	78.0%	11,215

	<u>Short name</u>	<u>Cost Pool Costs</u>	<u>Volume Variability Factor</u>	<u>Volume Variable Costs</u>
MODS 1&2 FACILITIES (Continued)				
36 Mail Processing Support	1Support	209,678	26.0%	54,516
36 Miscellaneous Activity	1Misc	159,959	57.0%	91,177
37 LDC 48 – Customer Service / Express	LD48 Exp	5,058	31.0%	1,568
38 LDC 48 – Customer Service / Spec.Serv	LD48_SSV	111,824	53.0%	59,267
39 LDC 48 – Customer Service / Admin	LD48 Adm	181,728	54.0%	98,133
39 LDC 48 – Customer Service / Other .	LD48 Oth	151,388	69.0%	104,457
40 LDC 79 – Mailing Req' & Bus. Mail Entry	LD79	150,485	31.0%	46,650
MODS 1&2 SUBTOTAL		11,395,875	78.3%	8,926,563
BULK MAIL CENTERS				
DISTRIBUTION OPERATIONS				
41 Parcel Sorting Machine	PSM	85,460	100.0%	85,460
42 Sack Sorting Machine	SSM	37,766	100.0%	37,766
43 SPBS & Irregular Parcels (IPP & 115)	SPB	81,382	100.0%	81,382
44 Non-Machinable Outside (NMO)	NMO	45,909	100.0%	45,909
ALLIED OPERATIONS				
45 Platform	Platform	222,633	95.0%	211,501
46 Allied Labor & all other Mail Processing	Allied	280,366	98.0%	274,759
BMCs SUBTOTAL		753,516	97.8%	736,777
ALL OTHER FACILITIES (NON-MODS)				
DISTRIBUTION OPERATIONS				
47 Automated/Mechanized		185,652	100.0%	185,652
48 Manual Flat		584,908	100.0%	584,908
49 Manual Letter		799,968	100.0%	799,968
50 Manual Parcel		185,348	100.0%	185,348
51 ALLIED OPERATIONS		706,031	93.0%	656,609
MISCELLANEOUS OPERATIONS				
52 Express Mail		25,107	36.0%	9,039
53 Registry		48,583	36.0%	17,490
54 Miscellaneous		307,920	68.0%	209,386
NON-MODS SUBTOTAL		2,843,517	93.1%	2,648,400

3.1.2 MODS 1 & 2 Facilities

The Management Operating Data System (MODS) provides postal management with information on workhours and workloads necessary to plan, control, and monitor activities within postal facilities. Most of the Postal Service's mail processing plants report operational data through MODS. These plants are generally the largest and most highly automated

facilities in the network of mail processing facilities. In addition, MODS also records operational data for the customer service offices, stations, and branches associated with MODS mail processing facilities. Mail processing costs at MODS 1&2 facilities are 63% of Cost Segment 3 costs and 18% of total Postal Service costs.

MODS performs several key functions used in the mail processing cost analysis. It classifies all activities performed in postal facilities using standard three-digit operation numbers, records mail volumes for each operation number as appropriate, and records workhours for each operation number. The cost pools for activities at MODS 1&2 facilities are defined in terms of the three-digit MODS operation numbers. The total cost amounts for these cost pools are determined using a combination of payroll data, which records labor costs by broad operational groups (Labor Distribution Codes, or LDCs), and MODS workhours, for which finer operational detail is available. MODS workhours and volumes form the data sets used to econometrically estimate volume variability factors for the cost pools representing "Function 1" sorting operations. In-Office Cost System (IOCS) data, partitioned according to the MODS cost pool definitions, are used to determine the amount of volume-variable costs to be distributed to subclasses for cost pools without econometric variabilities, and to form distribution keys for the volume variable cost pools. Full details of the analysis are contained in Docket No. R2000-1, USPS-T-15, USPS-T-17, and USPS-LR-I-106.

The MODS data have been the subject of anecdotal criticism. The Inspection Service has also conducted some narrowly focused audits that have been used to criticize the use of MODS data in the costing. The Postal Service is well aware of such criticisms. Many of the criticisms of "MODS data" are really criticisms of MODS workload measures, in particular First Handled Pieces (FHP). The econometric variability analysis minimizes its reliance on FHP by using Total Pieces Fed (TPF) as the mail processing volume measure in automated and mechanized sorting operations. Automated and mechanized TPF are derived from machine counts and are not subject to errors resulting from conversions from weight into FHP pieces. The analogous Total Piece Handlings (TPH) measure in manual operations is subject to valid criticism only with respect to the portion of TPH that is not taken from machine counts. The econometric volume variability analysis strongly suggests that random errors in TPH are of limited concern, and the models are structured to eliminate bias in the presence of systematic error.

Hours data from MODS are also used in the new costing system. Hours data are widely recognized as being reliable in total since they are compiled from the payroll clock-ring data. The relevant potential criticism of hours data from MODS is that employees may be clocked into a different operation number (and, potentially, cost pool) than the operation to which they are actually assigned. There are numerous anecdotes of employees working in one 3-digit MODS operation while clocked into another. An Inspection Service Audit addressed that particular problem and reported a high rate of "misclocking" at the 3-digit MODS operation level. The Postal Service is well aware of this issue and uses the hours data at a level of aggregation for which the misclocking rate is believed to be quite low. The cost pools are defined so that they encompass activities for which supervisors have incentives to ensure correct clocking. The variability analysis confirms the consistency between the hours in a cost pool and the corresponding workload measures.²

The Postal Service relies on MODS hours data for many types of analysis. The edit and review of MODS data are extensive. MODS reports are examined on-site, at the area level, and at Headquarters to detect entries that deviate significantly from past experience. When errors are discovered, at any of these levels, corrections are made to the site-level data. The edit and adjustment process proceeds for several accounting periods after the initial

² Every model specification for variability analysis in Docket No. R97-1 and Docket No. R2000-1 exhibits very high explanatory power and statistically significant coefficients on the workload measures.

measurement. The Postal Service has performed a sensitivity analysis to demonstrate that estimated mail processing costs by subclass are accurate even in the presence of an extreme amount of misclocking. The most commonly expressed theory of misclocking says that workers clocked into opening pref work in distribution operations like BCS. If the Inspection Service Audit result of 32 percent misclocking at the 3-digit level were applied to the more aggregate cost pool data for opening pref and BCS, the average change in subclass volume variable cost would be 0.5 percent, and the maximum change would be 1.8 percent. Such changes would be within the sampling error of the estimates.

3.1.2.1 Distribution Operations at Mail Processing Plants

Description

Distribution operations at MODS mail processing facilities are partitioned into fourteen cost pools, reflecting various manual, mechanized and automated sorting activities. The cost pool for a given sorting activity is a composite of the incoming and outgoing scheme work for the activity.

- BCS/ Distribution of letter mail using mail processing barcode sorter (MPBCS).
- BCS/DBCS Distribution of letter mail using delivery bar code sorter (CBCS/DBCS) equipment.
- OCR Distribution of letter mail using optical character recognition (OCR) equipment. OCR equipment is also used to capture mailpiece image data for the Remote Barcode System (RBCS).
- LSM Distribution of letter mail using letter sorting machines (LSMs).
- FSM/ Distribution of flat mail using flat sorting machines (FSM) primarily FSM881.
- FSM/1000 Distribution of flat mail using FSM1000 equipment.
- SPBSPrio Distribution of Priority Mail pieces using small parcel and bundle sorter (SPBS) equipment.
- SPBS Oth All other distribution of parcels and bundles using SPBS equipment.
- Manf Manual distribution of flat mail.
- Manl Manual distribution of letter mail.
- Manp Manual parcel sorting.
- Priority Manual sorting of Priority Mail.
- Mecparc Mechanized parcel sorting.
- 1SackS M Mechanized sack sorting.

Variability and Distribution Analysis

The cost driver for each of these cost pools is the number of piece handlings in the activity, as measured by MODS TPF or TPH (except for Mecparc and 1SackS_M)³. Volume variability factors are computed for each cost pool using econometric labor demand equations that relate workhours to piece handlings, non-volume workload indicators, and economic variables such as the LDC wage.⁴ The volume-variability factor is, formally, the elasticity of workhours with respect to piece handlings. MODS does not record piece handlings by subclass. Therefore, the subclass distribution of the TPH in a cost pool is estimated using the IOCS handling tallies associated with the cost pool. The distribution approach makes use of the fact that, for a cost pool, the proportions of handling tallies by

³ The volume-variability factors for these two cost pools are computed based on the dollar-weighted tallies (see 3.1.2.2). The 1SackS_M is treated like an allied operation for distribution purpose (see 3.1.2.2).

⁴ The SPBS cost pools have been pooled for variability estimation, but retain separate distribution keys. The mechanized parcel sorting and mechanized sack sorting cost pools lack sufficient MODS data and therefore do not use econometrically estimated volume-variability factors. They employ the IOCS-based variability method described below for other mail processing cost pools.

subclass from IOCS are equivalent to the productivity-weighted proportions of piece handlings by subclass. An IOCS tally is associated with a cost pool if it was recorded at a MODS facility, and if the MODS operation number recorded as part of the IOCS question 18 response is in the cost pool's range of MODS operation numbers.

As part of its classification of clerk and mailhandler activities, the IOCS questionnaire identifies whether a sampled employee was handling one or more pieces, "items" (bundles, trays, sacks, etc.) or "containers" (APCs, BMC OTRs, etc.) of mail. Based on the IOCS responses, tallies are partitioned into "handling-mail" and "not-handling-mail" tallies. The subclass distribution of volume variable costs depends on the composition of the handling-mail tallies associated with the cost pool. The handling-mail tallies are, in turn, subdivided into categories of direct and mixed-mail tallies. Direct tallies are observations of personnel handling single pieces, items subject to the top-piece rule, counted items, or items and containers containing identical mail pieces and have specific subclass information. Direct tallies also result from observations of employees not handling mail but monitoring the operation of a piece of automated equipment at the time of the reading. Mixed mail tallies result from uncounted items, and counted and uncounted containers, as well as observations of employees handling empty items and containers. The essential feature of mixed-mail observations is that there is no direct information on the subclasses of mail associated with the observation. The subclass distribution of mixed items is inferred from the subclass distribution of direct items of the same type within the cost pool. Counted containers have information on the percentage of each type of piece and item filling the container. The subclass distribution for these containers is inferred by "filling" the container with the subclass distribution of items and loose mail in the same cost pool. Uncounted containers get the subclass distribution of counted containers of the same type in the cost pool. The definitions of the mixed-mail tally categories are described in more detail in Appendix C.

For certain pools the non-volume variable costs are included in the incremental costs of specific subclasses. The incremental cost of Priority Mail includes non-volume variable costs in the Priority and SPBS Priority pools; the incremental cost of Express Mail includes non-volume variable costs in the Express and LD48 Exp cost pools (see Appendix I).

3.1.2.2 Allied Operations at Mail Processing Plants

Description

Allied labor operations have two principal functions – to prepare mail for distribution operations in the plant, and to process other mail that may not require handling in piece sorting operations (i.e., presorted mail). Allied operations serve as "gateways" through which mail must pass en route to its final destination. Cost pools are defined for the following allied operation groups.

- Platform operations (1Platfrm). Platform activities include loading and unloading trucks, crossdocking pallets and other containers of mail, and initial sorting of sacks and other containers of mail performed in the vehicle unloading process. Platform support activities, including transfer clerks, ramp clerks and expeditors are also included in this cost pool.
- Opening Unit (1OpBulk, 1OpPref). Opening unit activities include manual distribution of letter and flat bundles, breaking down containers of mail, and preparing letters and flats for processing in piece sorting operations by cutting bundles and traying mail. The MOD System defines separate operation numbers for opening unit activities related primarily to bulk business mail and for "pref" mail. The Opening Unit-Bulk (1OpBulk) and Opening Unit-Pref (1OpPref) cost pools are distinguished to account for differences in mail composition between these sets of activities.

- Presort (1BulkPr). Activities related to handling of presort mail volumes, including traying or banding of presort mail.
- Cancellation and Mail Preparation (1CancMPP). These activities include obtaining mail from windows, drop units, and staging areas; manual and mechanized cancellation of mail; traying canceled mail and loose metered mail for distribution operations; rating short paid mail. These activities primarily handle First-Class mail.
- Pouching (1Pouching). This cost pool includes activities at pouch racks; tray banding; containerization of dispatched mail.
- Air Contracting Data Collection System (1SCAN). This cost pool includes workhours expended scanning mail using the Air Contracting Data Collection System.
- Manual Sack and Outside Sorting (1SackS_h). Manual distribution of sacks, pouches, and outsides; manual distribution of outsides when worked on the platform.

Variability and Distribution Analysis

As with distribution operations, the volume-related cost driver for allied operations is taken to be handlings of mail within the operation. In the cancellation and mail prep cost pool, the number of handlings is simply the volume of mail processed on cancellation equipment and in meter mail preparation operations and is captured in MODS. For most other allied activities, most of the handling is of containerized mail – mail in bundles, sacks, trays, pallets, rolling containers, and so on. MODS does not collect information on this type of workload that can be compared across facilities. Therefore no econometric volume variability analysis is performed for the remaining allied labor cost pools. For all allied operations, volume-variable costs are computed as the ratio of dollar weighted IOCS tallies for "variable mail processing" activity codes⁵ to total dollar weighted tallies associated with the cost pool. The calculation excludes the mail processing overhead activity codes (6521-6523) that are classified as volume variable to the extent of other mail processing costs. Since IOCS tally data can be used to identify subclass distributions for the time spent handling different types of containers, the distribution key formation procedure is similar to that for sorting operations. However, as a departure from the within-pool distribution method employed by the Postal Service in Docket R97-1, the not-handling tallies for the *allied* cost pools (except for 1CancMPP) are distributed to subclasses, based on the aggregated handling tallies in all distribution and allied operations in the MODS facility grouping.

3.1.2.3 Distribution Operations at Stations and Branches

Description

Some distribution work is performed at stations and branches, as dictated by mail flows, processing windows, and service standards. This distribution work is primarily incoming secondary distribution (i.e., sorting to carrier route).

- LD41. Automated letter distribution in stations and branches (LDC 41), mostly using carrier sequence barcode sorter (CSBCS) equipment.
- LD42. Mechanized distribution (all shapes) in stations and branches (LDC 42).
- LD43. Manual distribution (all shapes) in stations and branches (LDC 43).
- LD44. Manual distribution (all shapes) at box mail distribution cases and to post office boxes in stations and branches (LDC 44).

⁵ Costs associated with activity codes 6210, 6220, 6230, 6231, 6240, 6320, 6420, 6430, 6480, 6511, 6512, 6514, 6516, 6518, 6519, 6630, and not handling tallies with activity codes 0010 and 0060, were classified as fixed mail processing in the pre-R97-1 volume-variable cost methodology.

Variability and Distribution Analysis

While these operations are similar to the corresponding manual, mechanized, and automated sorting operations in mail processing plants, it is not possible to estimate volume variability factors econometrically for these operations. The degree of volume-variability is determined using the IOCS-based method described in section 3.1.2.2, above.

The distribution keys for each cost pool are based on the associated IOCS tallies using the same procedures employed for sorting operations in mail processing plants.

3.1.2.4

Miscellaneous and Support Operations

Description

In addition to sorting and allied operations, clerks and mailhandlers perform numerous additional activities.

- Remote Barcode System (LD15). RBCS activities, including keying activities in Remote Encoding Centers (RECs) and letter mail labeling machine (MLM) work in mail processing plants.
- Cost pools related to specific subclasses or special services. These include operations related to business reply mail and postage due activities (BusReply), Express Mail, Mailgrams, and registry.
- Computerized forwarding system/central markup unit (LD49).
- Platform acceptance (LD79). These operations cover all acceptance and verification activities, including determining eligibility of mail for rates claimed, verifying that mail meets preparation requirements, verifying and collecting postage payments, and moving accepted mail to handling or staging areas.
- Empty Equipment (1EEqmt). Empty equipment processing not associated with specific distribution or allied operations. This includes staging and transporting empty equipment for use by associate offices or postal customers, and inventorying empty equipment storage areas.
- Mail Processing Miscellaneous and Support (1Misc and 1Support). General mail processing support operations (Function 1).
- Customer Service Support (LDC 48 operations). Support and miscellaneous work at customer service facilities (Function 4). LDC 48 includes support operations related to Express Mail (LD48 Exp) and other special services (LD48 SpS) as well as general customer service support activities (LD48 Adm and LD48 Oth).

Variability and Distribution Analysis

Cost driver data for econometric variability analysis are available for the RBCS cost pool.

The cost driver for the RBCS cost pool is mailpiece images processed by the RECs. The variability is determined from a regression of keying workhours on mailpiece images. The distribution key is based on IOCS direct tallies associated with the BCS/OSS operations (MODS operations 271-278, 971-978), in which RBCS-generated barcodes are applied to mailpieces.

The variability factors for the other cost pools are determined using the IOCS-based method described in section 3.1.2.2, above. Distribution keys for volume-variable costs are based upon the IOCS tallies associated with the cost pool, except for the Function 1 Support and Function 4 Support cost pools.

The cost drivers for the Function 1 Support and Function 4 Support cost pools are the work activities in the supported mail processing operations. Therefore, the total volume-variable

cost in each support operation is distributed in proportion to the composite volume-variable cost in the supported operations. The supported Function 4 operations include window service at MODS associate offices (AOs), stations and branches. The supported operations are:

- Function 1 Support (1Misc and 1Support): Distribution operations at plants; allied operations at plants; other miscellaneous and support operations, excluding LDCs 48 and 49.
- Function 4 Support (LD48_Adm and LD48_Oth): Distribution operations at AOs, stations and branches; other miscellaneous and support operations in LDCs 48 and 49; MODS window service.

3.1.3 Bulk Mail Centers

The Bulk Mail Center (BMC) network consists of 21 facilities specialized for processing bulk mail and parcels. Relative to other mail processing plants, BMCs have much more extensive platform and other "allied" operations; distribution operations at BMCs are geared towards parcel and sack sorting.

Mail processing operations at BMCs are subdivided into six cost pools. Each cost pool corresponds to certain PIRS operations, and to corresponding sets of IOCS tallies. The volume-variability factors are determined using the IOCS-based method described in section 3.1.2.2. BMC cost pool totals are developed using clerk and mailhandler pay data totals for the 21 BMCs, which are separated into cost pools in proportion to the IOCS tallies associated with each cost pool. Administrative and customer service costs for the BMCs are also identified using IOCS tallies. The IOCS tallies associated with each cost pool are used to form distribution keys for BMC volume variable costs using the same algorithms employed for the MODS distribution keys.

3.1.3.1 Distribution Operations at Bulk Mail Centers

Description

- PSM. Mechanized parcel sorting.
- SSM. Mechanized sack sorting.
- NMO. Distribution of non-machinable outsides.
- IPP. Sorting of irregular pieces and parcels (IPPs); opening IPP sacks.

Variability and Distribution Analysis

The variability and distribution analyses are carried out for each cost pool as described in Section 3.1.3.

3.1.3.2 Allied and Other Operations at Bulk Mail Centers

Description

Allied labor activities similar to those performed at MODS mail processing plants are carried out at BMCs as well. However, less operational detail on these operations is available from IOCS. Accordingly, there are only two categories of allied and miscellaneous activities at BMCs.

- Platform. Loading and unloading trucks, crossdocking containers of mail, and initial container sorting performed as part of the vehicle unloading process. These operations are generally similar to MODS Platform operations.

- Allied labor and other mail processing. This cost pool includes all BMC activities not classified above, including other allied labor activities and mail processing support work.

Variability and Distribution Analysis

The volume-variability factors are determined using the IOCS-based method described in section 3.1.2.2.

Distribution keys for each cost pool are formed from IOCS tallies as described in section 3.1.3. The not-handling tallies for these cost pools are treated similarly to those in the MODS allied operations.

3.1.4 Other Facilities (Non-MODS)

Description

The non-MODS office group consists of all post offices not included in the MODS or BMC office groups. These are generally small facilities that engage primarily in manual mail processing activities, though some facilities have automated equipment such as the Carrier Sequence Bar Code Sorter (CSBCS). Mail flows within non-MODS facilities tend to be simpler than in large plants with numerous specialized mail processing operations. Clerk and mailhandler costs are partitioned into the following cost pools:

- Allied. Platform and collection activities, moving mail to/from other operations, separating/breaking down mail, other allied labor activities.
- Automated/Mechanized. Automated and mechanized distribution operations (primarily CSBCS).
- Express Mail. Distribution of Express Mail and related activities.
- Manual Flat. Distribution of mail at flat cases.
- Manual Letter. Distribution of mail at letter cases.
- Manual Parcel. Manual piece distribution of parcels.
- Registry. Activities in the Registry section.
- Miscellaneous. All mail processing activities not otherwise classified above.

Variability and Distribution Analysis

Since non-MODS facilities do not, by definition, report operating data to the MODS system, workhour and workload data for specific mail processing activities at these facilities do not exist. However, clerk and mailhandler costs can be partitioned into operation-specific cost pools using IOCS tally data, in a similar manner to the partition of BMC costs into cost pools.

The absence of operating data precludes econometric estimation of volume variability factors for non-MODS operations. The volume-variability factors for the non-MODS cost pools are determined using the IOCS-based method described in section 3.1.2.2.

Distribution keys for non-MODS operations are based on the IOCS tallies associated with each cost pool, and use the same algorithms as are used for the distribution keys in similar MODS operations. The not-handling tallies for the Allied cost pool are treated similarly to those in the MODS allied operations. The not-handling tallies for the Miscellaneous cost pool are distributed based on all Non-MODS aggregated handling tallies.

3.1.5 Adjustment to Mail Processing Volume Variable Costs

Several adjustments are made to obtain final volume variable mail processing costs. One set of adjustments transfers a portion of clocking in and out costs at BMCs and at non-

MODS offices from the administrative component to mail processing. Additional adjustments reapportion the volume variable costs distributed to the registry and special delivery special services. The premium pay adjustment redistributes night differential and Sunday premium costs.

3.1.5.1 Clocking In And Out at Bulk Mail Centers and Non-MODS Offices

The programs that process the IOCS tally data assign an administrative IOCS operation code to clocking in and out tallies (activity code 6522). However, a significant portion of these costs is incurred as overhead to mail processing (and window service) operations. To appropriately reflect this, a portion of the cost associated with clocking in and out is moved from the administrative component to mail processing and window service. This adjustment is necessary only for the BMC and non-MODS office groups, where the partition of costs is based on IOCS tallies. Costs for all overhead activities, including clocking in and out, associated with an operation group are included in the MODS 1&2 cost pool totals.

The clocking in and out adjustment is carried out separately for the BMC and non-MODS office group. For each office group, the total costs associated with clocking in and out are identified, as well as the total costs excluding clocking in and out for each cost segment 3 component. The clocking in and out costs for each office group are distributed to the cost components in proportion to the total costs excluding clocking in and out for each component. The clocking in and out costs distributed to mail processing are volume variable to the same extent as the other mail processing costs for the office group. The volume variable portion of clocking in and out costs is distributed in proportion to the other distributed mail processing volume variable costs for the office group.

3.1.5.2 Special Services Costs.

Special Service costs are assigned when the mail pieces with paid special services are processed by employees clocked into the Special Service-related cost pools. In the distribution and allied operations, the same mail pieces are processed as ordinary mail pieces of the same subclasses; therefore they are assigned the underlying subclass costs rather than the Special Service costs.

The exceptions are when the mail pieces are themselves detached Postal Service forms used in the provision of special services. With those forms, Special Service costs are incurred in any cost pool in which the forms are processed. Another exception is the Special Handling service cost which is incurred in any cost pool, provided the underlying subclass is eligible to receive the service, i.e. the subclass must be either Standard A Single Piece or Standard B.

The resulting procedure streamlines the Docket No. R97-1 Postal Service costing procedure, in particular for Registered Mail. It eliminates the need for the Docket No. R97-1 W/S 3.1.1 'normal feature' adjustment; this RPW-based adjustment removed the mail processing costs from the costs attributed to the Registered Mail Services in any cost pool. It also eliminates the need for the "Registry adjustment" in W/S 3.1.1 to make the data consistent between the Registry IOCS and RPW categories.

3.1.5.3 Premium Pay Adjustment

The premium pay adjustment (or the peak load cost adjustment) is done for night shift differential and Sunday premium for non-BMC mail processing labor costs. The volume variable night shift differential and Sunday premium pay at non-BMCs are deducted from all classes (excluding special services) and redistributed in the following way:

- Nonplatform volume variable night shift differential and Sunday premium are distributed to "pref mail" (First-Class, Priority, Express Mail, International, Free for the Handicapped, Penalty USPS and Periodicals), in proportion to the non-platform, non-BMC volume variable costs with night shift differential and Sunday premium, respectively, for each subclass and category.
- Platform volume variable night shift differential and Sunday premium are distributed to all classes in proportion to platform, non-BMC volume variable costs with night shift differential and Sunday premium, respectively, for each subclass and category.⁶

This reduces the night shift differential and Sunday premium pay distributed to "nonpref mail" which is Standard Mail (originally third-class and fourth-class), reflecting the lower marginal costs due to service standard differences. The logic of this adjustment and the general methodology employed is the same as done previously since Docket No. R87-1.⁷ These calculations have been modified to be consistent with the Docket No. R97-1 testimonies of witnesses Bradley, USPS-T-14, and Degen, USPS-T-12.

3.1.6 Incremental Costs

The incremental costs for distribution operations at MODS offices are calculated using the constant elasticity method. Incremental costs for all other mail processing operations equals volume variable costs. Product specific costs, shown in Appendix I, Table I-1, are identified in manual Priority operations, and Express and International activities in MODS non-distribution and non-MODS and BMC operations.

3.2 WINDOW SERVICE

3.2.1 Description and Rationale for Classification

Window service activities are in three groups: transactions that involve mail classes or special services; sales of stamps, cards, money orders, Express Mail, and stamped envelopes, weigh and rate activities, and the setting of postage meters; and all other window activities.

Transactions Involving Mail or Services. These activities include accepting and delivering parcel post, insured mail, registered mail, and other mail; issuing receipts and collecting postage related to accepting and delivering mail; seeking certificates of mailing; issuing and cashing money orders; and renting post office boxes and receiving rental payments.

The number of each of these window transactions tends to be fully variable with the volume of the related mail, and service and clerk time for such transactions tends to increase proportionately as the number of transaction increases. These costs are therefore classified as fully variable with volume.

Stamps, Cards, Money Orders, Express Mail, and Stamped Envelope Sales; Weigh and Rate; and Postage Meter Setting Activities. These activities represent the time that window clerks spend providing specific services to customers at post office windows. Stamps may be sold individually, in coils, booklets, or sheets. Any number of cards may be sold to a customer. Stamped envelopes may be sold individually or in boxes of 500. Postage meters may be set for any amount of postage. Weigh and rate activities, Express Mail, and Money Order sales can be single or multiple item transactions.

The variabilities for some of these window service activities are based upon surveys of customer purchasing behavior. Those surveys quantified the relative incidence of two possible

⁶ See Docket No. R97-1, USPS witness Alexandrovich, Workpaper A-2, pages 1-4.1.

⁷ See PRC Opinion for R87-1, pages 126-202.

customer reactions to a need to send more mail: (1) making larger purchases while not increasing the number of transactions (visits to the post office), and (2) not increasing the amount purchased while increasing the number of transactions in proportion to the increased mailing need. Special studies of window service transaction times and profiles⁸ indicate that (1) the first type of reaction produces no increase in clerk staffing time, and (2) the latter type of customer reaction results in a fully volume variable increase in clerk staffing time and therefore in costs. The composite effects of these two types of customer reaction produce estimated volume variabilities of 46.1 percent for stamp sales, 50.4 percent for card sales, and 24.2 percent for meter setting.

Based upon the IOCS, costs for serving a customer with the sale of plain stamped envelopes (activity code 5060) is deemed postage sales, of which 47.9 percent is considered variable with volume. The remainder of the other stamped envelope costs (activity codes 5090, 6060 and 6090) is considered 100 percent variable due to the envelope feature. Costs for Money Order sales are considered 65.37% volume variable and costs for Express Mail services are 83.15% variable with volume. The costs that are associated with weighing and rating mail are 56.37% volume variable.

All Other Window Activities. These activities include all preparation and accounting work associated with opening or closing out a window, such as balancing and replenishing stamp stocks, checking postage meter dates and closing out postage meters, and running tally tapes of receipts; collecting fees and performing other work not related to any particular mail class in connection with certain customers who pick up mail at windows (e.g., general delivery and customer hold mail); being engaged in other activities (e.g., auditing stamp credit; handling customer inquiries; and handling matters for other government agencies such as the Internal Revenue Service); and at window waiting for a customer and overhead time. The time required for these activities, other than the last two, varies with factors other than mail volume, such as the number of postal customers and daily accounting and reporting requirements. Accordingly, the costs for these activities are classified as institutional.

Information from the window service transaction time and profile studies indicates that time spent at a window waiting for a customer is directly proportional to time spent on other window service activities. Thus, the costs for time at a window waiting for a customer are classified as variable to the same degree as the costs for all other window service activities. Window service overhead time tends to vary in accord with the amount of other window service time, and the costs for it are classified as variable to the same degree as costs for all other window service time.

3.2.2 Accrued Costs

Accrued costs consist of all window service costs at CAG A-J post offices. Costs are included for clerks and mailhandlers (roster designations 11, 12, 31, 32, 41, 42, 61, and 62) doing window service work (uniform operation codes 09, 24, 25, and 26) regarding mail in the forms of direct mail (codes 1020-4950) and mixed mail (codes 5300-5480 and 5610-5750). Additionally, costs are included for those employees engaged in mail-connected special services work (codes 0010-0300), window and window-related office activities (codes 5020-5195 and 6000-6200), and other activities (codes 6270 and 6519). Costs for clerk uniform allowances also are included.

⁸ The transaction time study provides information regarding the effects on transaction times of economies of scale (performing more of the same type services) and economies of scope (performing additional services of differing types). The transaction profile study provides information concerning the mix of varying combinations of services and various numbers of the same services provided during transactions.

Window service overhead consists of costs stemming from window service clerks on break (code 6521) and the window service share of costs of clocking in or out (code 6522). (See section 3.1.5.2 for the development of accrued costs for clocking in or out.

3.2.3 Volume Variable Costs

Volume variable costs for window service consist of that portion of accrued costs relating to mail-connected special services (codes 0010-0300), direct mail (codes 1020-4950) and mixed mail (codes 5300-5480 and 5610-5750). Also included as volume variable are costs for activities involving money orders (codes 5080 and 6080) and, as discussed in section 3.2.1, those portions of the accrued costs of window service relating to stamp, card, and meter setting activities (codes 5040, 5050, 5070, 6040, 6050, 6070 and 6073) and stamped envelopes (codes 5060, 5090, 6060 and 6090). Costs for post office box work (uniform operation code 24) and window caller work (uniform operation code 25) not involving the handling of mail (activity codes 6020 and 6030) are also considered volume variable.

Costs incurred for waiting for a customer at the window are volume variable to the same degree as the costs for all other service activities and costs for uniform allowance and for overhead time (codes 6521 and 6522) are volume variable to the same degree as all other window service costs.

3.2.4 Distribution of Costs

Window service volume variable costs for certain mail-connected special services (codes 0010-0300) and direct mail (codes 1020-4950) are distributed to the classes and subclasses of mail and special services represented by the codes.⁹

Costs for mixed mail (codes 5300-5480 and 5610-5750) are distributed to classes and subclasses of mail and special services by basic function, i.e., outgoing (code 1), incoming (code 2), transit (code 3), and other (code 5), in the same proportions as costs for direct mail (codes 1020-4950). This distribution process is described in greater detail in Appendix C.

The volume variable portion of costs for stamps (codes 5040 and 6040), cards (codes 5050 and 6050), and meters (codes 5070 and 6070) is distributed to classes and subclasses of mail on the basis of relative mail volumes determined from the application of Origin Destination Information System (ODIS) proportions to official estimates of mail volume prepared by Revenue, Volume and Performance Measurement Division, as described in Appendix D.

Volume variable stamped envelope costs related to envelope sales are distributed to the stamped envelope special service, while those related to postage sales are distributed between two categories of mail – the letters and parcels subclass of First-Class Mail and the bulk rate nonprofit other subclass of third-class mail. The basis for the distribution is the relative number of stamped envelopes added to salable stock in each category. Volume variable costs for selling cards are distributed to the related First-Class Mail subclass, postal cards.

The costs for post office box work (uniform operation code 24, activity code 6020) and caller service activities (uniform operation code 25, activity code 6030) are distributed to the related special services.

Volume variable costs for time at a window waiting for a customer are distributed to classes and subclasses of mail and rate categories in proportion to the distribution of all other window service costs. Uniform allowance costs and volume variable overhead time costs (codes 6521

⁹ See footnote 3 of this Cost Segment.

and 6522) are distributed to classes and subclasses of mail and special services in proportion to the corresponding distribution of all other window service costs.

3.2.5 Incremental Costs

The incremental costs for the mail weigh and rate, stamps, meters, and stamped envelope window operations are calculated using the constant elasticity method. Incremental costs in three window operations – cards, Express Mail, and money orders, are equal to the total costs in these operations. The incremental costs equal the volume variable costs for those window operations that are fully volume variable, including waiting time at the window and special services.

3.3 ADMINISTRATIVE AND SUPPORT ACTIVITIES

Accrued costs consist of all administrative and support work costs at MODS 1&2 facilities, Bulk Mail Centers, and non-MODS facilities. Administrative and support work costs are included for clerks (roster designations 11, 31, 41, and 61) doing Express Mail work and performing administrative and support work regarding various category groupings of activities and activity codes. They are developed separately for each category as follows: administrative work in the Express Mail section; claims and inquiry work; personnel and time and attendance work; and other administrative and support responsibilities, including accounting and auditing, data collection and processing, general office and clerical duties, purchasing, and miscellaneous activities.

3.3.1 Description

Express Mail Administration

Costs for Express Mail (activity code 6231) involve activities of personnel who have been assigned to the Express Mail section but are not handling mail.

Claims and Inquiry Work

This work encompasses handling complaints, processing dead letters and other mail for shipment or disposal, handling the contents of torn envelopes or broken packages (lost in the mails activities), corresponding in connection with inquiries, maintaining claims records, and responding to general inquiries. Claims and Inquiry work include activities clocked into MODS operation codes 551-552 for the MODS 1&2 facilities and the activities classified under the uniform operation code 17 for the BMCs and the non-MODS facilities.

Personnel and Time and Attendance Work

This work includes counseling (Equal Employment Opportunity and Program for Alcoholic Recovery), nursing, Postal Employee Development Center training, and safety specialist activities, as well as recording employee arrival and departure times and hours of work according to pay categories, distributing time cards to racks, reviewing time cards for accuracy, answering employee questions concerning leave and pay matters, preparing forms related to personnel actions, maintaining personnel records, and conducting examinations of applicants for employment. Activities under IOCS codes 6610, 6640, and 6650 are included in this category.

Accounting and Auditing Activities

These activities involve daily recording and bookkeeping functions, periodic reporting, and current operations and are included under IOCS activity code 6620

Daily recording and bookkeeping functions include verifying daily cash reports, posting cash books, maintaining trust funds, taking inventories of accountable paper, recording daily transactions, and checking and balancing general ledger accounts.

Periodic reporting consists of work on daily, weekly, biweekly, and accounting period reports; budget operations reports; and cost control reports. Employees who perform these activities may also research, compile, and record data for special studies on postal activities.

Current operations include entering payroll information into machines, auditing time cards, and preparing journals reflecting payroll actions.

Data Collection and Processing Activities

These activities involve weighing and recording all mail volumes passing through Management Operating Data System (MODS) offices, performing MODS transactor entries, sampling mail volume, analyzing statistical data pertaining to financial and operating activities at post offices, transcribing information to computer input forms and performing computer data entry. IOCS code 6495 which involves certain mail-related activities and code 6660 which involves a related general service are included in this category.

General Administrative and Clerical Activities

These activities include receiving, routing, and responding to correspondence; performing receptionist functions; copying and duplicating materials; setting up and maintaining files; typing and transcribing; and similar activities. Also included are administrative duties relating to (1) the overall operation of a post office; (2) work for the Postal Inspection Service or on area or Headquarters projects; (3) general messenger work; and (4) work performed by general guards, watchmen, elevator operators, switchboard operators, and keypunch operators. Certain mail-related activities (one-half of code 6460) and a related general service activity (code 6630) are included in this category.

Purchasing Activities. This work is associated with IOCS code 6320 and one-half of code 6460.

Miscellaneous Activities

This work includes various training activities, conducting or taking examinations regarding systematic methods for sorting mail according to destination (scheme examinations), quality control, and revenue protection activities. IOCS codes 6480, 6500, 6511-6512, 6514, 6516, and 6519 are included in this category of miscellaneous activities.

3.3.2 Volume Variable Costs.

Costs for Express Mail personnel not handling mail (activity code 6231) are classified as non-volume variable. Since these costs would be avoided if Express Mail were eliminated, they are included in Express Mail incremental costs (see Appendix I).

Claims and Inquiry

Some claims and inquiry work is associated with mail classes and special services. Performance of these activities can reasonably be expected to vary with the volume of mail of the associated class or service. Other claims and inquiry activities concern more general matters and vary with non-volume factors such as the number of postal customers. Accordingly, that portion of claims and inquiry costs that involves mail classes and special services is classified as fully variable and the remaining costs, excluding overhead costs, incurred when no mail is in hand, are classified as institutional. Overhead costs (codes 6521 and 6522) are volume variable to the same degree as the portion of the claims and inquiry costs that involves mail classes and special services.

Personnel and Time and Attendance Work.

The costs of these functions vary according to the number of postal employees. Additional employees require that additional time be devoted to these functions. Personnel and time and attendance functions are therefore classified as variable to the same degree that other postal

employee costs are variable. Costs for personnel and time and attendance are classified as volume variable to the same degree as the composite of labor costs in Cost Segments 1 through 12 and the Postal Inspection Service portion of Cost Segment 18.

Accounting and Auditing Activities.

These activities are primarily a function of reporting requirements that are not related to volume. Time and attendance related functions included in this segment tend to vary with the number of employees, which is partly variable with volume. The amount of time devoted to the auditing and accounting of time and attendance functions is not identifiable but is small relative to the amount of time spent on other auditing and accounting activities. For these reasons, all auditing and accounting activities are treated as functions of reporting requirements that do not vary with volume, and their costs are classified as institutional.

Data Collection and Processing Activities.

The costs of recording and reporting attendance and leave data are included under time and attendance, discussed earlier. The activities included here tend to be affected by changes in mail volume, both directly and through the resultant changes in personnel to process mail. Accordingly, these costs are classified as variable to the same degree as the composite of mail processing and city carrier office time costs.

General Administrative and Clerical Activities.

These services are provided as support to postmasters, supervisors, and the overall operations of post offices. The level of such services is generally tied to the total number of postal employees at facilities and installations. As the number of postal employees increases, the workloads and management responsibilities of postmasters and supervisors, and the level of support activity, increase. Reporting is more complicated, problems are more intricate, and daily operations are more complex. Finding solutions frequently requires special studies or increased correspondence with the areas or with Headquarters. Typing, filing, copying requirements, and other general clerical activities all increase. In order to manage a heavier workload effectively, adjustments are made that affect both staff size and rates of pay. Because these costs vary with the number of postal employees, they are classified as variable to the same degree as other postal employee costs are variable.

Thus, costs for general office and clerical work are variable to the same degree as labor costs in Cost Segments 2 through 12 (excluding costs of time and attendance clerks, costs of supervision of time and attendance and of employee labor relations technical personnel in Cost Segment 2, and costs of custodial and building equipment maintenance personnel in Cost Segment 11).

Purchasing Activities. The work associated with these activities does not vary as mail volume changes. In some instances, purchasing activities do involve support for volume variable functions, but when requirements for supplies or materials change due to volume changes, the ability to adjust the size of inventories by modifying order amounts buffers the effect of volume increases on this cost. Hence, the costs of purchasing activities are classified as institutional.

Miscellaneous Activities.

In general, training and examination costs tend to vary with the number of related positions for which the training or examination activities are performed. Therefore, for analytical purposes, training and examination costs are grouped in three distinct categories:

- 1) The first involves conducting or taking scheme examinations (code 6500). These costs, incurred to evaluate the understanding of those holding and desirous of advancing to positions requiring scheme knowledge, tend to be fully variable.

- 2) The second category involves training activities concerning the operation of equipment for sorting various shapes of mail (codes 6511-6516). These costs are proportional to the costs of sorting various shapes of mail and are classified as fully variable.
- 3) The third category includes safety, window service, administrative and clerical work, and general mail processing and various special service training. The level of these costs tends to vary with the number of clerks and mailhandlers and is classified as variable to the same degree as non-training costs in this cost segment. Costs for miscellaneous activities involving training and examination costs for other training and examination (code 6519) are volume variable to the same degree as all non-training costs in this cost segment.

Quality control activities involve checking the accuracy of various types of mail processing and city delivery carrier work including casing, sorting, and distributing mail. Revenue protection activities involve various checks of mail to determine whether or not the postage paid is in accordance with approved rates and classification regulations. Costs for quality control and revenue protection work are classified as variable to the same degree as the composite of mail processing and city carrier office time costs. Costs for other miscellaneous activities are classified as institutional. Costs for quality control and revenue protection (code 6480) are volume variable to the same degree as the composite of mail processing and city carrier office time costs. Costs for other miscellaneous activities are classified as institutional.

Costs for overhead time (codes 6521 and 6522) are volume variable to the same degree as other administrative and support costs.

3.3.3 Distribution of Volume Variable Costs

Claims and Inquiry

Claims and inquiry volume variable costs are distributed among classes and subclasses of mail and special services on the basis of the IOCS data. Volume variable overhead costs (codes 6521 and 6522) are distributed to classes and subclasses of mail and special services in the same proportions as the distribution of all other claims and inquiry volume variable costs.

Personnel and Time and Attendance Work

Volume variable costs for personnel and time and attendance are distributed among classes and subclasses of mail and special services in the same proportions as the composite of volume variable labor costs in Cost Segments 1 through 12 and the Postal Inspection Service portion of Cost Segment 18.

Data Collection and Processing Activities

Data collection and processing costs are distributed among classes and subclasses of mail on the basis of total mail volume.

General Administrative and Clerical Activities

Volume variable costs for general office and clerical activities are distributed among classes and subclasses of mail and special services in the same proportions as labor costs in Cost Segments 2 through 12 (excluding costs of time and attendance clerks, costs of supervision of time and attendance and of employee labor relations technical personnel in Cost Segment 2, and costs of custodial and building equipment maintenance personnel in Cost Segment 11).

Miscellaneous

Volume variable costs for quality control and revenue protection are distributed among classes and subclasses of mail and special services in the same proportions as the composite of volume variable mail processing and city carrier office time costs. Volume variable training and examination costs (1) for scheme examinations (code 6500) are distributed among classes and

subclasses of mail and special services on the basis of costs for nonplatform mail processing work; (2) for sorting equipment (codes 6511-6516) are distributed among classes and subclasses of mail and special services on the basis of mail processing costs for related shapes of mail; and (3) for other matters (code 6519) are distributed to classes and subclasses of mail and special services on the basis of nontraining volume variable costs in this cost segment.

Administrative clerk overhead costs (codes 6521 and 6522) are distributed to classes and subclasses of mail and special services in the same proportions as the distribution of all other administrative support costs

3.3.4 Incremental Costs

The incremental costs for quality control clerks and data collection clerks are calculated using the constant elasticity method. Incremental costs for other administrative clerks are equal to volume variable costs.

The institutional costs for Express Mail clerks are considered product specific to Express Mail, as shown in Appendix I, Table I-1.

The incremental costs for various training activities, including mail processing parcel training, mail processing non-parcel training, and scheme training, are equal to volume variable costs. The incremental costs for claims and inquiry clerks are also equal to volume variable costs.

The volume variabilities for costs of administrative clerks for other training activities, for general office and clerical, and for time and attendance are dependent on a composite of other postal labor activities. The incremental costs for these components are calculated in the same way as those of the independent components, in proportion to the amount of costs in each independent component.

3.4 EXPEDITED DELIVERY

Expedited delivery costs cover salaries, benefits, equipment maintenance allowance (EMA) costs, and other related costs associated with the out-of-office activities to deliver Express Mail and other mail products that cannot be delivered on regular routes by regular delivery personnel and meet service standards. These costs also may include providing pickup service, and performing various inter-facility movements and collection activities. The office time associated with these out-of-office activities are treated the same as all other clerk office activities.

The accrued costs of this segment in FY 2000 totaled \$47,940 thousand. The accounts and booked costs analyzed in this segment are described in 3.0.2. and are summarized in the following table (detail may not add to total due to rounding).

<u>Component</u>	<u>FY 2000 Costs (Thousands)</u>	
	<u>Total Accrued</u>	<u>Volume Variable</u>
3.4 Expedited Delivery	\$47,940	\$20,639

3.4.1 Description and Rationale for Classification

Street activity consists of time spent at stops, time spent driving between stops, and travel time from the delivery unit to the first stop and from the last stop back to the delivery unit. Stops and the time spent at stops are further classified according to the following activities:

- a. Express Mail facility drop/pickup
- b. Other facility drop/pickup
- c. Customer delivery
- d. Express Mail collection box
- e. Other collection box
- f. Other (including pickup service)

This classification supports separate analysis of street activities that differ with respect to cost causality.

3.4.2 Accrued Costs

Accrued costs for expedited delivery street activity are apportioned among driving, stop, and travel/support functions using percentages derived from a special study of messenger activities presented in R97-1.

3.4.3 Volume Variable Costs

Volume variable street activity costs are determined separately for the driving, stop, and travel/support functions, as follows:

- a. Driving – Accrued driving costs are multiplied by factors that account for the variability of driving time with respect to stops (62.0 percent) and the variability of the number of stops with respect to the number of activities (96.6 percent). This yields a pool of activity-related driving costs, which is apportioned to specific activities on the basis of their relative frequencies, as determined from a special study. For customer delivery, volume variable driving costs are determined by multiplying delivery-related driving costs by the variability of delivery points with respect to pieces (94.0 percent). For regular collection, volume variable driving costs are determined by multiplying collection-related driving costs by the coverage variability of collection activity (60.0 percent). All other driving costs are treated as fixed.
- b. Stop – For customer delivery, statistical analysis of data from a special study of messenger activities is used to identify the effects on stop time of the number of stops made and the numbers of delivered accountable and non-accountable pieces. Volume variable customer delivery stop costs are determined by separately multiplying accrued customer delivery stop costs by each of the following: (i) the product of the variability of delivery stop cost with respect to delivery points (68.7 percent) and the variability of delivery points with respect to pieces; (ii) the variability of delivery stop cost with respect to accountable piece volume (13.3 percent); and, (iii) the variability of delivery stop cost with respect to non-accountable piece volume (2.4 percent). For Express Mail collection boxes, volume variable stop costs are determined by multiplying accrued Express Mail collection box stop costs by a factor developed from analysis of data from a special study of messenger activities. For regular collection boxes, volume variable stop costs are determined by separately multiplying accrued regular collection box stop costs by each of the following: (i) a factor developed from analysis of data from a special study that identifies the effect of collection volume on the time spent at a collection stop; and, (ii) the product of the coverage variability of collection activity and a factor developed from

analysis of data from a special study that identifies the effect of the number of collection stops on time spent at collection stops. All other stop costs are treated as fixed.

- c. Travel/Support – Accrued travel/support costs are considered volume variable to the same degree as the composite of street costs (other than travel/support).

3.4.4 Distribution of Costs

- a. Volume variable customer delivery costs associated with driving and the number of stops made are distributed to classes and subclasses of mail and special services on the basis of the corresponding characteristics of the pieces delivered, as determined from the special study of special delivery messenger activity presented in R97-1.
- b. Volume variable customer delivery stop costs associated with the number of delivered accountable pieces are distributed to Express Mail, International and relevant special services on the basis of the corresponding characteristics of the pieces delivered, as determined from the special study of special delivery messenger activity presented in R97-1.
- c. Volume variable customer delivery stop costs associated with the number of delivered non-accountable pieces are distributed to classes and subclasses of mail on the basis of the corresponding characteristics of the pieces delivered by messengers, as determined from the special study of special delivery messenger activity presented in R97-1.
- d. Volume variable Express Mail collection box costs are distributed to Express Mail.
- e. Volume variable regular collection box costs are distributed to classes and subclasses of mail on the basis of a special study.
- f. Volume variable travel/support costs are distributed to classes and subclasses of mail and special services in the same proportions as the composite of volume variable street costs (other than travel/support).

3.4.5 Incremental Costs

The incremental costs for all activities, except travel and support and those activities that are fully variable with volume, are calculated using the constant elasticity method. Because travel and support costs are burdened on all other street costs and mail-related office costs, the incremental costs for travel and support are calculated in the same manner as the incremental costs of these activities. Express facility drops and pickups and Express Mail box collection drive costs are product specific to Express Mail. Product specific costs are shown in Appendix I, Table I-1.

COST SEGMENT 4

CLERKS, CAG K POST OFFICES

4.0 SUMMARY

This segment covers salaries, benefits, and related costs of clerk work at approximately 11,000 CAG K post offices. This work includes sorting incoming mail and dispatching outgoing mail for a small number of points of separation and destination, and providing window services.

The accrued costs of this segment in FY 2000 totaled \$7,075 thousand.

4.0.1 Segment Costs

The accounts and booked costs analyzed in this segment are shown in the Fiscal Year 2000 Cost Segments & Components Reconciliation to Financial Statements and Account Reallocations, pages 14 & 15.

4.0.2 Component Costs

Costs of this segment are classified by component as described below; amounts are summarized in the following table.

<u>Component</u>	<u>FY 2000 Costs (Thousands)</u>	
	<u>Total Accrued</u>	<u>Volume Variable</u>
4.1 CAG K Clerks	\$7,075	\$4,388

4.1 CAG K CLERKS

4.1.1 Description and Rationale for Classification

Clerk work in CAG K post offices involves various activities for which the required time varies with volume. These activities include sorting incoming mail to general delivery; providing post office box and general delivery service; separating letter and nonletter mail (culling); canceling postage stamps; wrapping mail; accepting and delivering at windows, letters, flats, and parcels and insured, certified, COD, and registered mail; collecting postage due and special service fees; issuing and cashing money orders; and performing post office box work, including renting boxes, collecting payments, and preparing forms and records.

Costs for certain other clerk activities at CAG K post offices that cannot readily be separated from the foregoing activities are also classified as variable, even though they do not vary significantly with volume. Such activities include putting outgoing mail in pouches and sacks and closing, locking, and labeling such containers. Time for these activities is largely related to the number of destinations, because one characteristic of these offices is their small volume of originating mail. Because costs in this cost segment account for less than one-half percent of both total system accrued and volume variable costs, more detailed analyses to identify such costs have not been initiated.

Costs for all other activities, including those for selling stamps and setting meters, are classified as institutional. Because operational characteristics of these smaller offices differ from those at CAG A-J offices, it is not clear that the stamp and meter analysis used to estimate variable costs at larger offices is applicable to these offices. These other various services and activities

classified as institutional are in large degree performed when CAG K clerks are not involved in mail processing or window service customer work. Thus, this work is generally accommodated during times when CAG K clerks must be present at these offices to be available to serve customers.

4.1.2 Accrued Costs

Accrued costs, developed by the In-Office Cost System (IOCS), are included for clerks (roster designations 11, 31, 41, and 61) doing mail processing, window service, and administrative and support work (uniform operation codes 00-29) regarding mail in the forms of direct mail (codes 1020-4950) and mixed mail (codes 5300-5480 and 5610-5750).¹ Additionally, costs are included for these employees when engaged in mail-connected special services work (codes 0010-0300); window service (codes 5020-6200); nonpostal activities (code 6270); mail-related activities (codes 6210-6580), including overhead activities; and general services (codes 6610-6660).

4.1.3 Volume Variable Costs

Volume variable costs consist of the accrued costs for mail processing and window service work (uniform operation codes 00-09, 11-14, 18, 24-26, and 27-29) regarding mail-connected special services (codes 0010-0300) and mail in the form of direct mail (codes 1020-4950) and mixed mail (codes 5300-5480 and 5610-5750). Costs for overhead (codes 6521-6523) are volume variable to the same degree as all other costs.

4.1.4 Distribution of Costs

Volume variable costs for mail-connected special services (codes 0010-0300) and direct mail (codes 1020-4950) are distributed to special services (in aggregate) and the classes of mail represented by these codes.

Costs for mixed mail (codes 5300-5480 and 5610-5750) are distributed to classes by basic function, i.e., outgoing (code 1), incoming (code 2), transit (code 3), and other (code 5), in the same proportions as costs for direct mail (codes 1020-4950). This distribution process is discussed in greater detail in Appendix C.

Costs distributed to mail classes and special services (in aggregate) are further distributed to subclasses of mail and individual special services based upon the Cost Segment 3 (Component 3.1) proportions of costs (before adjustment for registry ordinary feature) within subclasses of mail and total special services. Volume variable costs for time involving break or personal needs (code 6521), clocking in or clocking out (code 6522) and moving empty equipment (6523) are distributed to classes and subclasses of mail and special services in the same proportions as the distribution of all other time costs.

4.1.5 Incremental Costs

Incremental costs for clerks at CAG K post offices are equal to volume variable costs.

¹ Accrued costs include the costs of "loaned to others" employees doing CAG K clerk work, but these "loaned" employees are not included in the IOCS sampling frame for CAG K clerks. The percentage of accrued costs stemming from "loaned" employees is small and their activities are assumed to be in the same proportions as the activities of the sampled CAG K clerks.

COST SEGMENT 5

This cost segment number is not used.

COST SEGMENT 6

CITY DELIVERY CARRIERS, OFFICE ACTIVITY

6.0 SUMMARY

This segment covers salaries, benefits, and related costs of the in-office activity part of city delivery carrier work. Regular carriers operate in a fixed daily schedule and typically spend part of their 8-hour day in the office; the remaining time is spent on street work (covered in Cost Segment 7 below).¹ Carrier in-office activity consists mainly of preparing mail for delivery before leaving the office for street work. In addition, it includes maintaining operational records and performing administrative duties.

When the carrier returns to the office to complete the day's tour after finishing street work, mail collected on the route may be handled. Where substantial amounts of non-preferential mail (usually Standard (A) mail) are delivered, the afternoon office work may be scheduled to include casing this mail in readiness for the next day's delivery so that the morning office work can be devoted to that day's preferential mail. In some delivery units, certain carriers (either full-time or part-time employees) may be routinely assigned to office work on several different routes in turn for their entire tour, thereby enabling the regulars to spend more time on their street work.

The accrued costs of this segment in FY 2000 totaled \$ 4,157,883 thousand.

6.0.1 Segment Costs

The total accrued labor costs of city delivery carriers, forming both Cost Segment 6 and Cost Segment 7, are developed from certain payroll and related accounts shown in the Fiscal Year 2000 Cost Segments & Components Reconciliation to Financial Statements and Account Reallocations, pages 16 & 17.

The total city carrier costs are prorated between office activity and street activity on the basis of the proportion of carrier time spent in each activity. Proportions of time are determined from work measurement samples provided by the In-Office Cost System (IOCS).² On this basis, total accrued costs are determined for Cost Segment 6 in terms of the components detailed below. These components, which address particular in-office activities, are individually analyzed with regard to volume variable costs and the distribution of such costs to the affected classes and subclasses of mail and special services. The IOCS provides the basis for distribution of volume variable costs at the same time as it determines the accrued costs of the different components.

6.0.2 Component Costs

Costs of this segment are classified by component as described below; amounts are summarized in the following table (detail may not add to total due to rounding).

¹ Most regular carriers are assigned full time to their own routes (as a bid position) and are responsible for performing both the office and street work for five days each 40-hour workweek. "Technician" carriers (a higher pay grade) are assigned to carry the route on the sixth day. Auxiliary carriers, who may be either full-time or part-time employees are available in some delivery units to be assigned when the regular carrier or technician carrier is temporarily absent.

² As described under section 3.0.1, the IOCS provides a standardized basis for measuring the components and elements of costs incurred by in-office activities of clerks and carriers and their supervisors.

<u>Component</u>	<u>FY 2000 Costs (Thousands)</u>	
	<u>Total Accrued</u>	<u>Volume Variable</u>
6.1 In-Office Direct Labor	\$3,517,539	\$3,100,352
6.2 In-Office Support	640,344	564,398
TOTAL	\$4,157,883	\$3,664,750

6.1 IN-OFFICE DIRECT LABOR

6.1.1 Description and Rationale for Classification

Carrier in-office work consists of a variety of activities whose specifics depend on the individual route (the different types of routes are described under Cost Segment 7 below). Office time on delivery routes (so-called "letter" routes as distinct from "special-purpose" routes) is primarily devoted to sequencing mail for delivery.

Letters (except for those arriving in DPS) are sorted one by one into a case partitioned according to delivery sequence. Flats and small parcels are sequenced separately into their own case; larger parcels are gathered together so that they can be sequenced when loaded into the vehicle. Where available, DPS letters typically are not sorted into the case, but are taken directly into the vehicle as is. On foot routes, however, DPS letters must be separated and bundled along with other (non-automated) pieces into trays. Depending on local arrangements, the residual (i.e. non-automated) letters may be cased into the letter case or may be cased with the flats into a vertical flat case. During the implementation of DPS at a given unit, DPS mail may be handled (i.e., cased and strapped out) with non-DPS mail.

The office time spent in preparing mail for delivery is directly related to the number of pieces handled. Therefore, the operation is considered fully variable with volume, and the corresponding costs are classified as fully variable. This is true for all types of letter delivery routes, but the volumes and the relative proportions of letters, flats, parcels, and special services differ substantially among individual routes, reflecting the demographic features of service areas. The relative proportions of the various mail classes handled during office work reflect these same differences.

Besides mail preparation, carrier office work also entails other direct labor activities. Carriers sometimes obtain mail for their routes directly from mail processing sections by "sweeping" the secondary distribution cases. When the mail for a route has been cased in delivery sequence, on some routes it must be "strapped out" into bundles in a form convenient for subsequent unbundling into delivery sequence on the street.

"Markups" (i.e., mail that must be readdressed or is otherwise undeliverable) and "holds" are identified and separated in accordance with local arrangements. Collection mail (gathered from customers and customer boxes along the route) is separated by shape for subsequent processing. The costs of all these mail-related operations are classified as fully variable. This piece-volume basis for volume variability is consistent with the workload standards used for route management and adjustment by Delivery Services.

On special-purpose routes there is comparatively little in-office sequencing of mail for delivery in accordance with the procedures just described for letter routes. Where mail is handled in-office on special-purpose routes, however, the costs are volume variable on the basis of IOCS observations.

Certain carrier office activities, such as obtaining keys and clocking in and out, are unrelated to mail volume but are considered as indirectly volume variable in part as described under 6.2 below.

Certain other carrier in-office activities are considered fixed, and their costs are classified as institutional. These include routine functions unrelated to mail volume such as maintaining route books and engaging in administrative activities unrelated to the handling of mail.

6.1.2 Accrued Costs

The accrued costs incurred for carrier in-office activities are determined from the proportion of carrier time (including overtime) spent in paid activities except for street time, as determined from IOCS observations as a whole. The component Office Direct Labor consists of all IOCS activities except street time (code 6710); obtaining mail or keys, checking a vehicle, or attending a safety meeting (code 6430); training (codes 6511-6519); break and personal needs (code 6521); clocking in or clocking out (code 6522); and moving empty equipment (code 6523).

6.1.3 Volume Variable Costs

Volume variable costs for city carrier in-office direct labor activity consist of the costs for business, mixed, and residential routes (IOCS route codes 71, 73, 75, 77, 78, 80, 82, and 83), combination, parcel post, and collection routes (route codes 84-87, 89, 90, and 98) that are associated with the mail class activity codes for direct mail handling (codes 1020-4950) and mixed mail (codes 5300-5480 and 5610-5750).³ Also included are costs for carriers serving these route types involving mail-connected special services work (codes 0010-0300).

6.1.4 Distribution of Costs

City delivery carrier in-office volume variable costs for mail-connected special services (codes 0010-0300) and direct mail (codes 1020-4950) are distributed to the classes and subclasses of mail and special services represented by these codes.

Costs for mixed-mail (codes 5300-5480 and 5610-5750) are distributed to classes and subclasses of mail and special services by basic function, i.e., outgoing (code 1), incoming (code 2), transit (code 3), and other (code 5), within route code in proportion to costs for direct mail (codes 1020-4950). This distribution process respects the tendency of the mix of mail classes to vary among route types. It is described in greater detail in Appendix C.

6.1.5 Incremental Costs

The costs in this component are either fully variable with volume or do not vary with volume. Incremental costs are equal to volume variable costs.

³ Mixed mail codes represent the handling of mail in bulk quantities or the performance of a mail-related (i.e., volume variable) activity where no mail is actually being handled at the instant of observation.

6.2 IN-OFFICE SUPPORT

6.2.1 Description and Rationale for Classification

In-office support costs are ascribed to two categories: overhead costs and other support costs. In-office overhead costs are defined as those in-office support costs that are considered to be variable with volume to the same degree as in-office direct labor costs (Component 6.1). These costs are for personal time, moving empty equipment, and training specific to in-office activities. Costs associated with clocking in and out are transferred to street support, which is analyzed in Cost Segment 7 as an overhead of carrier activity (see below).

Other support costs are incurred by carriers for obtaining mail or keys, checking or preparing a vehicle, or attending a safety meeting, and for other training. These costs vary with the number of routes in the system and therefore are variable to the same degree as the city carrier system as a whole. To implement this treatment, these costs are transferred to street support, which is analyzed in Cost Segment 7 as an overhead of carrier activity (see below).

6.2.2 Accrued Costs

Accrued overhead in-office support costs consist of costs for break and personal needs (activity code 6521), moving empty equipment (code 6523), and a portion of training activities (Route Type 99 and codes 6511 and 6516). Accrued other in-office support costs arise from obtaining mail or keys, checking vehicle, or attending safety meeting (code 6430), and for other training activities (codes 6512-6515 and 6517-6519).

6.2.3 Volume Variable Costs

Overhead in-office support costs are volume variable by definition to the same degree as in-office direct labor costs.

As street support, clocking in/out and other in-office support costs are volume variable to the same degree as the aggregate of all other Cost Segment 6 and Cost Segment 7 costs.

6.2.4 Distribution of Costs

Volume variable overhead in-office support costs are distributed to classes and subclasses of mail and special services in the same proportions as volume variable in-office direct labor costs.

As street support, volume variable clocking in/out and other in-office support costs are distributed to classes and subclasses of mail and special services in the same proportions as the volume variable portions of all other Cost Segment 6 and Cost Segment 7 costs.

6.2.5 Incremental Costs

The incremental costs for in-office support are calculated by applying the same method used in segment 6.1.

COST SEGMENT 7

CITY DELIVERY CARRIERS, STREET ACTIVITY

7.0 SUMMARY

City delivery carriers perform both office and street activities. Cost Segment 7 covers the salaries, benefits, and related costs of street activities; office activities are covered in Cost Segment 6. Carrier street activity consists primarily of delivering mail to customers located within the zones served by city delivery (as distinct from rural delivery). In addition, it includes certain other street-related carrier activities such as delivering relays, making collections and pickups, and moving mail to and from post offices and other postal facilities.

City delivery is organized and operated in terms of individual routes. Normally, (as noted under Cost Segment 6), each route is assigned as a bid position to a regular carrier who performs both the office work and the street work.¹ Because of their different operating characteristics, routes are considered for cost development in two groups: letter routes and special purpose routes. Letter routes account for over 95 percent of street activity costs. They are categorized for cost analysis as (1) business foot, (2) business motorized, (3) residential foot, (4) residential park & loop, (5) residential curblane, (6) mixed foot, (7) mixed park & loop, and (8) mixed curblane. Special purpose routes, which account for less than five percent of costs, involve relay, parcel delivery, bulk delivery, collection, interstation, and other service and support activities.²

The accrued costs of this segment in FY 2000 totaled \$8,982,104 thousand.

7.0.1 Segment Cost

The total labor costs of city delivery carriers, including both Cost Segment 6 and Cost Segment 7, are developed from certain payroll and related accounts shown in the Fiscal Year 2000 Cost Segments & Components Reconciliation to Financial Statements and Account Reallocations, pages 16 & 17. The total costs are prorated between office activity and street activity on the basis of the proportion of carrier time spent in each. Office and street costs are separately prorated on the same basis among the eight types of letter routes and to special purpose routes. Proportions of time are determined from work measurement samples provided by the In-Office Cost System (IOCS).

7.0.2 Component Costs

The accrued street time costs by route type are further divided into four major components: route time, access time, load time, and street-support time. As described further below, each component corresponds to one of the essential functions of delivery route operations. All components are defined so as to distinguish the effects of mail volume from other factors of delivery performance, and at the same time to facilitate the collection of data required for variability analysis. In this way, the components enable the effects of the different factors to be effectively separated.

¹ As footnoted on page 6-1, most regular carriers are assigned full time to their own routes and work a five-day week. In addition, auxiliary (both full-time and part-time) and technician (full-time) carriers are employed to carry routes on the sixth day and other days when the regular is absent.

² The IOCS codes identifying the different route categories are listed in Appendix B.

Costs of this segment are classified by activity category as described below, and are summarized in the following table.

<u>Component</u>	<u>FY 2000 Costs (Thousands)</u>	
	<u>Total Accrued</u>	<u>Volume Variable</u>
7.1 Route Time	\$2,806,011	\$110,366
7.2 Access Time	2,950,870	337,880
7.3 Load Time	1,365,761	1,319,455
7.4 Street Support Time	1,859,462	848,639
TOTAL a/	\$8,982,104	\$2,616,340

a/ Total accrued costs include Product Specific Costs, which are shown in Appendix I, Table I-1.

Route time can generally be conceptualized as the time spent by the carrier traversing the course of the route without deviating to make stops. On letter routes, which generally follow a designated line of travel, it includes all driving time except that associated with slowing the vehicle to access curblane delivery points or to collect mail from street collection boxes. However, it excludes all walking time spent in making deviations from the course of the route for any purpose, whether to access customer sites or to access street collection boxes. As a result, route time is largely fixed, with a small degree of volume variability resulting from the effect of volume on the time spent driving up to routine loop-dismount and deviation-delivery stopping points.³

Access time is time that varies as a function of the number of stops made (i.e., "coverage-related" variability). On letter routes, access time includes carrier walking time spent in deviating from the course of a route to go to and from customer delivery points and street collection boxes. It also includes driving time associated with deviating from the course of a route to go to curblane customer delivery points and to street collection boxes, and the portion of load time at customer delivery points and street boxes that varies with the number of stops made (i.e. coverage-related load time). Access time excludes other loading time spent in making the actual mail deliveries or box collections. On special purpose routes, it includes the portion of driving time that varies with the number of stops made.

Load time is the time carriers spend at delivery and box collection. Elemental load time is time that is dependent on the volume of mail delivered or collected at the stops. Different types of mail (e.g., in terms of piece shape and/or accountability) generally have different volume effects on such time. Coverage-related load time varies with the number of stops. On letter routes, accrued coverage-related load cost is the difference between total load cost calculated with the street time sampling system proportion for load (described below) and volume variable elemental load cost. Coverage-related load is moved to the access component and treated in the same manner as letter route access costs.

Street support time includes clocking in or clocking out, and that part of street time spent on such activities as traveling to and from the route and carrier station, obtaining and loading

³ Deviation delivery stops are stops at places that are not the regular, designated vehicle parking locations for the given route.

the vehicle, and preparing mail at the vehicle and at relay boxes. Street support time also includes certain of those components identified as other in-office support costs, as noted in Section 6.2.1.

To disaggregate street time costs among components, time proportions are estimated for letter routes from the data provided by two special surveys:

(1) Street Time Sampling (STS) - determines the relative proportions of street time spent on particular activities; and,

(2) Curblin and Foot Access Tests (CAT/FAT) - determine the relative proportions of route time and access time in letter route delivery operations.

The percentage of time proportions for the eight categories of letter routes are shown by STS to be as follows:

STREET TIME SAMPLING PERCENTAGES ⁴								
	Bus Foot	Bus Mot	Resid Foot	Resid P/L	Resid Curb	Mixed Foot	Mixed P/L	Mixed Curb
Running Time Total	39.43	62.59	36.54	62.71	48.59	68.37	57.23	53.37
Driving time (all of which is route time)	0.00	20.40	1.76	7.33	6.43	4.72	11.76	7.95
Route/access FAT walking time	39.43	38.40	33.03	49.43	10.65	62.53	38.73	28.38
Route/access CAT time	0.00	3.79	1.75	5.95	31.51	1.12	6.74	17.04
Load Time	41.88	15.69	49.89	19.78	37.05	18.78	24.53	26.14
Collection	0.00	4.70	1.00	0.93	0.38	0.00	0.82	2.26
Street Support	18.69	17.02	12.57	16.58	13.98	12.85	17.42	18.23
TOTAL	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

"Route/access FAT walking time" and "Route/access CAT time" are then disaggregated into their route time and access time components using the results of the FAT and CAT, respectively. The sum of FAT and CAT route time plus all of driving time equals total route time. Also, the portion of "Load Time" associated that varies with the number of stops made (coverage-related) is later reallocated to access time.

For special purpose routes, analogous data are developed from a special study of special purpose route activities, and from a special study known as the "Parcel Access Test."

⁴ Source: W/S 7.0.4.1, line numbers 5 through 8b.

7.1 ROUTE TIME

7.1.1 Description and Rationale for Classification

Because so much of route time is time spent traversing the course of the route without deviating to make stops, it may be visualized as the time required to cover the entire length of the Nation's city streets – a token of "readiness to serve" as distinct from the actual serving (which is represented by access time and load time).

Most of route time is therefore classified as institutional. The only exception is driving time associated with deviating from the route to reach routine loop/dismount and deviation delivery stopping points.

7.1.2 Accrued Costs

Accrued route time costs of \$2,806,011 thousand were presented in Section 7.0.2.

7.1.3 Volume Variable Costs

On motorized letter routes, volume variability is determined for driving time associated with routine loop/dismount and deviation delivery stops. First, accrued driving costs are multiplied by factors that account for the variability of driving time with respect to stops (50.0 percent) and the variability of the number of stops with respect to the number of activities (99.4 percent). This yields a pool of activity-related driving costs, which is apportioned to specific activities on the basis of their relative frequencies, as determined from a special study. For routine loop/dismount stops, volume variable driving costs are determined by multiplying the driving costs related to routine loop/dismount stops by the variability of such stops with respect to volume (32.2 percent). For deviation delivery, volume variable driving costs are determined by multiplying the driving costs associated with deviation delivery by the variability of deviation delivery points with respect to pieces (98.5 percent). All other activity-related driving time costs are treated as institutional.

All route time cost other than driving time cost consists of the route time portions of route/access CAT and route/access FAT. The route time portion of route/access CAT is time spent driving on curblane portions of routes without making deviations to access stops. The route time portion of route/access FAT is likewise time spent walking on routes without making deviations to access stops. All such non-deviation driving and walking time is treated as institutional.

7.1.4 Distribution of Costs

Volume variable routine loop/dismount costs are distributed to classes and subclasses of mail on the basis of the estimated weight of mail carried on routine loop/dismounts, as determined from CCS and RPW. Volume variable deviation delivery costs are distributed to classes and subclasses of mail and special services on the basis of the corresponding characteristics of the pieces receiving deviation delivery, as determined from a special study of motorized letter route activity.

7.1.5 Incremental Costs

The incremental costs for the two motorized letter route activities - deviation delivery and routine loops/dismounts - are calculated using the constant elasticity method.

7.2 ACCESS TIME

7.2.1 Description and Rationale for Classification

Access time is time that varies only as a function of the number of stops made (i.e., "coverage-related" variability). On letter routes, access time includes carrier walking time spent in deviating from the course of a route to go to and from customer delivery stops and collection boxes, and driving time associated with slowing to serve curblines stops or deviating to reach collection boxes. Access time excludes load time spent in putting mail into receptacles or collecting mail from customers or street boxes. On both letter and special purpose routes, access time includes the portion of driving time that varies with the number of stops made (coverage-related load).

7.2.2 Accrued Costs

The accrued costs of letter route access time are developed as follows. First, a regression analysis of data on running time and numbers of stops produces equations that define curblines, foot, and park & loop running times as functions of actual stops. These equations are documented in Docket No. R97-1, USPS LR-H-141. The equations are used to determine the variability of both curblines running time cost and foot and park & loop running time cost with respect to actual stops. The product of each of these variabilities, known as split factors, and the corresponding running time cost equals the volume variable portion of running time, which is segment 7.2 accrued access time cost. The balance of the running time cost is segment 7.1 accrued route cost.

Total CAT running time cost equals the cost generated by carriers driving the curblines portions of all letter routes. This cost, derived through multiplication of the STS proportion for CAT running time by total accrued street time cost, equaled \$ 754.6 million in FY 2000. The calculation of total CAT access cost first allocates this running time cost across the three stop type categories: SDR, MDR, and BAM. CAT access cost for each stop type is then estimated as its running time cost times a split factor derived from the curblines regression evaluated at the mean level of coverage for that stop type. This procedure is described in detail in Docket No. R97-1, USPS LR-H-141. The sum of the CAT access costs calculated in this manner over all three stop types equaled \$ 372.8 million in FY 2000. The excess of the total CAT running time cost, \$ 754.6 million, over this \$ 372.8 million in access cost equals \$ 381.8 million in curblines route-time cost. This \$ 381.8 million is thus 100% institutional.

Total FAT running time cost equals the cost generated by carriers traversing the walking portions of routes. This cost, equal to \$ 3,325.3 million in FY 2000, applies to the time carriers spent in walking on foot routes and on the looping portion of park & loop routes. The calculation of total FAT access cost first distributes this \$ 3,325.3 million across the SDR, MDR, and BAM stop types. Next, the running time cost for each stop type is further apportioned across the eight route type categories. As described in Docket No. R97-1, USPS LR-H-141, accrued FAT access cost for each of these stop/route type combinations equals that combination's portion of the \$ 3,325.3 million running cost times a split factor derived from either the park & loop or foot regression of running time on actual stops. The split factor for each combination is obtained through evaluation of the appropriate regression at the mean level of coverage for the given stop type. The sum of the eight stop/route type access costs estimated in this manner for each stop type equals the corresponding total accrued FAT access cost.

The sum of the resulting total FAT access costs over all three stop types equaled \$ 1,632.0 million in FY 2000. The excess of the total FAT running time cost over this access cost equaled \$ 1,693.3 million in walking route time cost, which is considered 100% institutional.

Letter route access time associated with driving to street collection boxes is developed using the methodology described in Section 7.1.3 (above). For special purpose routes, access time associated with driving to collection boxes and individual delivery points is identified in an analogous manner. First, accrued driving costs are multiplied by factors that account for the variability of driving time with respect to stops (63.4 percent, based on the "Parcel Access Test") and the variability of the number of stops with respect to the number of activities (100.0 percent). This yields a pool of activity-related driving costs, which is apportioned to specific activities (including collection and individual delivery) on the basis of their relative frequencies, as determined from a special study.

On special purpose routes, the fixed times spent after arrival at both collection and delivery stops are also identified as accrued access costs. Fixed time at collection stops is determined from a special study. Fixed time at delivery stops is measured through econometric analysis of data from a special study.

On letter routes, the portion of load time that varies with the number of stops made is treated in the same manner as letter route access costs. The calculation of accrued coverage-related load costs are described section 7.0.2.

7.2.3 Volume Variable Costs

Not all delivery points receive mail each day. The time to access customer delivery points depends in part on the proportion of possible customer sites actually receiving mail. This proportion is called the "coverage." Thus, the time to access customer delivery points depends on the distribution of volumes and classes among stops and delivery sites. The volume variable cost of accessing customer delivery points is determined through an analysis of how the number of actual stops and deliveries changes in response to changes in this distribution.

On letter routes, estimates for the variability of numbers of customer stops actually made with respect to delivered pieces by class are developed separately for single delivery residential (SDR) stops, multiple delivery residential (MDR) stops, and business and mixed (BAM) stops. The individual mail classes and subclasses are treated as separate, independent variables for this development except that certain low-volume subclasses are aggregated into a single variable. This multivariate approach is necessary because each of the mail subclasses tends to have its own characteristic distribution over stops, and hence its own coverage variability characteristics with regard to the different stop types.

The subclasses considered as independent variables are (1) First Class single piece, (2) First Class Presort, (3) Periodicals, (4) Standard (A) bulk regular rate, (5) Standard (A) carrier route, (6) Standard (A) non-profit bulk, (7) Standard (A) non-profit carrier route, (8) package mail, and (9) all other CCS subclasses, consisting of First-Class cards, Priority, Express Mail, penalty USPS, free mail, and international mail.

The actual stops variability analysis is estimated from CCS FY96 Panel data after these data are aggregated by stop type for each test route. Depending on the types of stops sampled on the route, each test provides separate data points for volume (by subclass) and SDR stops, volume and MDR stops, and volume and BAM stops. The resulting data points provide separate estimates of the volume variability of actual stops for each stop type, as described in Docket No. R97-1, USPS LR-H-138. The resulting estimates of actual stop variabilities with respect to volumes for the various subclasses and subclass aggregates are used to measure volume variable cost by subclass and subclass aggregate for each stop type. Variability is estimated at the mean level of volume for the stop type in question.

For special purpose routes, coverage-related variability associated with delivery activity (95.2 percent) is measured through econometric analysis of data from a special study.

For collection activity occurring on both letter routes and special purpose routes, a coverage-related variability factor of 60.0 percent is used based on information presented in Docket No. R87-1.

7.2.4 Distribution of Costs

For letter routes, volume variable customer access costs for the identified subclasses are determined directly by applying the appropriate variability factor to the total accrued access cost. Costs for the subclass aggregates are similarly determined by the variability factor, and are then distributed to the pertinent classes and subclasses of mail on the basis of the class and subclass proportions of pieces constituting each aggregate, as determined from the FY 2000 CCS volume data. Volume variable coverage-related load costs are determined in the same manner.

For special purpose routes, volume variable access costs associated with individual delivery activity are distributed to the mail classes and subclasses and special services on the basis of the corresponding characteristics of the pieces receiving individual delivery, as determined in a special study.

Volume variable costs associated with collection access on both letter routes and special purpose routes are distributed to mail classes and subclasses on the basis of a special study.

7.2.5 Incremental Costs

The incremental costs for letter route access costs are calculated using single subclass stop ratios. The incremental costs for all special purpose route and collection access and time at stop activities are calculated using the constant elasticity method.

7.3 LOAD TIME

7.3.1 Description and Rationale for Classification

Load time is the time spent handling mail pieces and containers at the point of delivery or collection, and in performing incidental customer services. To a considerable extent, it is affected directly by piece volumes of different types, and is therefore analyzed separately from other costs.

7.3.2 Accrued Costs

Accrued costs for letter route load time at customer delivery points and collection boxes are determined as described in section 7.0.2. Accrued special purpose route costs for delivery and collection stops are determined on the basis of the proportions of time found in a special study. For special purpose routes, accrued load time costs for collection and delivery activities are reduced by the fixed time associated with each type of stop, reflecting the treatment of such fixed time costs as access (i.e., coverage-related) costs.

7.3.3 Volume Variable Costs

For letter routes, volume-variable elemental load time is developed from regression analysis of data from the Load Time Variability (LTV) study. The LTV survey measured load time by direct time-study observation of actual street work on a representative sample of routes. For

a succession of stops along a selected part of each route, the physical characteristics of each stop were recorded together with the volume of mail by shape to be delivered to that stop and the time associated with making the delivery.

LTV regression analysis is performed separately for the three stop types through a stratification of the data. In each case, a multivariate model is used to represent load time as a function of the volumes of letters, flats, parcels, accountables, and collected mail.

The SDR, MDR, and BAM regressions are described in PRC LR 9 of Docket No. R90-1, and in Docket No. R97-1, USPS-T-17. Mail receptacles and containerization are represented as dummy variables. For all three stop types, the variability of load time with respect to total volume loaded is estimated at the mean levels of volume for the given stop type.

The resulting load time variability estimates are as follows:

Mail Shape	STOP TYPE		
	SDR	MDR	BAM
Letters	0.263	0.526	0.151
Flats	0.204	0.105	0.015
Parcels	0.087	0.068	0.082
Accountables	0.042	0.015	0.245
Collections	0.025	0.006	0.008

Volume variable elemental load time costs are obtained through multiplication of the above load-time elasticities by the accrued costs of load time by stop type.

Volume variable costs for delivery stop time on special purpose routes are determined by multiplying accrued delivery stop costs by the variabilities of such costs with respect to accountable and nonaccountable piece volumes.

For both letter routes and special purpose routes, volume variable costs for load time at regular collection boxes are determined on the basis of econometric analysis of data from a special study. Volume variable costs for load time at Express Mail collection boxes are also determined on the basis of a special study.

7.3.4 Distribution of Costs

Volume variable costs for letter route elemental load time at customer delivery points are distributed to classes and subclasses of mail and special services on the basis of proportions of pieces. The proportions are developed in two steps, with the first step being in two parts. In one part of the first step, nine separate distributions of volume-variable costs (single-delivery residential letters, flats, and parcels, multiple-delivery residential letters, flats, and parcels, and business and mixed delivery letters, flats, and parcels) are made to classes and certain subclasses of mail on the basis of CCS volume data by stop type. In the other part of the first step, three separate distributions (postage due, business reply, and special services) of accountable delivery volume variable costs are made to classes and certain subclasses of mail and to individual special services also on the basis of CCS volume data by stop type. In the second step, costs distributed in the two parts of the first step are aggregated and further distributed to Periodicals subclasses (to which distributions

were not made in the first step) on the basis of national volume relationships determined from Revenue, Pieces, and Weight (RPW) data.

Volume variable delivery load costs for special purpose routes are distributed to the mail classes and subclasses (for nonaccountables) and to the mail classes and subclasses and special services (for accountables) based on the corresponding characteristics of pieces observed in a special study.

On both letter routes and special purpose routes, volume variable load costs for Express Mail collection boxes are distributed to Express Mail. Volume variable load costs for regular collection boxes are distributed to mail classes and subclasses on the basis of a special study.

7.3.5 Incremental Costs

The incremental costs for letter route elemental and coverage-related load are calculated by applying the constant elasticity method, which has been modified to include the effect of multiple mail shapes and the impact of single subclass stops. The incremental costs for all special purpose route and collection load activities are also calculated using the constant elasticity method.

7.4 STREET SUPPORT TIME

7.4.1 Description and Rationale for Classification

Street support time is that part of street time that is variable to the same degree as the system as a whole. Because routes are normally adjusted by delivery management to occupy an eight-hour day for a regular carrier, changes in volume or other factors affecting workloads necessarily lead to corresponding changes in the hours per day and total number of routes.

7.4.2 Accrued Costs

For letter routes, street support costs include the costs for such activities as traveling to and from the route and carrier station, loading and unloading the vehicle at the office and on the street, on-route mail preparation, waiting for relay mail, unloading mail from relay boxes, training, and clocking in and out. Apart from training and clocking in and out, which are measured based on IOCS tallies, the proportions of street time for these activities are developed by route category from street-time sampling data. The costs of relay functions accrued on special purpose routes are treated as direct additions to total letter route street accrued costs for business, residential, and mixed foot routes.

For special purpose routes, street support costs include the costs for such activities as traveling to and from the route and carrier station, and training and clocking in or clocking out as determined by IOCS.

The accrued support costs of the eight types of letter routes and of special purpose routes are apportioned among component functions (office, route, access, and load) on the basis of the accrued costs for the components.

7.4.3 Volume Variable Costs

Accrued street support costs for letter routes and special purpose routes are split into volume variable and institutional portions in the same proportion as are the costs for office, route, access, and load time for letter routes and special purpose routes.

7.4.4 Distribution of Costs

Volume-variable street support costs for letter and special purpose routes are distributed to classes and subclasses of mail and special services in the same proportions as are the office and other street time component costs for letter routes and special purpose routes.

7.4.5 Incremental Costs

The incremental costs for street support time are calculated in the same way as city carrier office, route, load, and access costs. Product specific costs are shown in Appendix I, Table 1.

COST SEGMENT 8
VEHICLE SERVICE DRIVERS

8.0 SUMMARY

This segment includes salaries, benefits, and related costs of vehicle service driver (VSD) labor. VSD workload involves transporting mail using postal-owned and leased vehicles. Transportation runs are made between post offices, stations, branches, Processing and Distribution Centers/Facilities (P&DCs/P&DFs), Air Mail Centers/Air Mail Facilities (AMCs/AMFs), Bulk Mail Centers (BMCs), depots, and certain customer locations (firms).

The accrued costs of this segment in FY 2000 totaled \$518,561 thousand.

8.0.1 Segment Costs

The accounts and booked costs analyzed in this segment are shown in Fiscal Year 2000 Cost Segments & Components Reconciliation to Financial Statements and Account Reallocations, pages 18 & 19.

8.0.2 Component Costs

Costs of this segment are classified by component as described below; amounts are summarized in the following table.

<u>Component</u>	<u>FY 2000 Costs (Thousands)</u>	
	<u>Total Accrued</u>	<u>Volume Variable</u>
8.1 Vehicle Service Drivers	\$518,561	\$313,418

8.1 VEHICLE SERVICE DRIVERS

8.1.1 Description and Rationale for Classification

The accrued costs for Segment 8 are the salaries and benefits paid for VSD labor. Vehicle service drivers provide transportation of mail and equipment for postal facilities and their activities, other than driving, include loading and unloading their vehicles. Their primary transportation activities include inter-station pickup and delivery, airport runs, delivery to firms, parcel and relay deliveries, and street and building collections.

The majority of VSD routes are regularly scheduled routes that service specifically identified facilities and other collection and delivery points. The schedules cover the driver's entire tour and include estimated travel times between points, loading and unloading time, vehicle check-in and check-out, and break or meal times. Deviations of more than 10 or 15 minutes generally require supervisor notification. Some routes are designed to be more flexible and include blocks of time for what is referred to as "on-call" time. During on-call time, a supervisor directly controls the driver's schedule. Some drivers perform spotting operations (the staging of trailers for loading, unloading, and dispatch) at BMCs and larger post offices. In addition to driving, VSDs also perform a variety of off-road duties. Drivers obtain their own vehicles from the yard, make routine checks for serviceability, position vehicles in yards and at docks, assist in loading and unloading, attend to vehicle security and follow procedures for "accountable" mail items. VSDs office activities are limited to routine administrative duties and coordination of their work with platform and office supervisors.

The scheduling of VSD routes is determined largely by the need to coordinate the schedules of mail processing and delivery operations, inter-city transportation links, and by local network characteristics. Thus, weekend and holiday schedules usually differ from the normal weekday schedule. Due to the different times at which the various services are required, it is common for a driver to perform several different activities on the same tour.

An example of how VSD schedules coordinate with mail processing and delivery operations is found in how service to city carrier delivery stations is provided. These stations are normally served by two morning runs and one afternoon run. The first run is early and is timed to coordinate with the arrival of carriers to case mail. This run provides carriers with the bulk of the mail to be delivered that day. A second morning run, the "cleanup run," takes any additional mail from processing operations that was not ready for the earlier dispatch. In the late afternoon or early evening, close-out runs are made from each station and branch to centralized mail processing facilities to ensure that originating mail enters the processing stream without overnight delays.

Other coordinating activities include runs made to depots, truck terminals, and AMCs/AMFs to coordinate with the schedules of common carriers and contract carriers. There are also a limited number of relay runs, collection runs, and runs for firm pickups and/or deliveries where such arrangements are beneficial to the Postal Service.

8.1.2 Accrued Costs

The accrued costs of VSDs are obtained directly from the pertinent accounts.

8.1.3 Volume Variable Costs

The requirements for VSD labor will primarily be driven by two factors: 1) the network of postal facilities, collection points, and delivery points; and 2) the cubic volume of mail distributed over the network. The volume variability for Cost Segment 8 is based on the methodology developed in R97-1 and is 60.44% (USPS-T-20, Exhibit 2 Revised, page 22).

The volume variability of VSD costs was developed from a cross-sectional analysis of FY 1993 VSD workhour usage and VSD workload components. The sources of the data for this analysis were 1) a FY 1993 survey of plant and distribution facilities that used VSDs, and 2) the Postal Forms 4533. Form 4533 has route and scheduling data, and forms are routinely maintained by facilities using VSDs.

There were 149 plant and distribution facilities in 1993 that were judged to have significant VSD workhours. The survey included data for 89 responding facilities and accounted for approximately 75 percent of total VSD workhour usage. After eliminating facilities with incomplete data, a final sample of 49 facilities resulted. For these 49 facilities supplemental data on individual routes were collected from the Forms 4533.

The volume variability estimate was developed from a regression model for these 49 facilities. The dependent variable was workhours. Independent variables were 1) the number of unique stops served by the facility's VSDs, 2) the estimated cubic foot miles (CFM) of mail transported, and 3) the average travel speed in miles per hour. These three concepts account for 1) the costs of servicing the network of delivery points, regardless of volume, 2) the volume variable component of workload, and 3) the effects on workload of road conditions and congestion. The first and third concepts were derived directly from data on the Forms 4533. The CFM concept was developed from survey information combined with Form 4533 data. See USPS-T-20, pages 7-12 for general description of the concepts. Workpaper C describes how the regression

data were derived from the survey and Form 4533 information.

The regression model was estimated in "translog" form using logarithms of the 3 independent variables, along with own-products and cross-products of the logarithms of the independent variables. Own-product and cross-product terms judged insignificant were eliminated from the final model. See USPS-T-20, pages 16-22 for further model descriptions, and LR-H-261, page 13 for the final estimated model. From this model a plant and distribution facility volume variability of 66.12% was developed.

Bulk Mail Centers also use VSDs, but their primary usage is for spotting, and is thus different in nature than VSD usage in plant and distribution facilities where spotting is insignificant. Since a different survey design would have been needed to account for the important elements of VSD usage in BMCs, no BMCs were included in the survey. The final volume variability for Cost Segment 8 was derived by assuming spotter volume variability is zero, and weight-averaging the non-spotter volume variability with the zero assumption for spotters. The weights were proportions of total accrued costs for non-spotter and spotter activities respectively. Upon weight-averaging, the overall volume variability of Cost Segment 8 is 60.44%.

8.1.4 Distribution of Costs

The volume variable costs of VSD labor are distributed to classes and subclasses of mail in the same proportions as cubic feet of total (local and non-local) mail, obtained from Revenue, Pieces, and Weight (RPW) statistics (adjusted to include cubic feet for Mailgrams).

8.1.5 Incremental Costs

The incremental costs for the vehicle service driver activities at plants are calculated using the translog method. The variability for the BMC non-spotter activities is a composite variability. Therefore the constant elasticity method is used to develop the incremental costs. There is no incremental cost calculation for BMC spotter activities.

COST SEGMENT 9

This cost segment number is not used.

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COST SEGMENT 10

RURAL CARRIERS

10.0 SUMMARY ¹

This segment covers salaries, benefits, and related costs of rural carrier work including the equipment maintenance allowance (EMA), and incentives for using right hand drive vehicles. Rural carriers primarily provide delivery, collection, and retail services to customers ("boxes") on rural routes; on a few routes they also carry mail in bulk ("pouches") between post offices. The routes are typically served from a vehicle (most rural carriers use their own vehicles), but some include stretches of foot deliveries ("dismounts"). There are about 67,000 rural routes nationwide.

Rural carriers deliver all kinds of mail, including accountable items. In contrast to city carriers, rural carriers also collect all kinds of mail, provide special services, collect postage, and sell stamps -- essentially providing a mobile post office. Rural carriers further differ from city carriers in their use of the one-bundle system to case flats and letter mail.²

With regard to costs, a significant feature of rural carriers is the way they are paid. Most rural routes are evaluated in terms of time standards. For "evaluated routes" (designated H, J or K routes), the resulting "evaluated time" determines the carrier's salary. On the few remaining "M" (mileage) routes, carriers are paid according to the mileage of the route. Carriers serving "A" (auxiliary) routes are also paid according to the route-evaluated time. "A" and "M" routes are termed "other routes."

The accrued costs of this segment in FY 2000 totaled \$4,233,565 thousand.

10.0.1 Segment Costs

The accounts and booked costs analyzed in this segment are shown in the Fiscal Year 2000 Cost Segments & Components Reconciliation to Financial Statements and Account Reallocations, pages 22 & 23.

¹ For additional detail on rural carrier costing, see Docket No. R97-1, USPS-T-17, Part 3, Docket No. R97-1, USPS-RT-1, Part 2, and Docket No. R2000-1, USPS-RT-13.

² When preparing mail for delivery, rural carriers generally sequence both letters and flats into the same case so that this mail can be handled as one bundle for inserting into customers' boxes.

10.0.2 Component Costs

Costs of this segment are classified by component as described below; amounts are summarized in the following table (detail may not add to total due to rounding).

<u>Component</u>	<u>FY 2000 Costs (Thousands)</u>	
	<u>Total Accrued</u>	<u>Volume Variable</u>
10.1 Evaluated Routes	\$3,534,064	\$1,723,210
10.2 Other Routes	334,919	159,522
10.3 Equipment Maintenance	364,581	—
TOTAL	\$4,233,565	\$1,822,732

10.1 EVALUATED AND OTHER ROUTES

10.1.1 Description and Rationale for Classification

Evaluated Routes

Each evaluated rural carrier is paid a salary determined by the evaluated time for his or her route. The evaluated time is developed based on route factors such as route length; boxes served; the number of letters delivered; the number of papers, magazines, and catalogs delivered; and box holder mail volume. These route factors are measured in periodic (approximately biannual) regular counts, called "National Rural Mail Counts," and, when circumstances dictate, in special counts. During a National Rural Mail Count, all mail for nearly all rural routes is counted by shape (but not by class) and the actual time for individual routes is recorded daily during a two- or four- week period (typically during March or September). The mileage, number of boxes, volume of mail, and other applicable items provide a value for evaluated time used to determine the pay for individual routes.

Each evaluated route is classified as an "H," "J," or "K" route. An "H" route is carried entirely, six days a week, by the regular carrier (except for sickness, annual leave). "J" routes are carried 11 days out of 12 (one day off each two weeks) by the regular carrier and one day by the replacement carrier. "K" routes are carried five days out of six (one day off each week) by the regular carrier and one day by the replacement carrier. Evaluated routes are further subclassified into "L" status and non-"L" status routes. Box densities of 12 or more per mile distinguish "L" routes. Designation of a route as "L" results in a somewhat smaller time allowance for the number of boxes and slightly different allowances for other minor evaluation factors.

As the evaluated time of individual rural routes increases, routes are reclassified to limit both the hours worked and the overtime compensation paid to the regular carrier. To illustrate, "H" routes are usually reclassified to "J" routes when the evaluated route time (i.e., the time for both the regular carrier and the replacement carrier) is 46.5 hours per week. Similarly, "J" routes are usually reclassified to "K" routes when the evaluated route time exceeds 50.7 hours per week. If the actual route time for both regular and replacement carriers combined exceeds 57.6 hours per week, the route is classified as "overburdened." An overburdened route must be adjusted to a smaller value of workload by reallocating some of its territory to another route. The other route may be an existing one or a new one created for this purpose.

Other Routes

The costs of rural carriers other than evaluated route carriers are included in the "other routes" component. These carriers serve routes in either of two classifications: "A" routes or "M" routes. "A" (auxiliary) carriers serve routes that are evaluated at less than 35 hours per week. "A" routes are typically created to relieve overburdened routes or to accommodate route expansion that cannot be handled by adding segments to existing routes. Carriers who serve on "A" routes are compensated according to the route evaluated time. The "M" (mileage) classification applies only to existing routes for which the rate of compensation on the basis of the mileage compensation schedule exceeds the rate of compensation based on the evaluated schedule. "M" routes are being gradually phased out through conversion to evaluated status as they become vacant (i.e., the carrier retires or otherwise terminates employment) or when the compensation would be greater under the evaluated route schedule. The salaries of "M" route carriers are based on the mileage of the route.

10.1.2 Accrued Costs

The total accrued salary costs of rural carrier work (sub-account .112) are divided into evaluated and other route costs using information from payroll records (the Pay Data System).

10.1.3 Volume Variable Costs

The volume variable costs of rural carrier workhours are determined from a variability analysis developed in accordance with the evaluated time and factors of workload for all 48,718 routes in the FY2000 National Mail Count.

A four-step procedure is implemented separately for each of the two route components: evaluated and other. First, carrier workload is categorized into 31 distinct cost drivers. These drivers are defined as various carrier activities and workload factors that determine the total office and street time required to service a route. 16 of these drivers are activities for which the time required for completion varies proportionately with volume delivered on the route. Examples include the delivery of letters, the delivery of flats, and the collection of letters and flats. These volume variable drivers are referred to as variable evaluation items. The remaining 15 drivers are a combination of fixed route characteristics, such as route mileage and numbers of rural boxes served, and other carrier activities for which the time required for completion is unaffected by route volume. All of these drivers are called fixed evaluation items, since the time amounts involved are fixed with respect to volume delivered.

Step 2 assigns each of the 31 drivers an "evaluation factor," which is a measure of the standard amount of time that one unit of the driver requires. For variable evaluation items, this factor is expressed as minutes per unit of activity. For example, the factor for the delivery of letters item is expressed as 0.0791 minutes per letter delivered. For fixed evaluation items, the evaluation factor is expressed as either minutes per unit of activity, or minutes per unit of the factor that generates the workload. An example is the factor for route miles, which equals 12 minutes per mile.

Step 3 applies these evaluation factors to the calculation of average weekly carrier times per route for each of the 31 evaluation items. To do this, the levels of activity and numbers of units by workload factor are obtained from the National Rural Mail Counts for all 31 items on each of a large sample of all rural routes in the system. These measures are then aggregated to produce estimates of average FY 2000 activity levels and units served per

week per route over all routes.³ The product of each such estimate and the corresponding evaluation factor produces an estimate of average weekly minutes per route for the given evaluation item. For example, the average weekly activity level estimated for the letters delivered item equals 3,614 letters per week per evaluated route. The product of this level and the evaluation factor of 0.0791 minutes per letter equals an estimated 285.91 minutes per week per evaluated route for the delivery of letters in FY 2000.⁴

Step 4 uses these estimated average minutes per week per route across all 31 evaluation items (with some minor adjustments to several evaluation categories) to calculate volume variabilities. For each of the 16 variable evaluation items, the increase in time that occurs in response to a unit increase in volume is the same no matter what the initial volume level is. This constant increase in time per unit increase in volume simply equals the evaluation factor itself. Moreover, this constant marginal time increment implies that the volume variability for each variable evaluation item equals exactly 100%.

In contrast, for the 15 fixed evaluation items, however, any given increase in volume, by definition, has no impact on time. Thus, the marginal increase in time with respect to volume is zero, implying a volume variability of 0%.

The overall volume variability of rural carrier hours equals the 100% variability for variable evaluation items times the percentage of total evaluation time that is variable. This percentage is, in turn, calculated as the ratio of total variable evaluation minutes per week per route to the sum of this total plus total fixed evaluation minutes per week per route.⁵ FY 2000 volume variabilities calculated through this procedure equal 48.76% for the evaluated route group and 47.63% for the "other" route group. Thus, volume variable evaluated route cost equals 48.76% times the \$3,534,064 thousand accrued cost, or \$1,723,210 thousand. Volume variable other route cost equals 47.63% times \$334,919 thousand in accrued cost, or \$159,522 thousand.

10.1.4 Distribution of Costs

These two volume variable cost pools are distributed to mail subclasses through a two step procedure. First, each pool is distributed among the variable evaluation items in proportion to each item's percentage of total variable minutes per week per route. This allocation is accomplished as follows. First, the average minutes per week per route for 2 of the 16 items, "vehicle loading" and "markups" are reallocated to each of the remaining 14 items in proportion to the average minutes per week per route in each of these 14 categories. The result is a slightly higher average minutes per week for each of the remaining 14 items than is implied by the product of the average pieces per week per route and the evaluation factor.

Next, the new average minutes are summed over all the 14 items, and the percentage distribution of this sum over these items is determined. Finally, the percentage of total minutes allocated to each item is multiplied by the total volume variable cost to produce a volume variable cost for that item.

For an example, consider the letters delivered item for evaluated routes. After the reallocation of time from the vehicle loading and markups items, average minutes per week

³ These estimates for the variable evaluation items, along with the values for the corresponding evaluation factors, are presented in Worksheets 10.1.1 and 10.2.1. Estimates for the fixed evaluation items are not shown in Worksheets 10.1.1 and 10.2.1, because they are only used in variability analysis. The FY 1998 variability analysis is documented in Docket No. R2000-1, USPS LR-I-152.

⁴ See Worksheet 10.1.1 for a complete listing of these average minutes per week per route across all 31 evaluation items. Note also that the calculation of minutes per week per route by evaluation item for each individual rural route produces the time allowance data needed to determine the annual carrier salary for that route.

⁵ This ratio of variable to total evaluation minutes per week is updated each year using the National Rural Mail Count. The program that calculates the ratio is filed in Docket No. R2000-1, USPS LR-I-152.

per route for letters delivered on evaluated routes equals about 297.53 minutes. This is about 19.1% of the sum of the minutes per week per route over all 14 items. Thus, 19.1% of the total evaluated route volume variable cost of \$1,723,210 thousand, or about \$329,049 thousand, is determined to be volume variable cost for letters delivered on evaluated routes.

The next step distributes the volume variable costs allocated to each of the 14 variable evaluation items in this manner across mail subclasses and special services. Because the National Rural Mail Count provides data by mail shape but not by mail class, these distributions are based on proportions obtained from another source, the Rural Carrier Cost System. The applicable proportions by shape and by class, subclass, or special service, are derived from mail sampled on the Rural Carrier Route Test (Form 2858R) for mail to be delivered and on the Rural Carrier Mail Acceptance Data Form (Form 2848) for mail collected on routes.

10.1.5 Incremental Costs

Incremental costs equal volume variable costs for this component.

10.2 EQUIPMENT MAINTENANCE ALLOWANCE

10.2.1 Description and Rationale for Classification

EMA is paid when carriers use their own vehicles. Carriers receive a minimum allowance that increases on a mileage basis for routes exceeding 40 miles. Certain routes with a large number of stops in relation to the number of miles receive a supplemental allowance. Rural carriers may also be paid an incentive to buy and use right-hand drive vehicles while serving their route. Because the costs of EMA are a consequence of route mileage rather than mail volume, they are classified as institutional.

10.2.2 Accrued Costs

Accrued EMA costs are obtained from accounts 52462 and 52463.

10.2.3 Volume Variable Costs

The costs of this component are classified as 100% institutional.

10.2.4 Incremental Costs

There are no incremental costs for this component.

COST SEGMENT 11

CUSTODIAL AND MAINTENANCE SERVICES

11.0 SUMMARY

This segment covers salaries, benefits, and related costs of custodial, maintenance, support, and protection personnel work, including supervision costs; and costs for contracted cleaning services. The work includes general housekeeping and maintenance of postal facilities, maintenance of equipment, and ancillary facility protection and support.

The accrued costs of this segment in FY 2000 totaled \$2,560,323 thousand.

11.0.1 Segment Costs

The accounts and booked costs analyzed in this segment are shown in the Fiscal Year 2000 Cost Segments & Components Reconciliation to Financial Statements and Account Reallocations, pages 24-28.

11.0.2 Component Costs

Costs of this segment are classified by component as described below; amounts are summarized in the following table (detail may not add to total due to rounding).

<u>Component</u>	<u>FY 2000 Costs (Thousands)</u>	
	<u>Total Accrued</u>	<u>Volume Variable</u>
11.1 Custodial Services	\$981,654	\$602,208
11.1.1 Custodial Personnel	915,438	561,587
11.1.2 Contract Cleaners	66,216	40,621
11.2 Operating Equipment Maintenance	1,155,762	666,333
11.3 Plant and Building Equipment Maintenance	422,907	259,438
TOTAL	\$2,560,323	\$1,527,979

11.1 CUSTODIAL SERVICES

11.1.1 Description and Rationale for Classification

Custodial services costs include the costs of Postal Service personnel responsible for the cleaning and protection of service facilities and the costs of contractually procured cleaning services. These space support costs are incurred to provide secure, well-kept working environments. Because these costs tend to vary with the amount of space involved, they are developed in the same manner and are determined to be variable to the degree described in section 15.2.3 for space support costs.

11.1.2 Accrued Costs

Accrued custodial services costs are obtained from personnel subaccount .121, costs reallocated to that subaccount from subaccount .127,¹ and account 52311.

11.1.3 Volume Variable Costs

Accrued custodial services costs are volume variable to the degree described in section 15.2.3 for space support costs.

11.1.4 Distribution of Costs

Volume variable custodial services costs are distributed to classes and subclasses of mail and special services in the proportions described in section 15.2.4 for space support costs.

11.1.5 Incremental Costs

The incremental costs for cleaning and protection personnel and contracted cleaning services are calculated in the same manner as other space support incremental costs, discussed in Cost Segment 15.2

11.2 OPERATING EQUIPMENT MAINTENANCE

11.2.1 Description and Rationale for Classification

Costs are for the maintenance of mail processing equipment and various types of Postal Service equipment other than mail processing equipment such as computers and window service equipment and are developed in two subcomponents, mail processing equipment and other operating equipment.

Mail Processing Equipment Maintenance. Costs for mail processing equipment maintenance are separately developed for 21 types of equipment from Engineering Research and Development and expense account records. These 21 categories are shown in Appendix F, Table F-1. The FY00 maintenance labor cost by category is provided in Appendix F, Table F-2.

Mail processing equipment maintenance costs are classified as variable to the same degree as the costs of the personnel that use the equipment as discussed below.

Other Operating Equipment Maintenance. Because the costs for maintenance of computers and window service equipment do not vary with mail volume they are classified as institutional.

¹ Costs for components, e.g., salaries and benefits, travel, etc., of subaccount .127 are reallocated to the same components of subaccounts .121, .123 and .125 according to the relative proportions of the preallocation totals of the costs for a particular component in each of these subaccounts (see Fiscal Year 1999, Cost Segments and Components Reconciliation to Audited Financial Statements & Reallocation of Costs). The costs reallocated to a subaccount component are apportioned among the various accounts comprising the component in the same proportions as these costs appeared in that component in subaccount .127.

11.2.2 Accrued Costs

Mail Processing Equipment Maintenance. Accrued costs for mail processing equipment are obtained from Engineering Research and Development records of direct labor hours by equipment function and are aggregated to 21 equipment categories (e.g., optical character readers [OCRs], flat sorter machines [FSMs], and sack sorter machines). These direct labor costs are adjusted to reflect supervisory, breaktime, and administrative costs for personnel whose labor costs are included in subaccounts .123 (including costs reallocated from subaccount .127, see footnote 1, this cost segment) and .153. The FY00 maintenance labor costs by category is provided in Appendix F, Table F-2.

Other Operating Equipment Maintenance. Accrued costs for other operating equipment are obtained from personnel subaccounts .123 (including costs reallocated from subaccount .127, see footnote 1, this cost segment) and .153 (less costs for mail processing equipment as obtained above).

11.2.3 Volume Variable Costs

Mail Processing Equipment Maintenance. Accrued costs for maintenance of mail processing equipment are volume variable to the same degree as the costs of the mail processing equipment maintained. As a result, the variabilities for each equipment type listed in Appendix F, Table F-1, are based on the variabilities for the mail processing labor cost pools shown in Section 3.1 of Cost Segment 3. For some equipment categories the variability is a weighted average of two or more of the labor category variabilities, as shown in Docket No. R00-1, USPS LR-I-83, Part III.

Other Operating Equipment Maintenance. Because costs for maintenance of other operating equipment are classified as institutional, no accrued costs are volume variable.

11.2.4 Distribution of Costs

Mail Processing Equipment Maintenance. Separate distributions are done for each of the 21 categories listed in Appendix F, Table F-1. Volume variable costs for mail processing equipment maintenance labor are distributed in the same proportions as IOCS tallies of mail processing labor for 16 of the 21 individual equipment categories in recognition of the related equipment usage. RBCS costs are distributed based on the mail processing labor costs in MODS operations 971-979, in which RBCS processing occurs. Costs categorized as "General and Logistics: BMC" include conveyors, and other general use equipment at BMCs and are distributed in the proportions as all BMC mail processing labor. Costs categorized as "General and Logistics: Non-BMC" include similar equipment at non-BMC facilities and are likewise distributed as all non-BMC mail processing labor. Costs for Mail Transport Equipment (e.g., trays and rolling containers) are distributed in the same way as all mail processing labor costs.

Finally, the maintenance labor for Tray Transport and Staging System is divided into OCR-, MPBCS-, DBCS- and FSM-related amounts based on the relative number of each type of equipment and then distributed in the same way as each respective category.

11.2.5 Incremental Costs

Mail processing equipment maintenance costs are broken into 21 equipment categories, as shown in Appendix F, Table F-1. The volume variability of each equipment category is borrowed from the corresponding mail processing operation in

Cost Segment 3.1. The variability for an equipment category may be a combination of the variabilities for two or more mail processing operations. In this case, the constant elasticity method is used to calculate incremental costs. Otherwise, the translog method is used. Costs for other operating equipment maintenance are fully institutional, with no incremental costs.

11.3 PLANT AND BUILDING EQUIPMENT MAINTENANCE

11.3.1 Description and Rationale for Classification

Space support costs for building equipment maintenance are for the maintenance of such items as elevators, and heating and air conditioning systems. Because these costs tend to vary with the amount of space involved, they are developed in the manner and are determined to be variable to the degree described in section 15.2.1 for space support costs.

11.3.2 Accrued Costs

Accrued building equipment maintenance costs are obtained from personnel subaccount .125 and costs reallocated to that subaccount from subaccount .127 (see footnote 1, this cost segment).

11.3.3 Volume Variable Costs

Accrued building equipment maintenance costs are volume variable to the degree described in section 15.2.3 for space support costs.

11.3.4 Distribution of Costs

Volume variable building equipment costs are distributed to classes and subclasses of mail and special services in the proportions described in section 15.2.4 for space support costs.

11.3.5 Incremental Costs

The incremental costs for plant and building equipment maintenance are calculated in the same manner as other space support incremental costs, discussed in Cost Segment 15.2.

COST SEGMENT 12

MOTOR VEHICLE SERVICE

12.0 SUMMARY

This segment covers salaries, benefits, and related costs of vehicle maintenance personnel work; expenses for supplies and services used in maintaining vehicles; expenses for fuel and lubricants; expenses for contracted maintenance services; and expenses for rented vehicles.¹ The maintenance activities in this segment involve tuning, lubricating, washing, repairing, and fueling fleet vehicles (including experimental vehicles) used by city delivery carriers, expedited delivery personnel, vehicle service drivers, the Postal Inspection Service, postmasters, managers, and administrative employees.

Vehicles assigned to larger postal operations facilities are maintained at vehicle maintenance facilities (VMFs) that are under the control of the individual operations facilities. Vehicles assigned to outlying stations and branches of those operations facilities may obtain routine maintenance services through contracts with local concerns. Contractors service vehicles assigned to smaller offices, known as non-personnel offices (NPOs) that do not have VMFs.

The accrued costs of this segment in FY 2000 totaled \$772,460 thousand.

12.0.1 Segment Costs

The costs of this segment are developed directly from the accounts listed in the Fiscal Year 2000 Cost Segments & Components Reconciliation to Financial Statements and Account Reallocations, pages 29 & 30.

12.0.2 Component Costs

Costs of this segment are classified by component as described below; amounts are summarized in the following table (detail may not add to total due to rounding).

<u>Component</u>	<u>FY 2000 Costs (Thousands)</u>	
	<u>Total Accrued</u>	<u>Volume Variable</u>
12.1 Personnel	\$ 328,608	\$66,178
12.2 Supplies and Materials	394,062	90,948
12.3 Vehicle Hire	49,790	21,979
TOTAL	\$772,460	\$179,105

12.1 PERSONNEL

12.1.1 Description and Rationale for Classification

This component covers the costs of personnel who perform vehicle maintenance work at vehicle maintenance facilities. Vehicle maintenance is essentially dependent on the miles of

¹ Owners normally perform maintenance of rented vehicles.

vehicle use or hours of vehicle operation. Maintenance costs are thus related to mail volume in the same way as the street time costs (of the carriers or drivers using the vehicle) incurred while vehicles are in use. Accordingly, costs for this component are grouped for classification into six subcomponents based upon the particular kind of vehicle usage.

City Delivery Vehicles - Letter Routes. These vehicles are used predominantly on park and loop routes and also on residential curblane routes and business and mixed motorized routes. Vehicle maintenance costs are apportioned in correspondence with city delivery carrier street components (route, access, elemental load, and coverage-related load) on the basis of the portion of vehicle use associated with these components. These apportioned vehicle maintenance costs are classified as variable to the same degree as the costs of the corresponding individual components in Cost Segment 7.

City Delivery Vehicles - Special Purpose Routes. These vehicles are used on parcel relay, parcel delivery, collection, and other support-type routes. Costs are classified as variable to the same degree as the special purpose route costs of city delivery carriers.

Rural Delivery Vehicles. These vehicles are used on both "evaluated" and "other" rural routes. Costs are classified as variable to the same degree as rural carrier salary costs.²

Expedited Delivery Vehicles. Costs for these vehicles, which are used on expedited delivery routes, are classified as variable to the same degree as expedited delivery street time costs.

Vehicle Service Vehicles. These vehicles are used on routes within a city and between various postal facilities including post offices, stations, branches, Processing and Distribution Centers/Facilities, Air Mail Centers/Facilities, and Bulk Mail Centers. Costs are classified as variable to the same degree as vehicle service driver costs.³

Other Vehicles. These vehicles are used for administrative and management work by various categories of employees including the carrier route inspectors, Postal Inspection Service personnel, postmasters, managers, and other administrative employees. Because the number and use of these vehicles are determined by requirements of management, the costs of this subcomponent are classified as institutional.

12.1.2 Accrued Costs

The accrued costs of motor vehicle service personnel are obtained from subaccount .141 and apportioned to the six subcomponents. The subcomponent shares for personnel costs are derived using the Vehicle Management Accounting System (VMAS). VMAS compiles local vehicle acquisition and maintenance cost data records from all vehicle maintenance facilities each accounting period. Each record combines the type of expenditure (personnel labor, parts & supplies, depreciation, etc.) with the type of route (park & loop, rural carrier, expedited delivery, etc.). Costs by route type are grouped by type of driver (city carriers, rural carriers, admin, etc.) These groupings form the subcomponent shares. By using VMAS annual totals, the subcomponent user shares are calculated directly from the universe of billings.

Additionally, accrued costs apportioned to City Delivery Carrier Vehicles - Letter Routes, are further apportioned among delivery street functions corresponding to costs of individual components in Cost Segment 7 (route, access, elemental load, and coverage-related load) in the same proportions as they exist in CS 7.

² Separate street time costs for rural carriers are not available.

³ Separate street time costs for vehicle service drivers are not available.

12.1.3 Volume Variable Costs

City Delivery Vehicles - Letter Routes. Accrued costs of the individual delivery functions are variable to the same degree as the costs of the corresponding individual street components in Cost Segment 7.

City Delivery Vehicles - Special-Purpose Routes. Accrued costs are variable to the same degree as the costs for city delivery carrier special purpose routes in Cost Segment 7.

Rural Delivery Vehicles. Accrued costs are variable to the same degree as the salary costs of rural carriers in Cost Segment 10.

Expedited Delivery Vehicles. Accrued costs are variable to the same degree as the street activity salary costs of expedited delivery in Cost Segment 3.4.

Vehicle Service Vehicles. Accrued costs are variable to the same degree as the costs of vehicle service drivers in Cost Segment 8.

Other Vehicles. Because costs are classified as institutional, no accrued costs are variable.

12.1.4 Distribution of Costs

City Delivery Vehicles - Letter Routes. Volume variable costs of the individual delivery functions are distributed to classes and subclasses of mail and special services in the same proportions as the volume variable costs of the corresponding individual components in Cost Segment 7.

City Delivery Vehicles - Special-Purpose Routes. Volume variable costs are distributed to classes and subclasses of mail and special services in the same proportions as the volume variable costs of city delivery carrier special purpose routes in Cost Segment 7.

Rural Delivery Vehicles. Volume variable costs are distributed to classes and subclasses of mail and special services in the same proportions as the volume variable salary costs of rural carriers in Cost Segment 10.

Expedited Delivery Vehicles. Volume variable costs are distributed to classes and subclasses of mail and special services in the same proportions as the expedited delivery volume variable street activity salary costs in Cost Segment 3.4.

Vehicle Service Vehicles. Volume variable costs are distributed to classes and subclasses of mail and special services in the same proportions as the volume variable costs of vehicle service drivers in Cost Segment 8.

12.1.5 Incremental Costs

The costs for personnel performing maintenance on city delivery vehicles, rural delivery vehicles, expedited delivery vehicles, and vehicle service vehicles are variable to the same degree as the costs for the personnel using the vehicles. The incremental costs are calculated in the same manner as those for city delivery carriers, rural delivery carriers, expedited delivery personnel, and vehicle service drivers.

12.2 SUPPLIES AND MATERIALS

12.2.1 Description and Rationale for Classification

The costs in this component are for supplies and services used in vehicle maintenance work performed by motor vehicle service personnel as described in section 12.1. The subcomponent shares for supplies and material costs are also derived directly using the billings compiled in VMAS as described 12.2.1.

12.2.2 Accrued Costs

Costs are obtained from accounts 52150, 52151, 52153, 52170, 52240, 52951, 52953, 52955, 54543, 54545, 54546, 54547 and 54913 are apportioned to the six subcomponents by the same process used for personnel described in section 12.1.2. City Delivery Carrier Vehicles - Letter Routes are further apportioned among delivery functions as described for personnel costs in section 12.1.2.

12.2.3 Volume Variable Costs

Accrued costs for the six subcomponents are determined to be volume variable in the manner described for the costs of the corresponding personnel subcomponents in section 12.1.3.

12.2.4 Distribution of Costs

Volume variable costs for the six subcomponents are distributed to classes and subclasses of mail and special services in the manner described for the costs of the corresponding personnel subcomponents in section 12.1.4.

12.2.5 Incremental Costs

The incremental costs for motor vehicle service supplies and services are calculated in the same manner as those in 12.1.5.

12.3 VEHICLE HIRE

12.3.1 Description and Rationale for Classification

The costs covered by this component are for rental of privately-owned and GSA vehicles and exclude equipment maintenance allowances paid to expedited delivery personnel and rural carriers for use of their vehicles (included in Cost Segments 3.4 and 10, respectively). The costs for these rented vehicles, used to supplement the Postal Service owned fleet for which maintenance costs are covered by components 12.1 and 12.2, are dependent upon the number of employees using them and thus are related to volume in the same manner as the employees that use them are related to volume. The costs for this component are grouped for classification analysis into four of the subcomponents used for vehicle maintenance personnel costs in section 12.1.1 on the basis of usage data taken from Postal Service reports.

City Delivery Vehicles - Letter Routes. Costs are apportioned among delivery functions corresponding to city delivery carrier components in Cost Segments 6 and 7 (office, route, access, elemental load, and coverage-related load) on the basis of the costs of those individual components on motorized letter routes. These apportioned costs are separately classified as variable to the same degree as the costs of the corresponding individual components in Cost Segments 6 and 7.

Expedited Delivery Vehicles. Costs are classified as variable to the same degree as expedited delivery salary costs.

Vehicle Service Vehicles. Costs are classified as variable to the same degree as vehicle service driver costs.

Other Vehicles. For the reasons presented in section 12.1.1, the costs of this subcomponent are classified as institutional.

12.3.2 Accrued Costs

The accrued costs for vehicle hire are obtained from account 52459, and apportioned to the five subcomponents on the basis of postal reports. Accrued costs apportioned to City Delivery Carrier Vehicles - Letter Routes are further apportioned among delivery functions corresponding to costs of individual components in Cost Segments 6 and 7 (in-office direct labor and support, route time, access time, elemental load time, and street support time) in proportion to the relative costs of those individual components on motorized letter routes.

12.3.3 Volume Variable Costs

City Delivery Vehicles - Letter Routes. Accrued costs of the individual delivery functions are volume variable to same degree as the costs of the corresponding individual components in Cost Segments 6 and 7.

Expedited Delivery Vehicles. Accrued costs are volume variable to the same degree as the total salary costs of expedited delivery personnel in Cost Segment 3.4.

Vehicle Service Vehicles. Accrued costs are volume variable to the same degree as the costs of vehicle service drivers in Cost Segment 8.

Other Vehicles. Because costs are classified as institutional, no accrued costs are volume variable.

12.3.4 Distribution of Costs

City Delivery Vehicles - Letter Routes. Volume variable costs of the individual delivery functions are distributed to classes and subclasses of mail and special services in the same proportions as the volume variable costs of the corresponding individual components in Cost Segments 6 and 7.

Expedited Delivery Vehicles. Volume variable costs are distributed to classes and subclasses of mail and special services in the same proportions as the volume variable salary costs of expedited delivery personnel in Cost Segment 3.4.

Vehicle Service Vehicles. Volume variable costs are distributed to classes and subclasses of mail and special services in the same proportions as the volume variable costs of vehicle service drivers in Cost Segment 8.

12.3.5 Incremental Costs

The incremental costs for vehicle hire are calculated in the same manner as those in 12.1.5.

COST SEGMENT 13

MISCELLANEOUS LOCAL OPERATIONS

13.0 SUMMARY

This segment covers certain miscellaneous local operations expenses. They are placed together here for convenience of presentation; for development of volume variable costs they are considered separately as unrelated components. Included are operating costs incurred for contract stations; carfare and drive-out agreements; tolls and ferriage; Federal Reserve Bank and commercial bank charges; employee awards; mail equipment shop; rental allowances for CAG L offices; and other local operations costs, including costs of Purchasing Field Service Centers and Facilities Field Offices.

The accrued costs of this segment in FY 2000 totaled \$356,580 thousand.

13.0.1 Segment Costs

The accounts and booked costs analyzed in this segment are shown in the Fiscal Year 2000 Cost Segments & Components Reconciliation to Financial Statements and Account Reallocations, Cost Segment 13, pages 31-37.

13.0.2 Component Costs

Costs of this segment are classified by component as described below; amounts are summarized in the following table (detail may not add to total due to rounding).

<u>Component</u>	<u>FY 2000 Costs (Thousands)</u>	
	<u>Total Accrued</u>	<u>Volume Variable</u>
13.1 Contract Stations	\$69,351	--
13.2 Carfare, Driveout, Tolls, and Ferriage	61,775	\$8,059
Carfare	54,913	4,697
Driveout	5,387	3,362
Tolls and Ferriage	1,475	--
13.3 Federal Reserve and Commercial Banks	75,497	--
13.4 Employee Awards	59,159	--
13.5 Equipment Shops	34,555	--
13.6 CAG L Rental Allowance	20	--
13.7 Other Local Operations	56,223	--
TOTAL	\$356,580	\$8,059

13.1 CONTRACT STATIONS

13.1.1 Description and Rationale for Classification

Contract stations are a special kind of small office operated by a nonpostal individual under a contract with the Postal Service. These stations sell stamps and accept mail at times and places convenient to the public and provide services similar to the window service available at postal stations, branches, and smaller post offices. Contract stations usually consist of a special counter occupying a part of a small retail store and open for part or all of the store's business hours. The volume of business is normally insufficient to justify a separate postal facility.

The contracts for contract stations are negotiated individually to cover all aspects of the station and its operation under a single stated price. The price typically includes provision of the space and its associated utilities, telephone service if required, and the time and effort for operating and maintaining the postal services. No breakdown of price among these items is required by the contract.

Contract stations vary widely in the hours of business, the volume of business, the amounts and kinds of mail, and the revenue taken in. No data are available to determine a relationship, if one exists, between contract price and the volume of mail. In many cases it is likely that the owner considers it advantageous to have customers enter the store for postal matters, a factor that may affect the price accepted for the contract. Accordingly, the costs associated with contract stations are classified as institutional.

13.1.2 Accrued Costs

The accrued costs of contract stations are obtained from account 52301.

13.1.3 Volume Variable Costs

Because the costs of this component are classified as institutional, no accrued costs are volume variable.

13.1.4 Incremental Costs

There are no incremental costs for contract stations.

13.2 CARFARE, DRIVEOUT, TOLLS, AND FERRIAGE

13.2.1 Description and Rationale for Classification

This component covers the costs of carfare, drive-out agreements, tolls, and ferriage. Carfare and drive-out agreements are made with city delivery carriers, expedited delivery personnel, and postmasters for reimbursement of certain transportation expenses. Carfare represents costs of reimbursement for employees' use of public transportation while serving their routes. Drive-out agreements represent amounts paid to city delivery carriers for using their personal vehicles to travel between their offices and routes. Carfare and drive-out costs are developed for the affected crafts on the basis of data recorded on Form 30. The accrued costs are considered variable to the same degree as the costs of city delivery carrier foot routes and expedited delivery personnel. Thus, they are volume variable separately based on the costs developed for the city delivery carriers (Cost Segments 6 and 7) and expedited delivery personnel (Cost Segment 3).

Costs for tolls and ferriage are incurred from reimbursements of vehicle service drivers for bridge, ferry, and highway tolls paid during the local transportation of mail. These costs are a consequence of the particular trips and routes over which mails are transported, which are primarily service factors. These factors reflect postal services as a whole rather than the volume of mail carried or the costs of the vehicle service drivers involved. Thus, costs of tolls and ferriage are classified as institutional.

13.2.2 Accrued Costs

The accrued costs of carfare, drive-out agreements, tolls, and ferriage are obtained directly from accounts 52451, 52453, and 52455. The amounts for carfare and drive-out incurred by city delivery carriers as distinct from expedited delivery personnel are determined on the basis of Form 30 data. These costs are then apportioned among functions corresponding to carrier costs in Cost Segments 6 and 7 (office, route, access, and elemental load) on the basis of the foot route related costs for these components.

13.2.3 Volume Variable Costs

The accrued costs of carfare and drive-out associated with city delivery carriers are volume variable to the same degree as costs of the associated carrier foot routes (Cost Segments 6 and 7).

The accrued costs of carfare and drive-out associated with expedited delivery personnel are volume variable to the same degree as expedited delivery work costs (Cost Segment 3).

13.2.4 Distribution of Costs

Volume variable costs of carfare and drive-out are distributed separately to classes and subclasses of mail and special services with respect to those costs related to city delivery carriers and those related to expedited delivery personnel. The city delivery carrier costs are distributed to classes and subclasses of mail and special services in the same proportions as the volume variable costs of the corresponding individual city delivery carrier components in Cost Segments 6 and 7. The expedited delivery personnel costs are distributed to classes and subclasses of mail and special services in the same proportions as the volume variable costs of expedited delivery work in Cost Segment 3.

13.2.5 Incremental Costs

The incremental costs for carfare and drive-out are calculated in the same manner as the incremental costs for city carriers in Cost Segments 6 and 7.

13.3 FEDERAL RESERVE AND COMMERCIAL BANKS

13.3.1 Description and Rationale for Classification

Federal Reserve Banks process the redemption of Postal Service bonds.¹ Commercial banks maintain bank accounts for Postal Service offices throughout the country. The charges for these banking services are not significantly related to mail volume. Rather, they reflect other factors affecting the number of Postal Service bondholders and offices. Thus, the costs of this component are classified as institutional.

¹ Postal Service bonds were called in 1992; however, some bonds remain outstanding.

13.3.2 Accrued Costs

Accrued costs are obtained directly from account 52424.

13.3.3 Volume Variable Costs

Because the costs of this component are classified as institutional, no accrued costs are volume variable.

13.4 EMPLOYEE AWARDS

13.4.1 Description and Rationale for Classification

Costs for employee awards are related to the performance of individuals rather than to the volume of mail. They primarily reflect management decisions for improving morale and efficiency. Therefore, the costs of this component are classified as institutional.

13.4.2 Accrued Costs

The accrued costs of employee awards are obtained from accounts 51313, 51315, 51321, 51323, and 51337.

13.4.3 Volume Variable Costs

Because the costs of this component are classified as institutional, no accrued costs are volume variable.

13.5 EQUIPMENT SHOPS

13.5.1 Description and Rationale for Classification

This component covers the costs of employees in the Mail Equipment Shop (MES) and supplies issued from the MES, in addition to vendor freight charges. The MES, located in Washington, DC, is operated by the Postal Service to manufacture mailbags and related locks, keys, and miscellaneous hardware. (Most costs are incurred from manufacturing locks and keys.) These items provide security for mail in collection boxes, post office boxes, postal vehicles, and contract highway service vehicles in accordance with standards established by the Postal Inspection Service. Their costs are related primarily to security standards governing the design of the equipment rather than the volume of mail. Therefore, the costs of this security equipment are classified as institutional.

A portion of the costs of the MES is connected with manufacturing mailbags. Anticipated requirements for mailbags are determined by the Operations Support based on factors such as the rate of return of bags from overseas, the relative use of alternative forms of mail-carrying equipment, and current inventory levels. Because these factors are not a function of mail volume, this cost is classified as institutional.

13.5.2 Accrued Costs

Accrued costs for MES are obtained directly from accounts 52155, 52156, and 52801 and subaccount .142.

13.5.3 Volume Variable Costs

Because the costs of this component are classified as institutional, no accrued costs are

volume variable.

13.6 CAG L RENTAL ALLOWANCE

13.6.1 Description and Rationale for Classification

Postmasters at CAG L post offices are reimbursed for facilities used for Postal Service business in two different ways. Costs incurred under one system, which was established in 1973, are included in the "rents" component of Cost Segment 15. Costs for the other system of reimbursement are treated in this component of Cost Segment 13.

Prior to March 3, 1973, all postmasters at CAG L offices received an amount equal to 15 percent of their base pay as reimbursement for the provision of space and related items for the transaction of Postal Service business. Under the new system established on that date in 1973, annual reimbursements are based on prevailing rental rates in local communities for facilities provided.

At the time of conversion, each postmaster had the option of continuing to be reimbursed at 15 percent of base pay for his or her grade level but was permitted to convert to the new system at any time. However, amounts to be paid under the old system are fixed at 15 percent of the base amount of pay for each grade level as of that date. Subsequent changes to higher grade levels cause no change in the allowances; changes to lower levels result in lower reimbursements.

These costs have declined substantially since 1973 and will continue to do so as postmasters paid on a percentage basis retire, resign, or convert to the new system. Because the terms under which these reimbursements are provided insulate these costs from the effects of changes in mail volume, they are classified as institutional.

13.6.2 Accrued Costs

The accrued costs for CAG L rental allowance are obtained directly from account 54127.

13.6.3 Volume Variable Costs

Because the costs of this component are classified as institutional, no accrued costs are volume variable.

13.7 OTHER LOCAL OPERATIONS

13.7.1 Description and Rationale for Classification

The remaining costs in this segment are personnel costs for Purchasing Field Service Centers and Facilities Field Offices. Purchasing Field Service Centers are responsible for such matters as vehicle hire and maintenance contracting, food service and cleaning services contracting, and supply management. Facilities Field Offices are responsible for matters such as facility planning, engineering specifications, and the acquisition and disposition of owned and leased properties. The costs in this component are unrelated to mail volume and therefore are classified as institutional.

13.7.2 Accrued Costs

The accrued costs for other local operations costs are obtained directly from subaccounts .146 and .148.

13.7.3 Volume Variable Costs

Because the costs of this component are classified as institutional, no accrued costs are volume variable.

COST SEGMENT 14

TRANSPORTATION

14.0 SUMMARY

This segment covers the costs of transportation procured by contract from air carriers, as well as trucking, rail, and shipping companies. A given contract is usually limited to transportation covering a geographic area or route structure under a set schedule of transportation services and rates.

In addition to the actual transportation, contracts often include the incidental handling of mail and containers at terminals and transfer points, charges for terminal dues, and other expenses. Particular activities and conditions of service may also be incorporated. For example, some contracts combine point-to-point carriage of mail in bulk with mail delivery to individual customers. Highway contracts especially may include provisions for occasional extra trips and other temporary arrangements that are needed to deal with unusual transportation requirements.

The accrued costs of this segment in FY 2000 totaled \$4,721,374 thousand.

14.0.1 Segment Costs

Within the postal system of accounts, distinctly numbered accounts are maintained for each of the principal modes of transportation and related expenses. Additional cost information is obtained from collateral memos and studies. The accrued costs of the recognized categories of transportation are obtained directly from trial balances of the appropriate accounts, adjusted as necessary by data from the collateral memos and studies. Determinations of volume variable costs of purchased transportation require detailed considerations of the particular mail classes involved in the different transportation arrangements. In the present development, each distinct transportation mode is regarded as a separate cost component. The costs for each component are developed and distributed quarterly. Details of the accounts and booked costs analyzed in this segment are shown in the Fiscal Year 2000 Cost Segments & Components Reconciliation to Financial Statements and Account Reallocations, pages 38-42.

14.0.2 Component Costs

Costs of this segment are classified by component as described below; amounts are summarized in the following table (detail may not add to total due to rounding).

<u>Component</u>	<u>FY 2000 Costs (Thousands)</u>	
	<u>Total Accrued</u>	<u>Volume Variable</u>
14.1 Domestic Transportation	\$4,144,239	\$3,391,391
Air Transportation	1,682,775	1,347,563
Highway Transportation	2,154,965	1,741,196
Railroad Transportation	276,739	275,031
Water Transportation	29,757	27,600
14.2 International Transportation	577,135	634,092
TOTAL a/	\$4,721,374	\$4,025,483

a/ Total accrued costs include Product Specific Costs which are shown in Appendix I, Table I-1.

14.1 DOMESTIC TRANSPORTATION

14.1.1 Air Transportation

14.1.1.1 Description and Rationale for Classification

Domestic air transportation consists of the air conveyance of mail throughout the 50 states (and Puerto Rico) by scheduled commercial air carriers, network contract arrangements, and air taxi operators. Mail is carried primarily on scheduled commercial airlines; air taxis are used for times and places where suitably scheduled flights are unavailable or inadequate. The network contracts provide weekday transportation between high-volume cities. A separate network and related air taxis also operate during the two weeks prior to Christmas to provide airlift for seasonal peak volumes. Generally, air transportation is confined to preferential mail, but all types of mail, preferential and nonpreferential, are carried by air, especially within Alaska and Hawaii. Differences among kinds of mail and transportation routes are taken into account by developing costs separately in five categories: Passenger Air; Network; Daynet and HASP; Christmas; Alaska and Hawaii; and Air Taxi.

Passenger Air. By far the most common kind of domestic air transportation, passenger air costs include system carriage of loose parcels, sacks, trays, and containers. Under contracts with individual carriers, the Postal Service purchases transportation on any part of a carrier's system at a uniform linehaul rate applicable to all carriers. Individual carriers are paid a terminal handling rate per pound and a linehaul rate per pound-mile. System costs are regarded as fully variable with volume. Other miscellaneous costs included in this component are: (a) commuter and Pacific airline costs, (b) emergency and temporary air transportation costs and (c) miscellaneous adjustments, claim adjustments, personnel screening expenses, and the passenger air portion of excise tax costs. Each of these costs is treated as fully volume variable.

Network. Network costs are for the Eagle and Western Networks, both of which are air mail hub-and-spoke operations providing transportation of mail among cities with high mail volumes. Under the network contracts, all aircraft provided by the carrier are fully dedicated to network transportation and costs are incurred on a per-trip basis without regard to the mail volume carried. The volume variability of network costs is determined in two steps. First, the hypothetical cost of providing the equivalent service via passenger air is determined. These costs are variable with volume. Remaining, "premium" costs are incremental to Express Mail. A portion of excise tax costs is also included.

Daynet and HASP: Daynet costs are incurred by the use of aircraft (and ground support operations) dedicated to the transportation of mail. Unlike the Eagle and Western networks, these aircraft operate during the daytime with the mission of improving service for mail with a two- or three-day service commitment (i.e., First-Class and Priority Mail). Daynet costs are incurred on a per trip basis. The cost of the Daynet is treated as fully volume variable. Certain costs associated with the Hub and Spoke (HASP) operations at the Indianapolis hub are provided under the TNET (Eagle ground support) contract. Like the costs of the Daynet, HASP costs are incurred to improve service for two- and three-day mail. In addition to these costs, a portion of excise tax is included.

Christmas. Network and air taxi costs for Christmas air operations are separately identified. The hub and spoke network costs are incurred in the same fashion as Eagle and Western Network costs. Christmas air taxis are incurred in the same fashion as air taxis discussed below. A portion of excise tax is also included. As with the Eagle and Western networks, the volume variability of the network elements of this category is determined in two steps. Passenger-air-equivalent costs are calculated. These costs are variable with volume. The remaining "premium" costs are incremental to Priority Mail. The volume variability of the air taxi elements of this category is developed in the same fashion as described below for Air Taxi.

Alaska and Hawaii. This air transportation category involves loose sacks and containers but is distinct from the foregoing category (other than in the geographical areas of operation) because it is not restricted to the preferential mail classes. Different, regulated rates are charged for preferential and nonpreferential transportation within these two states. Otherwise, the costs of this transportation category are similarly incurred with regard to the volume of mail carried. As with Passenger Air, portions of excise tax costs are allocated to the Alaska and Hawaii category. Preferential Alaska and Hawaii costs are classified as fully variable with volume. Nonpreferential Alaska air costs are adjusted as follows. Nonpreferential Alaska costs equivalent to highway service are treated as fully variable with volume; costs above and beyond equivalent highway service are treated as institutional.

Air Taxi. Air taxi transportation, used between points where regularly scheduled transportation suitable to meet mail service standards is not available, is obtained on a negotiated trip-mile basis from individual contractors. Costs, which are incurred on the basis of plane miles per trip, are classified as fully variable with volume. A portion of excise taxes is included in this category as well.

14.1.1.2 Accrued Costs

The accrued costs of domestic air transportation are obtained directly from the pertinent accounts and from specific collateral memos. They are developed separately for each distinct category as follows:

Passenger Air. Accrued costs for system contracts are obtained from accounts 53501, 53503, 53505, 53509, 53511, 53513, 53593, and 53903. Other miscellaneous accrued costs in this component are obtained from accounts 53108, 53519, 53906, 53571, 53573, 53588, 53589, 53591, 53595, and 53599 (portion).

Network. Accrued costs are obtained from portions of accounts 53541, 53543, 53545, 53546, 53547, and 53599.

Daynet and HASP: Accrued costs are obtained from accounts 53521, 53523, 53525, 53527, 53529, and 53531. Additional accrued costs are obtained from portions of accounts 53541, 53543, 53545, 53546, 53547, and 53599.

Christmas. Supplemental Christmas service costs are obtained from accounts 53542, 53544, 53552, 53554, and portions of portions of accounts 53541, 53543, and 53599.

Alaska and Hawaii. Intra-Alaska costs for preferential transportation (paid to carriers at the priority rate) include costs for mainline linehaul (53564) and terminal handling (53568) and bush linehaul (53563) and terminal handling (53567). Intra-Alaska nonpreferential costs (incurred at the nonpriority rate for mainline carriers and, by order of the Department of Transportation, at the priority rate for bush carriers) include costs for mainline linehaul (53562) and terminal handling (53566) and bush linehaul (53561) and terminal handling (53565). Intra-Hawaii costs for preferential transportation (paid to carriers at the priority rate) are obtained from account 53585. Intra-Hawaii non-preferential costs include costs for linehaul (53581) and terminal handling (53583). Also, Alaska and Hawaii bears a portion of excise tax costs from 53599.

Air Taxi. Accrued costs are obtained from accounts 53551, 53553, and 53599 (portion).

14.1.1.3 Volume Variable Costs

Accrued costs for domestic air transportation are volume variable as described in section 14.1.1.1.

14.1.1.4 Distribution of Costs

The volume variable costs of domestic air transportation are distributed as follows:

Passenger Air. Volume variable costs are distributed to classes and subclasses of mail on the basis of pound-mile data obtained from the Transportation Cost System (TRACS).

Network. Volume variable costs are distributed to classes and subclasses of mail on the basis of pound-miles developed from network data by airclass and TRACS mail subclass data by airclass.

Daynet and HASP. Volume variable costs are distributed to classes and subclasses of mail on the basis of pound-miles developed from Daynet data by airclass and TRACS Passenger Air and Eagle Network mail subclass data by airclass.

Christmas. Volume variable costs are distributed to classes and subclasses of mail on the basis of pound-miles developed from Christmas network data by airclass and TRACS Passenger Air and Eagle Network mail subclass data by airclass.

Alaska and Hawaii. Volume variable intra-Alaska and intra-Hawaii costs are distributed to classes and subclasses of mail on the basis of pound-miles developed by special studies.

Air Taxi. Volume variable costs are distributed to classes and subclasses of mail on the basis of the composite of the costs of the other domestic air categories.

14.1.1.5 Incremental Costs

Incremental costs for air transportation equal volume variable costs, except for premium network costs. Premium costs for operating the Eagle and Western Networks are product specific to Express Mail. Premium costs for operating the Christmas Network are product specific to Priority Mail. Product specific costs are shown in Appendix I, Table I-1.

14.1.2 Highway Transportation

14.1.2.1 Description and Rationale for Classification

Highway Transportation is divided into nine categories: intra-SCF (Sectional Center Facility); inter-SCF; intra-BMC (Bulk Mail Center); inter-BMC; plant load; contract terminal and van damage; area bus; empty equipment; and Alaskan highway. Within the intra-SCF category,

contracts that provide intra-city transportation, rural box service, other transport by van, and other transport by tractor-trailer are all treated separately in the estimation of variability. The weighted average of these variabilities is used as the variability of intra-SCF contracts. Within inter-SCF transportation, variabilities are separately estimated for inter-SCF contracts provided by tractor-trailer and all other vehicle types. The weighted average of these two variabilities is used as the variability of inter-SCF contracts. All of these categories of transportation are procured from individual firms under similar contracts that prescribe general conditions of transportation service; they are distinguished because they involve different kinds of mail, equipment, and service areas. Procurement of highway transportation is by competitive bidding for individual contracts. Vendors are asked to provide a certain schedule of transportation, vehicle capacities, and times and numbers of trips per day and week. Provisions are often included for extra trips (at extra cost) from time to time as conditions dictate. Most regular contracts are placed for four-year periods; they are frequently renewed at term and changes may be negotiated within the contract period at the request of the contractor or the Postal Service. Additional emergency contracts are temporary in nature and may have a term of up to two years. Exceptional contracts cover emergency situations. Plant load contracts provide on-call or scheduled one-way transportation. In all, thousands of contracts and contractors are involved to provide a nationwide highway network of routes and trips geared to Postal Service requirements for timely and reliable transportation.

Variabilities of costs for contracts providing five categories of highway transportation — intra-SCF, inter-SCF, intra-BMC, inter-BMC, and plant load — are developed by regressing contract annual cost against annual contract cubic-foot-miles of capacity and route length. The variability of the "rural feature" cost of intra-SCF transportation is developed by regressing annual pay against the number of boxes, the number of miles, and the route length.

Area bus transportation costs are incurred on an actual load basis and are classified as fully variable. Costs of contract terminals and van damage are considered to vary to the same degree as plant load and inter-facility transportation. The cost of hauling empty equipment is considered to vary to the same degree as all other highway transportation costs.

14.1.2.2 Accrued Costs

The accrued costs of contract highway transportation are developed directly from the pertinent accounts and collateral memos as follows:

Intra-SCF. Accrued costs are obtained from accounts 53119, 53121-53123, and 53601-53608.

Inter-SCF. Accrued costs are obtained from accounts 53124-53126, 53609, 53611-53619, 53621-53622, 53625-53626, and 53101.

Intra-BMC. Accrued costs are obtained from accounts 53127-29, (excluding the portion for Alaskan highway transportation), 53136, and 53623.

Inter-BMC. Accrued costs are obtained from accounts 53131-33 and 53624.

Account 53905 is distributed among the foregoing subcomponents on a pro rata basis.

Plant Load. Accrued costs are obtained from accounts 53134 and 53135.

Contract Terminal and Van Damage. Accrued costs are obtained from accounts 53137, 53138, and 53163.

Area Bus. Accrued costs are obtained from account 53139.

Empty Equipment. Accrued costs are obtained from account 53191 and 53194.

Alaskan Highway. Accrued costs are obtained from a portion of accounts 53127-29 (based on collateral data).

14.1.2.3 Volume Variable Costs

Accrued costs for domestic highway transportation are volume variable to the degree described in section 14.1.2.1.

14.1.2.4 Distribution of Costs

Cost distributions are based on data developed by the Transportation Cost System (TRACS) and RPW statistics. Costs for the following four categories of highway transportation are distributed on the basis of four separate sets of TRACS data:

Intra-SCF. Volume variable costs are distributed to classes and subclasses of mail on the basis of TRACS intra-SCF cubic feet. Distribution of TRACS data within Periodicals is performed on the basis of RPW statistics.

Inter-SCF. Volume variable costs are distributed to classes and subclasses of mail on the basis of TRACS inter-SCF cubic-foot-miles.

Intra-BMC. Volume variable costs are distributed to classes and subclasses of mail on the basis of TRACS intra-BMC cubic-foot-miles.

Inter-BMC. Volume variable costs are distributed to classes and subclasses of mail on the basis of TRACS inter-BMC cubic-foot-miles.

Plant Load. Volume variable costs are distributed to classes and subclasses of mail on the basis of data from a study of plant load mail.

Contract Terminal and Van Damage. Volume variable costs are distributed to classes and subclasses of mail in the same proportions as the composite of the five preceding cost distributions.

Area Bus. Volume variable costs are distributed to preferential classes and subclasses of mail on the basis of the TRACS Amtrak distribution key.

Alaskan Highway. Volume variable costs are distributed to classes and subclasses of mail in the same proportions as the composite of the costs for highway inter-BMC transportation in this subcomponent and for railroad freight train transportation in the following subcomponent.

Empty Equipment. Volume variable costs are distributed to classes and subclasses of mail in the same proportions as the composite of the all cost distributions other than those for empty equipment across all modes of domestic transportation.

14.1.2.5 Incremental Costs

The constant elasticity method is used to calculate Intra-SCF, Inter-SCF, Intra-BMC, Inter-BMC, and Plant Load highway transportation incremental costs. Incremental costs for Contract Terminal and Van Damage are calculated in the same manner as the proceeding five activities, in proportion to the costs in each activity. Alaska Highway incremental costs are calculated in the same manner as incremental costs for Inter-BMC and Freight Rail, in proportion to the costs in each activity. Empty Equipment incremental costs are calculated in the same manner as all other transportation activities, in proportion to the costs in each activity.

14.1.3 Railroad Transportation

14.1.3.1 Description and Rationale for Classification

Railroad transportation includes conveyance by passenger and freight train and related terminal services. The mail is carried primarily in containers on passenger trains and by trailers on flat cars by freight trains. Passenger train costs are determined by the linear feet of space used and the miles traveled. Freight train costs are determined by the number and size of trailers transported and the miles traveled.

Costs are developed separately for five categories: passenger train, Roadrailer on passenger trains, freight train, plant load, and empty equipment.

Variability of freight train costs is developed by regressing contract costs against cubic-foot-miles and route length. Freight plant load and empty equipment are considered to vary to the same degree as freight train costs. Costs associated with passenger transportation are classified as fully variable.

14.1.3.2 Accrued Costs

The accrued costs of railroad transportation are obtained as follows:

Passenger Train. Accrued costs are obtained from account 53142, less estimated Roadrailer costs, described below

Roadrailer: Accrued costs are obtained from a special study of Roadrailer activity.

Freight Train. Accrued costs are obtained from accounts 53143, 53146, 53147, 53148, 53165, 53909, and 53913.

Plant Load. Accrued costs are obtained from account 53145.

Empty Equipment. Accrued costs are obtained from account 53192.

14.1.3.3 Volume Variable Costs

Accrued costs for domestic railroad transportation are volume variable to the degree described in section 14.1.3.1.

14.1.3.4 Distribution of Costs

Passenger Train. Volume variable costs are distributed to classes and subclasses of mail on the basis of TRACS Amtrak data.

Roadrailer: Volume variable costs are distributed to classes and subclasses of mail on the basis of a special study.

Freight Train. Volume variable costs are distributed to classes and subclasses of mail on the basis of TRACS freight rail cubic-foot-miles.

Plant Load. Volume variable costs are distributed to classes and subclasses of mail on the basis of data from a study of plant load mail.

Empty Equipment. Volume variable costs are distributed to classes and subclasses of mail in the same proportions as the composite of the all cost distributions other than those for empty equipment across all modes of domestic transportation.

14.1.3.5 Incremental Costs

The constant elasticity method is used to calculate rail transportation incremental costs for Freight Train and Plant Load. Incremental costs are equal to volume variable costs for Roadrailleurs and Passenger Train. Empty Equipment incremental costs are calculated in the same manner as the composite of all other transportation costs, in proportion to the amount of cost in each activity.

14.1.4 Water Transportation

14.1.4.1 Description and Rationale for Classification

Domestic water transportation consists of inter-city conveyance in some mainland and lake locations and offshore conveyance between the continental United States and Puerto Rico and Hawaii. This transportation, which is procured under contracts with private shippers, includes both linehaul transportation of mail in containers and rural feature, box delivery, and pickup services. Linehaul costs, which are incurred on the basis of ton-miles, are classified as fully variable. The costs of rural features, box delivery, and pickup service are classified as institutional.

14.1.4.2 Accrued Costs

The accrued costs of domestic water transportation are obtained from accounts 53183 and 53184.

14.1.4.3 Volume Variable Costs

Accrued costs incurred for inter-city linehaul transportation and that portion associated with offshore services, are fully variable with volume.

14.1.4.4 Distribution of Costs

Volume variable inter-city linehaul costs are distributed to classes and subclasses of mail on the basis of TRACS highway intra-SCF segment cubic-foot data. Volume variable offshore transportation costs are distributed to classes and subclasses of mail in the same proportions as the composite of highway inter-BMC and railroad freight train costs.

14.1.4.5 Incremental Costs

Water transportation costs are either fully volume variable or fully institutional. Incremental costs equal volume variable costs for water transportation.

14.2 INTERNATIONAL TRANSPORTATION

Volume variable costs of international transportation are obtained from accounts 53201, 53208, 53212, 53217, 53225-53228, 53261-53265, 53268-53269, 53281-53286, 58301-58302, 53633, and 53271. The development and distribution of volume variable costs of international transportation are not described in this document.

Incremental costs equal volume variable costs for international transportation.

COST SEGMENT 15

BUILDING OCCUPANCY

15.0 SUMMARY

This segment covers expenses for renting and leasing facilities (space provision); fuel and utilities (space support); communications services; and improvement of facility-related working conditions. Space provision expenses for other than rents are treated in other segments, i.e., interest and building depreciation (Cost Segment 20). Likewise, space support expenses for other than fuel and utilities are treated in other segments, i.e., custodial services and building equipment maintenance (Cost Segment 11), space-related supplies and services (Cost Segment 16), and building security (Cost Segments 11 and 18).

The accrued costs of this segment in FY 2000 totaled \$1,555,946 thousand.

15.0.1 Segment Costs

The accounts and booked costs analyzed in this segment are shown in the Fiscal Year 2000 Cost Segments & Components Reconciliation to Financial Statements and Account Reallocations, pages 43-45.

15.0.2 Component Costs

Costs of this segment are classified by component as described below; amounts are summarized in the following table (detail may not add to total due to rounding).

<u>Component</u>	<u>FY 2000 Costs (Thousands)</u>	
	<u>Total Accrued</u>	<u>Volume Variable</u>
15.1 Rents	\$720,874	\$719,149
15.2 Fuel and Utilities	466,339	286,081
15.3 Communications and Other Expenses	368,733	--
TOTAL a/	\$1,555,946	\$1,005,230

a/ Total accrued costs include Product Specific Costs which are shown in Appendix I, Table I-1.

15.1 RENTS

15.1.1 Description and Rationale for Classification

Studies indicate that the costs of providing facilities for postal operations vary with the workspace requirements of the underlying postal operating functions.¹ The variable costs of space-related building occupancy are developed through analysis of the space occupied by each functional operation and the volume-related characteristics of the underlying work activities.

¹ See Docket No. R76-1, USPS-T-9 and USPS-T-16.

Volume variable space provision costs for rents are based in part on current market rental costs, which reflect true economic costs. They are developed in conjunction with other space provision costs, i.e., interest expense and depreciation expense (Cost Segment 20). The volume variable costs for facility space are calculated using the current market rental value in place of the accrued costs for rents, interest expense, and depreciation. Variabilities, described below, are applied to the current market rental value or imputed rents for Postal Service facilities. To the extent these volume variable costs exceed accrued costs (in large part because current market rents often exceed actual rents which were set many years ago), volume variable costs are capped or set equal to accrued cost for rents, interest expense and depreciation.²

The attribution and distribution discussed below involve determining the Postal Service facility space for the 53 categories listed in Appendix F, Table F-3, based on a 1992 space survey, and determining imputed rents for this space.³ Appendix F, Table F-4, shows the estimated FY00 square feet and market rents by category, which is developed using the 1992 facility space survey.

15.1.2 Accrued Costs

Accrued costs are obtained from accounts 54101, 54103, 54105, 54121, 54129, 54133, 54150, 54951, 54953, and 56920.

15.1.3 Volume Variable Costs

Current market rental costs (imputed rents) for space provisions are developed by a three-part process. First, total imputed rents are determined by the attribution and distribution procedures described below. Second, the attributed and distributed imputed rent cost is apportioned to this component, interest expense and depreciation (Cost Segment 20) based upon the proportions of accrued costs of rents, interest expense, and depreciation. Finally, if the above calculated volume variable cost for space provision exceeds the accrued cost, then the volume variable costs for this component, interest expense and depreciation are set equal to accrued cost.

Total imputed rent costs are determined by a three-step procedure:

- (1) Current year square feet of facility space are apportioned to 53 individual functions or categories listed in Appendix F, Table F-3, on the basis of a 1992 survey of space usage and information on equipment deployments since 1992, as provided in Appendix F, Table F-4;
- (2) Current market rental rates for Postal Service facilities are estimated based on rental rates and acquisition costs for facilities leased and purchased during the 1981 to 1991 period. These data are used to impute the current market rental value per square foot for different types of facilities (e.g., major processing, stations, and branches). These rental rates are adjusted using the DRI residential rental index to reflect changes in rental rates since 1992.

² See PRC Opinion and Recommended Decision in Docket R90-1.

³ This work is described in Foster Associates, Inc., Facility Cost Development Update, December 1993.

(3) The results of steps 1 and 2 are combined (square feet times rental rates per square foot) to determine the imputed rents for each of the 53 categories as shown in Appendix F, Table F-4.⁴

Current market rental costs or imputed rents for the 53 categories are volume variable as follows:⁵

Lobby. Current market rental costs for window service space are classified as variable to the same degree as the costs of window service in Cost Segment 3; costs for post office box space are classified as fully variable with the number of boxes rented. Self-service postal center space is institutional.

Mail Processing. Imputed rents for BMC and parcel sorting related categories are 70 percent variable as previously established. These categories are identified in Appendix F, Table F-3, as follows:

- 18. Parcel Sorting Machine (PSM) and Non-Machinable Object (NMO) Machine
- 22. Sack Sorting Machine
- 23. Small Parcel and Bundle Sorter (SPBS)
- 25. Multislide
- 33. Sorting to Rolling Containers

Costs for the categories Express Mail, Priority Mail, and Registry are fully variable. Costs for the remaining mail processing categories listed in Appendix F are 80 percent variable.

Mail Delivery Space. Current market rental costs for mail delivery space are classified separately as variable to the same degree as the respective salary costs of city delivery carriers in Cost Segments 6 and 7, special delivery messengers in Cost Segment 9, and rural carriers in Cost Segment 10. Accountables cage variability is the salary-weighted average of city, rural and special delivery costs.

Platform. Costs for platform are fully variable.

Administrative and Support. Office space is as variable as the salary costs for the non-headquarters and non-area administrative personnel using the space. Mail Processing Equipment and Other Equipment Maintenance costs are also as variable as the maintenance personnel costs for this equipment. Employee Facilities costs are as variable as all personnel costs (excluding headquarters and area offices). VMF space is as variable as the motor vehicle service personnel costs in Cost Segment 12. Mail Transport Equipment Center space is also as variable as the clerks and mailhandlers working at them, which is set as the overall average mail processing labor variability. The remaining categories are institutional.

Attributed imputed rents exceeded accrued costs in FY 2000 and so attributed imputed rents are capped in the aggregate equal to accrued costs for space provision. The attributed imputed rents for each of the 53 categories are reduced by the ratio of attributed imputed rents to accrued costs in order to cap imputed rents. Rents associated with the International Business Unit are treated as a product specific cost and are discussed in Appendix I.

⁴ Facility Cost Development Update, December 1993.

⁵ These variabilities stem from Docket No. R76-1, USPS-T-9 and USPS-T-16. Variabilities for new categories stemming from the 1992 space survey were the same as the most similar former category.

15.1.4 Distribution of Costs

Lobby. Volume variable costs for window service space are distributed to classes and subclasses of mail and special services in the same proportions as the volume variable costs of window service in Cost Segment 3. Volume variable costs for post office box service are directly distributed to that special service.

Mail Processing. Volume variable costs for facility space for mail processing equipment are distributed to classes and subclasses of mail and special services in the proportions described in section 20.1.4 for the depreciation of these types of equipment. Volume variable workroom space costs for Express Mail and Priority Mail are directly distributed to these classes and special services. Volume variable costs for the other mail processing categories are distributed in the same proportions as IOCS tallies for the related work.

Mail Delivery Space. Volume variable costs for mail delivery space are distributed to classes and subclasses of mail and special services in the same proportions as the respective salary costs of city delivery carriers in Cost Segments 6 and 7, special delivery messengers in Cost Segment 9, and rural carriers in Cost Segment 10. Accountables cage distribution is based on the combined distribution of these delivery personnel costs.

Platform. Platform costs are distributed in the same proportions as the platform and bulk mail acceptance unit personnel.

Administrative and Support. Volume variable costs for mail processing equipment maintenance space are distributed to classes and subclasses of mail and special services in the proportions described in Cost Segment 11 for USPS mail processing equipment maintenance personnel. Volume variable costs for vehicle maintenance are distributed to classes and subclasses of mail and special services in the same proportions as the volume variable costs of motor vehicle service personnel in Cost Segment 12.

Volume variable costs for administration space are distributed to classes and subclasses of mail and special services in the same proportions as the composite of all volume variable costs in Cost Segment 1 and certain volume variable costs in Cost Segment 2 (higher level supervisors) and Cost Segment 3 (clerks performing claims and inquiry, time and attendance, data collection, quality control and revenue protection, and general office and clerical work).

Employee facilities space costs are distributed based on the combined distribution of all non-headquarters and area office personnel or all volume variable personnel costs. Mail Transport Equipment Centers costs are distributed based on all mail processing labor cost distribution.

15.1.5 Incremental Costs

Incremental costs for rents equal volume variable costs, except for product specific costs associated with Priority and International mail. Product specific costs are shown in Appendix I, Table I-1.

15.2 FUEL AND UTILITIES

15.2.1 Description and Rationale for Classification

Fuel and utilities costs are incurred mainly for various heating fuels, electricity, and water. If design factors and related considerations are held constant, then fuel and utility and other space support costs will vary with facility space requirements. Therefore, to the extent that

facility space provision costs are variable with changes in mail volume, so are fuel and utility costs and other space support costs. Fuel and utility and other space support costs are developed in the same manner, and are determined to be variable to the same degree, as space provision costs, described in section 15.1.1.

15.2.2 Accrued Costs

Accrued fuel and utilities costs are obtained from accounts 54142, 54143, 54144, 54151, 54152, 54153, 54156, and 56607.

15.2.3 Volume Variable Costs

Fuel and utility and other space support costs are apportioned among the 53 categories listed in Appendix F, Table F-3, on the basis of relative square footage of space usage as shown in Appendix F, Table F-4. The fuel and utility costs for each category are volume variable to the same degree as space provision costs are classified as variable in section 15.1.3.

15.2.4 Distribution of Costs

Volume variable fuel and utilities costs are distributed to classes and subclasses of mail and special services in the same proportions as volume variable space provision costs described in section 15.1.4.

15.2.5 Incremental Costs

Fuel and utilities costs are apportioned to 53 space-related categories. 35 of these categories are associated with mail processing equipment and operations. The constant elasticity method is used to calculate the incremental costs for these categories. The incremental costs for six categories - rural carriers, window service, city carriers, special delivery messengers, mail processing equipment maintenance and MTE - are calculated in the same manner as the incremental costs for the personnel using the space.

The remaining space categories are either fully volume variable or fully institutional. Incremental costs equal volume variable costs for these categories.

15.3 COMMUNICATIONS AND OTHER EXPENSES

15.3.1 Description and Rationale for Classification

These space-related building occupancy expenses include such items as telephone and telegraphic services, Postal Service equipment and operations moving expenses, and noncapitalized facility improvements. These requirements have not been found to be influenced significantly by changes in mail volume and are consequently classified as institutional.

15.3.2 Accrued Costs

The accrued costs of this component are the sum of accounts 52315, 52415, 52417, 54135, 54146, 54165, 54167, 54168, 54169, 54221-54223, 54231-54234, 54251, 54404, and 54941.

15.3.3 Volume Variable Costs

Because the costs of this component are classified as institutional, no accrued costs are volume variable.

15.3.4 Incremental Costs

A portion of the costs for communications is product specific to Priority and International mail. Product specific costs are shown in Appendix I, Table I-1.

COST SEGMENT 16

SUPPLIES AND SERVICES

16.0 SUMMARY

This segment covers salaries, benefits, and related costs of supply personnel work; the costs of purchased stamps and accountable paper (e.g., money orders and stamped cards); and the procurement costs of supplies and commercial services (other than costs for contract cleaners in Cost Segment 11). The work covered in this segment also includes the activities of postal personnel at Postal Supply Centers.

The accrued costs of this segment in FY 2000 totaled \$3,317,284 thousand.

16.0.1 Segment Costs

The accounts and booked costs analyzed in this segment are found in the Fiscal Year 2000 Cost Segments & Components Reconciliation to Financial Statements and Account Reallocations, pages 46-51.

16.0.2 Component Costs

Costs of this segment are classified by component as described below; amounts are summarized in the following table (detail may not add to total due to rounding).

<u>Component</u>	<u>FY 2000 Costs (Thousands)</u>	
	<u>Total Accrued</u>	<u>Volume Variable</u>
16.1 Stamps and Accountable Paper	\$180,926	\$180,498
Stamps and Dispensers	174,301	173,873
Money Orders	1,647	1,647
Postal Cards & Embossed Stamped Envelopes	4,978	4,978
16.2 Supply Personnel	\$18,069	—
16.3 Other Supplies and Services	\$3,118,289	\$1,591,309
16.3.1 Custodial and Building	125,468	76,970
16.3.2 Equipment	394,765	247,805
16.3.3 Computerized Tracking/Tracing	602	559
16.3.4 Other Miscellaneous	2,446,880	1,265,968
16.3.5 Advertising	150,567	—
16.3.6 Remote Encoding	7	7
TOTAL a/	\$3,317,284	\$1,771,807

a/ Total accrued costs include Product Specific Costs, which are shown in Appendix I, Table I-1.

16.1 STAMPS AND ACCOUNTABLE PAPER

16.1.1 Description and Rationale for Classification

The costs of this component are incurred for procurement of postage stamps, money orders, stamped cards, embossed stamped envelopes, aerogrammes, migratory bird hunting and conservation stamps, and miscellaneous philatelic items.

The costs incurred for postage stamp procurement vary directly with the number of stamps purchased. If the proportion of stamped mail to nonstamped mail is held constant, the costs of postage stamps will vary directly with volume. Thus, these costs are classified as fully variable.

Like postage stamp costs, the costs for money orders, stamped cards and aerogrammes vary directly with the volumes of these articles. These costs are also classified as fully variable with volume.

Conversely, costs incurred for philatelic items such as stamp albums, migratory bird hunting and conservation stamps exhibit no relationship with volumes of mail and are classified as institutional.

16.1.2 Accrued Costs

The accrued costs for stamps and accountable paper are the sum of the costs shown in accounts 52100, 52140, 52441-52443, and 52449.

16.1.3 Volume Variable Costs

The costs associated with the procurement of postage stamps, money orders, stamped cards and aerogrammes are fully volume variable. To obtain volume variable costs, the costs of miscellaneous philatelic items and migratory bird hunting and conservation stamps are subtracted from the accrued costs.

16.1.4 Distribution of Costs

The costs of money orders (account 52449) are directly distributed to that special service. The costs associated with stamped cards and aerogrammes are directly distributed to First-Class (single piece) cards and international airmail letters and cards categories, respectively. The remaining volume variable costs are distributed to classes and subclasses of mail and special services in the same proportions as the volume variable portion of window service costs for stamp sales (Cost Segment 3).

16.1.5 Incremental Costs

The costs in this component are either fully volume variable or fully non-volume variable. Incremental costs equal volume variable costs.

16.2 SUPPLY PERSONNEL

16.2.1 Description and Rationale for Classification

Supply personnel are stationed at the Western Area Supply Center in Topeka, Kansas, and at the Eastern Area Supply Center in Somerville, New Jersey. The two supply centers maintain and distribute to smaller post offices the numerous supplies, forms, and items of equipment used by these offices.

Supply personnel select, pack, ship, and inventory supplies that are mainly classified as institutional (see discussion in section 16.3). The quantities of these supplies are largely unaffected by changes in mail volume; similarly, the number of personnel required to distribute these supplies is insensitive to mail volume changes. Therefore, the costs of these personnel are classified as institutional.

16.2.2 Accrued Costs

The accrued costs of supply personnel are obtained from subaccount .147.

16.2.3 Volume Variable Costs

Because the costs of supply center personnel are classified as institutional, no accrued costs are volume variable.

16.2.4 Incremental Costs

There are no incremental costs for supply personnel.

16.3 OTHER SUPPLIES AND SERVICES

16.3.1 Description and Rationale for Classification

Costs are grouped into five subcomponents for classification analysis: custodial and building supplies and services, equipment supplies and services, other miscellaneous supplies and services, advertising, and remote encoding supplies and services.

16.3.1.1 Custodial and Building Supplies and Services. These costs are for custodial and building supplies and services for VMFs and other postal facilities. Because these costs tend to vary with the amount of space involved, they are developed in the manner and are determined to be variable to the degree described in section 15.1.3 for space support costs.

16.3.1.2 Equipment Supplies and Services. Costs included here are for spare parts and materials used for the maintenance and repair of mail processing equipment. They are classified as variable to the same degree as the costs of the personnel that use the equipment and therefore are volume variable. Other costs include spare parts and materials for the maintenance and repair of equipment, other than mail processing equipment, such as office machines and furniture, letter boxes, and other postal operations equipment. Because these costs do not vary with volume, they are classified as institutional.

16.3.1.3 Computerized Tracking & Tracing/Delivery Confirmation. These costs are for printing costs of Delivery Confirmation labels.

16.3.1.4 Other Miscellaneous Supplies and Services. These costs are for repair and maintenance of ADP equipment, ADP programming and supplies and paper, contracted ADP services, software preparation, repair and maintenance of all other equipment except vehicles and ADP, supplies and services purchased with credit cards, contractual services other than repairs and maintenance and miscellaneous postal supplies and services, printing, inventory adjustments, and supplies and services for expedited and international mail, and other postal supplies. These costs also include expendable equipment such as tray lids, containers, and hampers for the Priority Mail Processing Centers.

16.3.1.5 Advertising. Costs for advertising are incurred to provide public information, to promote the Postal Service, and to encourage mailers to perform activities to improve postal efficiency, such

as "mail early" and "use ZIP" campaigns. With the exception of media costs for the promotion of particular products (which are treated as product specific costs toward those products), these costs represent management decision factors and are unrelated to mail volume. As a result, these other advertising costs are classified as institutional. Costs for promotional supplies such as posters and fliers do not vary with volume and are classified as product specific to the individual classes of mail.

16.3.1.6 Remote Encoding Centers. The contracted service for remote encoding operations is considered fully volume variable.

16.3.2 Accrued Costs

Custodial and Building Supplies and Services. Accrued costs for custodial and building supplies are obtained from accounts 52173, 52175, 52176, and 52313.

Equipment Supplies and Services. Accrued costs for mail processing equipment supplies and services are obtained from Engineering records by equipment function and are aggregated to 21 equipment categories (e.g., optical character readers [OCRs], flat sorter machines [FSMs], and sack sorter machines), as shown in Appendix F, Table F-2.

Accrued costs for other equipment supplies and services are obtained from accounts 52103, 52106, 52107, 52108, 52120, 52131, 52152, 52190, 52230, 56810, and 56820, net of those costs identified as mail processing related (shown in Table F-2).

Computerized Tracking & Tracing/Delivery Confirmation. Accrued costs of the delivery confirmation dedicated printing account is in account 52401.

Other Miscellaneous Supplies and Services. Accrued costs of other miscellaneous supplies and services include the costs of the following: repair and maintenance of ADP equipment, ADP programming and supplies and paper, contracted ADP services, software preparation;¹ repair and maintenance of all other equipment except vehicles and ADP;² supplies and services purchased with credit cards, contractual services other than repairs and maintenance and miscellaneous postal supplies and services;³ printing, reproduction and graphics costs;⁴ inventory adjustments;⁵ supplies and services for expedited and international mail;⁶ and other postal supplies.⁷

Advertising. Accrued costs of advertising are in account 52325, 52328, and 52344.

Remote Encoding Supplies and Service. Accrued costs of the remote encoding supplies and services are in accounts 52343, 54344, and 52180.

¹ Subcomponent 174: Accounts 52171, 52179, 52332, 52333, 52334, 52335, 52336, 52337, 54166, 54401, 54402, 54403, 54405, 54406, 54407, 54511, and 54513.

² Subcomponent 175: Accounts 52130, 54512, 54518, 54521, 54523.

³ Subcomponent 177: Accounts 52101, 52102, 52104, 52105, 52109, 52111, 52121, 52172, 52341, 52357, 52359, 52410, 52413, 52418, 52419, 52423, 52425, 52427, 52428, 52429, 52432, 52433, 52445, 52446, 52447, 52448, 52474, and 54411.

⁴ Subcomponent 179: Accounts 52174, 52431, 52435, 52436, and 52471.

⁵ Subcomponent 182: Accounts 52210, 52220, 52260, 52270, 52280, and 52290.

⁶ Subcomponent 187: Accounts 52177, 52178, 52324, 52122, 52316, 56602, 56622 and portions of 52106, 52359, 52436, 52120 associated with Priority Mail, International Mail, and Delivery Confirmation. Equipment such as Eastern Region Mail Containers (ERMCs), tray lids, etc. purchased for the contracted Priority Mail Processing Centers (PMPCs) are fully volume variable to Priority Mail. Expendable equipment for International Business are fully volume variable to International Mail.

⁷ Subcomponent 197: A portion of accounts 52105, 52111, 54521, 52173, 52101, 52121, 52419, 52359, 54411 associated with International Mail.

16.3.3 Volume Variable Costs

Custodial and Building Supplies and Services. Accrued custodial and building supplies and services costs are volume variable to the degree described in section 15.1.3 for space support costs.

Equipment Supplies and Services. Accrued costs for mail processing equipment supplies and services are volume variable to the same degree as the costs of the personnel that use the equipment as described in 11.2.3.

Other Miscellaneous Supplies and Services. Accrued costs for repair and maintenance of ADP equipment; ADP programming, supplies, and paper; contracted ADP services; and software preparation are not related to volume, so are not volume variable. Similarly repair and maintenance costs of all other equipment, except vehicles and ADP, do not vary with volume, so they are institutional. Supplies and services, that are not product specific, purchased with credit cards and contractual services other than repairs and maintenance and miscellaneous postal supplies and services, are classified as variable to the same degree as the costs of the personnel that use the services and are therefore volume variable. Printing, reproduction and graphics costs that are not product related do not vary with volume, and are therefore institutional. Printed labels, reproduction and graphics costs associated with specific products are fully volume variable. The variability of some items is decided on a case by case basis. Inventory adjustments do not vary with volume and are therefore institutional.

Advertising. Accrued costs for advertising, with the exception of media costs for the promotion of particular products (which are treated as product specific costs toward those products), represent management decision factors and are unrelated to mail volume. As a result, these other advertising costs are classified as institutional. Costs for promotional supplies such as posters and fliers related to specific products do not vary with volume and are classified as product specific, but not volume variable, to the individual classes of mail.

Remote Encoding Centers. The contracted service for remote encoding operations is considered fully volume variable.

16.3.4 Distribution of Costs

Custodial and Building Supplies and Services. Volume variable custodial and building supplies and services costs are distributed to classes and subclasses of mail and special services in the proportions described in section 15.1.4 for space support costs.

Equipment Supplies and Services. Volume variable mail processing equipment supplies and services costs are distributed to classes and subclasses of mail and special services in the proportions described in section 11.2.4 for mail processing equipment maintenance service.

Other Miscellaneous Supplies and Services. The costs for ADP programming and supplies and paper, contracted ADP services, and software preparation are not related to volume, so are not distributed. Similarly telecommunications repair and maintenance costs are not distributed. Supplies and services, that are not product specific, purchased with credit cards and contractual services other than repairs and maintenance are classified as variable to the same degree as the costs of the personnel that use the services and are therefore distributed based on all labor. Printing costs that are not product related do not vary with volume, and are not distributed. Printing costs for labels associated with specific products are distributed fully to the specific product using the printed labels. Other supplies and services for specific products are distributed either in the volume variable or the incremental costs. Inventory adjustments do not

vary with volume and are therefore not distributed.

Advertising. Accrued costs for advertising, with the exception of media costs for the promotion of particular products (which are treated as product specific costs toward those products) are not distributed. Advertising costs for specific products are distributed to classes of mail as a product specific, but not volume variable, cost. The following products had advertising expenditures for this year: Priority Mail; Express Mail; Parcel Post; International Mail; Money Orders; Special Services, other; and Post Office Box.

Remote Encoding Centers. The contracted service for remote encoding operations is considered fully volume variable. RBCS supplies and services costs are distributed based on the mail processing labor in MODS operations 971-979, in which RBCS processing occurs.

16.3.5 Incremental Costs

The incremental costs for custodial and building supplies and services are calculated in the same manner as fuel and utilities incremental costs in section 15.2. The incremental costs for equipment supplies and services are calculated in the same manner as mail processing equipment maintenance incremental costs, discussed in section 11.2.

The incremental costs for the portion of miscellaneous supplies and services for purchases with credit cards and contractual services other than repairs and maintenance are calculated in the same manner as all postal labor incremental costs, in proportion to the amount of cost in each component. Product specific costs are shown in Appendix I, Table I-1.

Portions of advertising costs are product specific to Priority Mail, Express Mail, Parcel Post, Special Service, other; International Mail, Money Orders, and Post Office Box. Product specific costs are shown in Appendix I, Table I-1.

COST SEGMENT 17

RESEARCH AND DEVELOPMENT

17.0 SUMMARY

This segment covers the accrued costs for materials, equipment, and contract services relating to Postal Service research and development (R&D). R&D expenditures are incurred primarily for developmental efforts to improve mail processing technology, construction engineering, and field industrial engineering. Salaries, benefits, and related expenses of Postal Service personnel engaged in R&D activities are described in the personnel costs component of Cost Segment 18.

The accrued costs of this segment in FY 2000 totaled \$42,395 thousand.

17.0.1 Segment Costs

The accounts and booked costs analyzed in this segment are shown in the Fiscal Year 2000 Cost Segments & Components Reconciliation to Financial Statements and Account Reallocations, page 52.

17.0.2 Component Costs

Costs of this segment are classified by component as described below; amounts are summarized in the following table.

FY 2000 Costs (Thousands)

<u>Component</u>	<u>Total Accrued</u>
17.1 Research and Development	\$42,395

17.1 RESEARCH AND DEVELOPMENT

17.1.1 Description and Rationale for Classification

R&D activities are undertaken for purposes of controlling system costs, increasing productivity, and improving service. These activities are the result of management decisions and do not result from changes in mail volume; the costs are classified as institutional.

17.1.2 Accrued Costs

Accrued costs are obtained from account 54242.

17.1.3 Volume Variable Costs

Because the costs in this component are classified as institutional, no accrued costs are volume variable.

17.1.4 Incremental Costs

This segment has no incremental costs.

COST SEGMENT 18

ADMINISTRATION AND AREA OPERATIONS

18.0 SUMMARY

This segment covers salaries, benefits, and related costs of Headquarters, Field Service Units, the Inspection Service, the Security Force, and Area Offices. Included under Headquarters are the Postal Rate Commission and the Engineering, Research, and Development Center located in Merrifield, VA. Field Service Units include Service Centers for Accounting, Information, Marketing Field Offices, Statistical Programs, Rates and Classification, and Human Resources.

Also included are corporatewide personnel expenses that are not reported by employee category. These include repriced annual leave, holiday leave, Civil Service Retirement System (CSRS) unfunded liability, workers' compensation, unemployment compensation, annuitant health benefits, annuitant life insurance, annuitant Cost of Living Adjustment (COLA), and the Annuity Protection Program.

The accrued costs of this segment in FY 2000 totaled \$5,377,065 thousand.

18.0.1 Segment Costs

The accounts and booked costs analyzed in this segment are found in the Fiscal Year 2000 Cost Segments & Components Reconciliation to Financial Statements and Account Reallocations, pages 53-75.

18.0.2 Component Costs

Costs of this segment are classified by component as described in the following sections; amounts are summarized in the following table (detail may not add to total due to rounding).

<u>Component</u>	<u>FY 2000 Costs (Thousands)</u>	
	<u>Total Accrued</u>	<u>Volume Variable</u>
18.1 Administration Personnel	\$1,205,950	\$52,966
18.1.1 Headquarters	609,363	—
18.1.1 Money Order Division	2,161	—
18.1.1 Area Administration	174,476	—
18.1.2 Postal Inspection Service	419,950	52,966
18.2 Administration Support	375,316	205
18.2.1 Supplies and Services	261,349	—
18.2.2 Miscellaneous Support	108,728	—
18.2.3 Inspection Expenses and Employee Losses	1,576	—
18.2.4 Reimbursements	(3,806)	—
18.2.5 Individual Awards	6,968	—
18.2.6 Miscellaneous Personnel Compensation	296	—
18.2.7 Money Orders	205	205
18.3 Personnel Benefits	3,795,799	2,083,681
18.3.1 Repriced Annual Leave	95,800	55,197
18.3.1 Holiday Leave	7,800	4,494
18.3.2 Civil Service Retirement	1,327,314	764,758
Current Year Unfunded Liability	111,812	64,423
Prior Years Unfunded Liability	1,215,502	700,335
18.3.4 Workers' Compensation	931,230	411,934
U S Postal Service	910,971	—
Current Year	714,952	411,934
Prior Year	196,019	—
Post Office Department	14,237	—
OWCP Health Benefits	6,002	—
18.3.5 Unemployment Compensation	37,736	21,742
18.3.6 Annuitant Health Benefits	743,504	428,384
18.3.7 Annuitant Life Insurance	6,700	3,860
18.3.8 Annuitant COLA/Principal	682,632	393,312
18.3.9 Annuity Protection Program	(36,917)	—
TOTAL a/	\$5,377,065	\$2,136,852

a/ Total accrued costs include Product Specific Costs, which are shown in Appendix I, Table I-1.

18.1 ADMINISTRATION PERSONNEL

18.1.1 Description and Rationale for Classification

Administration Personnel. These administration personnel costs reflect the National and Area costs of managing ongoing postal operations.

The personnel costs of all postal Headquarters and Area Operations, the Postal Rate Commission, Marketing Field Offices, Rates and Classification Service Centers, Human Resource Service Centers, and the Information Service Centers are considered in this subcomponent. Except for the management costs related to money orders,¹ the contracted Priority Mail Processing Centers (PMPCs),² and International Mail,³ these personnel costs are classified as institutional; they vary in response to changes in programs and activities designed to enhance management effectiveness and do not vary with changes in mail volume.

Postal Inspection Service. Postal Inspection Service personnel costs arise from two functionally distinct activities. Postal Inspection Service personnel provide protection at Headquarters and field offices, and are responsible for internal audits and special investigations. The personnel providing protection services, although accounted for by the Inspection Service, are responsible to the managers of the facilities that they secure. Because these costs tend to vary with the amount of space secured, they are developed in the manner and determined to be variable to the degree described in section 15.1.3 for space support costs.

The remaining Postal Inspection Service personnel undertake a variety of security-related activities, including financial and operational audits, background investigations of postal employees, analyses of security measures at postal facilities, and criminal investigation work relating to postal thefts, fraud, and counterfeiting. The costs of these personnel do not change with mail volume and are classified as institutional.

18.1.2 Accrued Costs

The accrued costs for Headquarters, Area Operations, and related personnel are obtained from subaccounts .144, .145, .150, .151, .152, .154, .155, .156, .157, .158, .159, .181, .182, and .183.

The accrued costs for protection force personnel at Headquarters and field offices are obtained from subaccount .175, while accrued costs for the remaining Postal Inspection Service personnel are obtained from subaccounts .171 and .172.

18.1.3 Volume Variable Costs

From the accrued costs of Headquarters, Area Administration, and related personnel, the costs relating to the handling of money orders, Priority Mail, and International Mail are subtracted,

¹ These costs are incurred by personnel located at the St. Louis, Missouri Accounting Service Center who deal exclusively with money orders. Because these personnel handle only money orders, their costs are classified as product specific to money orders.

² These costs are incurred by the personnel group located at postal headquarters to oversee matters pertaining to the PMPCs. Because these personnel are devoted to the supervision of the PMPCs, their costs are classified as product specific to Priority Mail and are included in the incremental cost of Priority Mail.

³ These costs are incurred by the personnel groups that oversee matters pertaining to International Mail. Because these personnel are devoted to matters pertaining to International Mail, their costs are classified as product specific to International and are included in its incremental cost.

classified as product specific, and included in the incremental costs of these products. The remaining costs are classified as institutional and are not volume variable.

The accrued space support costs for Inspection Service Protection Force personnel are volume variable to the degree described in section 15.1.3 for space support costs. The remaining Inspection Service personnel costs are classified as institutional and are not volume variable.

18.1.4 Distribution of Costs

Volume variable protection force costs are distributed to classes and subclasses of mail and special services in the proportions described in section 15.1.4 for space support costs.

18.1.5 Incremental Costs

The incremental costs for Postal Inspection Service personnel are developed in the same manner as fuel and utilities incremental costs, discussed in section 15.2. See Appendix I, Table I-1, for product specific costs in this component.

18.2 ADMINISTRATION SUPPORT

18.2.1 Description and Rationale for Classification

These costs include supplies and services used by the personnel in this segment and miscellaneous expenses.

Supplies and Services. These costs are incurred for the support of personnel in this segment. These support costs include procurement of outside services, expenses for audit services, and OPM EEO appeals examiners. These costs are unrelated to volume and are classified as institutional. The supply and service expenditures associated with the PMPCs and the International Business Unit (IBU) have been separately identified and are included as product specific costs included in the incremental costs of Priority Mail and International Mail. The costs for the EXFC (External First Class Measurement System) and PETE (Priority Mail End To End) contracts are here and have been included in the product-specific costs of their respective products.

Miscellaneous Support. These costs are incurred for providing a variety of expenses including: Clean Air Act fees and fines, Stamp Advisory Committee compensation, special occasion expenses, official receptions, Postal Forum expenses and other miscellaneous items. These miscellaneous support costs are unrelated to volume and are classified as institutional. The miscellaneous support expenditures spent by the IBU and Priority Mail network units have been separately identified and are included in the incremental cost of International and Priority Mail, respectively. The cost for EXFC and PETE postage is included in this component as a product specific cost to First-Class Mail and Priority Mail, respectively.

Inspection Expenses and Employee Losses. These costs are incurred as a result of Inspection Service investigations and employee personal property losses. These costs include costs of test money, posted rewards, and for information or services rendered. Inspection expenses are unrelated to volume and are classified as institutional.

Reimbursements. Reimbursements include such items as reimbursements from uniform vendors to defray the administrative cost of direct payments and other miscellaneous items. These reimbursements are unrelated to volume and are classified as institutional.

Individual Awards. These costs are incurred for providing Vice President's awards, non-bargaining spot awards, arbitration settlements, EAS team awards, and various informal

awards. These miscellaneous award costs are unrelated to volume and are classified as institutional.

Miscellaneous Personnel Compensation. These costs are incurred for providing PCES survivors' benefits, Fair Labor Standards Act expenses, and recovery of OWCP continuation of pay. These miscellaneous costs are unrelated to volume and are classified as institutional.

Money Orders. Commissions are incurred and paid on International money orders issued by foreign governments. These costs vary with the number of money orders issued and are fully variable with volume.

18.2.2 Accrued Costs

Accrued supplies and services costs are obtained from a variety of accounts shown in Fiscal Year 2000 Cost Segments & Components Reconciliation to Financial Statements and Account Reallocations, pages 52-73.⁴

Accrued miscellaneous support costs are obtained from a variety of accounts shown in Fiscal Year 2000 Cost Segments & Components Reconciliation to Financial Statements and Account Reallocations, pages 52-73.⁵

Accrued investigation expenses and seizure and forfeiture costs are obtained from accounts 56401, 56403, 56405, 56407, 56409, 56411, 56413, 56421, and 56422.

Accrued reimbursement costs are obtained from accounts 52914, 52941, and 52951.

Accrued individual awards costs are obtained from accounts 51313, 51314, 51315, 51316, 51317, 51321, 51322, 51323, 51324, 51325, 51327, and 51337.

Accrued miscellaneous personnel compensation costs are obtained from accounts 51213, 51317, 51271, 51335, 51336, and 52918.

Costs of non-U.S. money order commissions are found in account 56671.

18.2.3 Volume Variable Costs

Because costs for supplies and services, miscellaneous support, investigation expenses, seizures, forfeitures, and reimbursements are classified as institutional, no accrued costs are volume variable.

Costs of commissions on non-U.S. money orders are fully volume variable.

18.2.4 Distribution of Costs

The costs for commissions on non-U.S. money orders are directly distributed to International money orders. All other costs in this component are institutional.

⁴ Accounts 52321, 52322, 52323, 52326, 52327, 52331, 52338, 52339, 52342, 52421, 52422, and 54253.

⁵ Accounts 51407, 51408, 52115, 52117, 52411, 52437, 52438, 52439, 52454, 54248, 54249, 58201, 55324, 56301, 56311, 56315, 56501, 56503, 56601, 56603, 56605, 56621, 56625, 56645, 56651, 56655, 56666, 56701, 56703, 56704, and 56705.

18.2.5 Incremental Costs

A portion of supplies and services cost is product specific to Priority Mail, First-Class Mail, and International mail. A portion of miscellaneous support cost is product specific to Priority Mail, First-Class Mail, and International mail. Product specific costs are shown in Table I-1 of Appendix I.

18.3 PERSONNEL BENEFITS

18.3.1 Description and Rationale for Classification

Corporatewide personnel benefits costs are not reported by employee category and therefore are not included in Cost Segments 1-13, 16 & 19. These costs are reflected in five components that are described in more detail below.

Repriced Annual Leave and Holiday Leave. Repricing of annual leave represents the increased liability associated with the difference between the value of annual leave when it is earned and when it is taken. Postal employees earn a specific number of annual leave hours per pay period. Pay increases that occur after leave is earned but before it is used result in an increase in the liability and cost.

The cost of repriced annual leave is determined by relating the number of unused leave hours for each employee at year end to the current wage rates, summing for all employees, and then comparing this figure with the recorded liability for annual leave. The difference yields the cost of repricing annual leave.

Also included in this subcomponent are costs for holiday leave variance and holiday leave on terminal leave. Repriced annual leave and holiday leave adjustment costs are driven by wage increases and the actual cost of holiday leave versus the amount accrued. These costs relate to the services of current employees. Holiday leave variance represents the difference between actual year-end holiday leave costs and the amount of holiday leave costs estimated at the start of the fiscal year. At the beginning of the fiscal year, the amount for holiday leave is estimated in order to expense a uniform amount chargeable to each accounting period. At year-end, the actual holiday leave amount is compared with the estimated amount, the difference being the cost of holiday leave variance. Holiday leave on terminal leave represents the cost of holiday leave that is earned for the period represented by annual leave paid out as terminal leave.

Repriced annual leave and holiday leave adjustment costs could be identified by craft or function and reflected with the personnel costs of this and other segments. If developed in this manner, repriced annual leave costs would be variable to the same degree as all other personnel-related costs. Thus, the costs associated with repriced annual and holiday leave are distributed to the same degree as all volume variable postal labor costs.

Civil Service Retirement. The Postal Service incurs costs for the Civil Service Retirement System applicable to its personnel by (1) making funding contributions of seven percent of employee basic wages; and (2) making contributions of supplemental amounts to meet unfunded liabilities arising from general pay increases. These supplemental amounts form the Civil Service Retirement System (CSRS) unfunded liability.

The Postal Service's seven-percent contribution, shown under the personnel subaccounts of account 51212, is included as an employee benefit cost in Cost Segments 1 through 13 and Cost Segments 16, 18, and 19. The requirement for supplemental contributions is computed for years in which general increases occur, using factors determined by the Office of Personnel

Management, Administrator of the Retirement Program. At the direction of Congress,⁶ the required supplemental contributions are billed to the Postal Service in 30 annual installments, which, like a mortgage, represent both principal and interest.⁷ The expense booked by the Postal Service for a given fiscal year reflects the layering effects of these installment payments for general pay increases granted since these arrangements were first established.

For purposes of attribution, the CSRS unfunded liability expense is considered in two components: (1) the principal payment associated with the first installment due to general pay increases granted during the current year; and (2) the principal payments associated with installments arising from general wage increases granted in prior years.

The principal payment expense associated with the current year's wage increases is distributed to the same degree as all volume variable postal labor costs. The principal payments associated with prior years' wage increases are also distributed on all volume variable postal labor costs.

Workers' Compensation. Workers' compensation costs are considered in terms of current-year costs, prior-year costs and health benefit payments for current or former Postal Service employees who are on Office of Workers' Compensation Programs (OWCP) rolls full-time.

Current-year workers' compensation costs represent the discounted present value of current and projected payments for employee claims against the Postal Service arising out of current-year workplace injuries. The number of employees directly influences changes in the amount of current-year workers' compensation expense for which the Postal Service is liable. If the number of workers' compensation claims were held constant per 1,000 employees, then any change in the total Postal Service labor force would cause a proportionate change in the number of claims. Current-year workers' compensation costs are thus variable to the same degree as total postal labor costs.

Prior-year workers' compensation costs represent the difference between the estimated current-year costs accrued in the year of the accident and updated estimates of those expenses. Because of the adjustment nature of these prior-year workers' compensation costs, any relationship between their levels and current or previous period employment levels would be coincidental. As a result, prior-year workers' compensation costs are classified as institutional.⁸

Post Office Department workers' compensation costs relate to the cost of Post Office Department employees on workers' compensation which are borne by the Postal Service. Like prior year workers' compensation costs, these costs are classified as institutional.

OWCP health benefits relate to the health benefits of former postal employees on workers' compensations. Heretofore, OWCP health benefit payments were included in the prior-year portion of workers' compensation costs; therefore, like prior-year workers' compensation costs, these are also classified as institutional.

⁶ On July 12, 1974, Congress amended 5 U.S.C. § 8348, making the Service liable for increases in the unfunded liability of the retirement fund that relates to benefits payable from the fund to active and retired postal officers and employees.

⁷ The interest rate, currently set at five percent, is the same as that included in factors used to determine the unfunded liability.

⁸ Prior-year costs for workers' compensation are not incurred in the same manner as prior-year costs for the CSRS unfunded liability. Prior-year CSRS payments reflect, in part, benefits for services currently provided by postal employees. Prior-year workers' compensation costs reflect benefits solely for services provided in the past.

Unemployment Compensation. Unemployment compensation costs reflect payments by the Postal Service to the Department of Labor to reimburse states for payments to unemployed former Postal Service employees. Assuming that labor force attrition and postal hiring and termination practices remain constant, as volume changes, so will total employment and, therefore, the number of potentially unemployed postal workers.

Annuitant Benefits. Annuitant benefits are treated in four subcomponents: annuitant health benefits, life insurance, annuitant COLA/principal, and annuity protection program.

Annuitant health benefits and life insurance costs represent the employer's share of the Federal Employee Health Benefit Program (FEHBP) and Federal Employee Group Life Insurance (FEGLI) for Postal Service annuitants. The OBRA of 1990 required the Postal Service to pay the employer's share of FEHBP and FEGLI premiums for all employees retiring on or after July 1,

1971, and their survivors, with the exclusion of Federal civilian service prior to that date. The annuitant health benefit and life insurance cost are distributed to the same degree as all volume variable postal labor costs.

Annuitant COLA/principal costs stem from the OBRA of 1990 which made the Postal Service liable, on a prospective basis, for the cost of COLAs granted to Postal annuitants and their survivors, retiring on or after July 1, 1971, with the exclusion of costs that apply to Federal civilian service prior to that date. The annual liability created by this law is determined by OPM and funded in equal annual installments over 15 years, with interest at five percent. The OBRA of 1990 also required the Postal Service to reimburse the U.S. Government for annuitant COLAs paid prior to creation of the law. These expenses are distributed to the same degree as all volume variable postal labor costs.

Annuity protection program costs are for benefits paid to specific disability and discontinued service annuitants and their beneficiaries under the Annuity Protection Supplemental Retirement Plan. Because these costs are unrelated to volume they are classified as institutional.

18.3.2 Accrued Costs

The accrued costs for repriced annual leave are obtained from account 56646; accrued holiday leave costs are obtained from account 56647.

Accrued CSRS unfunded liability principal costs are obtained from account 56641. These costs are separated into current-year and prior-year costs by Postal Service accounting information.

Accrued workers' compensation costs are obtained from account 51206-51208. The costs are separated into current-year and prior-year costs from Postal Service accounting information. The costs of OWCP health benefit payments are found in account 51209.

Accrued unemployment compensation costs are obtained from account 51261.

Accrued annuitant health benefit costs are obtained from account 51204 and 51272. Accrued annuitant life insurance costs are obtained from account 51291.

Accrued annuitant COLA principal costs are obtained from account 56644.

Accrued annuity protection costs are obtained from accounts 51281, 51283, 51285, 51286, and 51287.

18.3.3 Volume Variable Costs

Accrued repriced annual leave and holiday leave adjustment costs, current-year and prior-year CSRS unfunded liability costs, current-year workers' compensation costs, unemployment compensation costs, annuitant health and life insurance benefit costs, and annuitant COLA costs are distributed to the same degree as all volume variable postal labor costs. Because prior-year workers' compensation, POD, OWCP health benefits, and annuity protection costs are classified as institutional, no part of these costs is volume variable.

18.3.4 Distribution of Costs

Repricing of annual and holiday leave adjustment costs, current-year and prior-year CSRS costs, current-year workers' compensation costs, unemployment compensation costs, annuitant health benefit costs, and annuitant COLA costs are distributed to classes and subclasses of mail and special services in the same proportions as the composite of all volume variable postal labor costs.

18.3.5 Incremental Costs

The incremental costs for corporatewide personnel compensation components are calculated in the same manner as those for all other personnel components, in proportion to the amount of costs in each component.

COST SEGMENT 19

GENERAL MANAGEMENT SYSTEMS

19.0 SUMMARY

This segment covers the salaries, benefits, and related costs of personnel at the Maintenance Technical Support Center (MTSC) at Norman, Oklahoma and costs for training-related activities in support of the Postal Service Management Academy and the Postal Service Technical Center. These costs are incurred to enhance management control and conduct training regarding matters other than postal operations.

The accrued costs of this segment in FY 2000 totaled \$21,240 thousand.

19.0.1 Segment Costs

The accounts and booked costs analyzed in this segment are shown in the Fiscal Year 2000 Cost Segments & Components Reconciliation to Financial Statements and Account Reallocations, pages 76 & 77.

19.0.2 Component Costs

Costs of this segment are classified by component as described below; amounts are summarized in the following table.

<u>FY 2000 Costs (Thousands)</u>	
<u>Component</u>	<u>Total Accrued</u>
19.1 General Management Systems a/	\$21,240

a/ Total accrued costs include Product Specific Costs, which are shown in Appendix I, Table I-1.

19.1 GENERAL MANAGEMENT SYSTEMS

19.1.1 Description and Rationale for Classification

General management systems costs are considered separately for the Maintenance Technical Support Center, and training activities.

The MTSC performs two activities related to the maintenance of all postal equipment except motor vehicles: it provides technical support to postal facility maintenance personnel and establishes maintenance standards for new types of postal equipment. These activities result from changes in management design factors, not changes in mail volume. Thus, these costs are classified as institutional.

The training-related activities include non-Postal Service personnel who prepare courses and instruct at the Postal Service Management Academy and the Postal Service Technical Center and training supplies such as textbook and audiovisual materials. Since these training items do not involve the instruction of Postal Service craft employees regarding the processing, delivery, transportation, or other handling of mail, they do not vary with mail volume and are classified as institutional.

19.1.2 Accrued Costs

Accrued costs are obtained from subaccount .149 and accounts 52361, 52363, 52365, 52367, and 52369.

19.1.3 Volume Variable Costs

Because the costs of this segment are classified as institutional, no accrued costs are volume variable.

19.1.4 Incremental Costs

A portion of the costs for equipment maintenance and management training support is product specific to Priority and International mail. Product specific costs are shown in Appendix I, Table I-1.

COST SEGMENT 20

OTHER ACCRUED EXPENSES (SERVICE WIDE)

20.0 SUMMARY

This segment covers nonpersonnel costs for miscellaneous items of expense, including depreciation of buildings, vehicles, equipment, and other assets; indemnities (both domestic and foreign) and insurance claims; interest expense; and other miscellaneous operating activities.

The accrued costs of this segment in FY 2000 totaled \$3,972,670 thousand.

20.0.1 Segment Costs

The accounts and booked costs analyzed in this segment are found in the Fiscal Year 2000 Cost Segments & Components Reconciliation to Financial Statements and Account Reallocations, pages 78-80.

20.0.2 Component Costs

Costs of this segment are classified by component as described below; amounts are summarized in the following table (detail may not add to total due to rounding).

<u>Component</u>	<u>FY 2000 Costs (Thousands)</u>	
	<u>Total Accrued</u>	<u>Volume Variable</u>
20.1 Equipment Depreciation	\$1,088,791	\$582,895
20.2 Vehicle Depreciation	197,111	36,510
20.3 Building and Leasehold Depreciation	743,018	743,018
20.4 Indemnities	131,864	36,092
20.5 Interest Expense	1,834,956	1,051,347
20.6 Other Expenses and Credits	(23,070)	—
TOTAL a/	\$3,972,670	2,449,862

a/ Total accrued costs include Product Specific Costs, which are shown in Appendix I, Table I-1.

20.1 EQUIPMENT DEPRECIATION

20.1.1 Description and Rationale for Classification

Mail processing equipment includes delivery barcode sorters, optical character readers, facer/cancelers, flat sorting machines, and other equipment used in distribution. Mail processing equipment costs are variable to the same degree as the cost for the personnel operating this equipment. Depreciation for other equipment includes costs for depreciation of customer service and postal support equipment, such as window service equipment and computers. Because the level of activities underlying these functions does not change with

changes in mail volume, these costs are classified as institutional.

20.1.2 Accrued Costs

Accrued costs for equipment depreciation is account 54330. Mail processing equipment depreciation, like other mail processing equipment-related costs is divided into 21 cost pools (or activities) listed in Appendix F, Table F-1. Separate variabilities and distribution keys are applied to each of these cost pools as described below. Depreciation is determined for the 21 mail processing equipment categories using more detailed Postal Service accounting information. The FY99 depreciation by category is provided in Appendix F, Table F-2.

The accrued costs of depreciation of other equipment and assets represent the balance of costs in account 54330 that are not related to mail processing equipment.

20.1.3 Volume Variable Costs

Mail processing equipment depreciation costs are variable to the same degree as the costs for the personnel that operate the equipment. As a result, the variabilities for each equipment type listed in Appendix F, Table F-1, are based on the variabilities for the mail processing labor cost pools shown in Section 3.1 of Cost Segment 3. For some equipment categories the variability is a weighted average of two or more of the labor category variabilities, as shown in Docket No. R00-1, USPS LR-I-83, Part III.

Because the costs of depreciation of other equipment and assets are classified as institutional, no accrued costs are volume variable.

20.1.4 Distribution of Costs

Volume variable costs are distributed to classes and subclasses of mail on the basis of IOCS tallies for the operation of 16 of the 21 types of equipment. RBCS costs are distributed based on the mail processing labor costs in MODS operations 971-979 in which RBCS processing occurs. The category, General and Logistics: BMC, includes conveyors, and other general use equipment at BMCs and is distributed in the same proportions as all BMC mail processing labor. General and Logistics: Non-BMC includes similar equipment at non-BMC facilities and is likewise distributed as all non-BMC mail processing labor. Mail Transport Equipment (e.g., trays and rolling containers) is distributed in the same way as all mail processing labor costs. The depreciation for Tray Transport and Staging Systems is divided into OCR-, MPBCS-, DBCS- and FSM- related amounts based on the relative number of each type of equipment and then distributed in the same way as each respective category.

20.1.5 Incremental Costs

The incremental costs for mail processing equipment depreciation are calculated in the same manner as mail processing equipment maintenance incremental costs, discussed in section 11.2. A portion of equipment depreciation costs is product specific to International Mail. Product specific costs are shown in Appendix I, Table I-1.

20.2 VEHICLE DEPRECIATION

20.2.1 Description and Rationale for Classification

Costs are for the depreciation of motor vehicles owned by the Postal Service and are considered separately for five categories of vehicles: city delivery carrier vehicles, rural carrier vehicles, expedited delivery vehicles, vehicle service driver vehicles, and other

vehicles.¹

Costs for vehicles assigned to city carrier routes are classified as variable to the same degree as city carrier personnel on street functions. Costs for rural carriers, expedited delivery, and vehicle service drivers are classified as variable to the same degree as the personnel to whom they are assigned. Costs for other vehicles do not vary with volume and are classified as institutional.

20.2.2 Accrued Costs

Accrued costs are obtained from account 54340 and apportioned among the categories of vehicles as described in section 20.2.1.

20.2.3 Volume Variable Costs

Depreciation costs are volume variable by vehicle category to the same degree as the costs of individual city delivery carrier street functions in Cost Segments 7, rural carriers in Cost Segment 10, expedited delivery in Cost Segment 3, and vehicle service drivers in Cost Segment 8. Because costs for other vehicles are classified as institutional, they are not volume variable.

20.2.4 Distribution of Costs

Volume variable motor vehicle depreciation costs are distributed to classes and subclasses of mail and special services in the same proportions as the costs of individual city delivery carrier street functions in Cost Segments 7, rural carriers in Cost Segment 10, expedited delivery in Cost Segment 3, and vehicle service drivers in Cost Segment 8.

20.2.5 Incremental Costs

The incremental costs for vehicle depreciation are calculated in the same manner as the incremental costs for city delivery carriers, rural carriers, expedited delivery, and vehicle service drivers, in proportion to the amount of cost in each component.

20.3 BUILDING AND LEASEHOLD DEPRECIATION

20.3.1 Description and Rationale for Classification

Building and leasehold depreciation are the depreciation of buildings owned by the Postal Service and leasehold improvements made by the Postal Service to buildings leased by it. Volume variable building and leasehold depreciation costs are based in part on current market rental costs, which are reflective of true economic costs. They are developed in conjunction with other space provision costs, i.e., rental expense (Cost Segment 15) and interest expense (Cost Segment 20.5).²

20.3.2 Accrued Costs

The booked costs for building and leasehold depreciation are obtained from accounts 54320, 54350, 54360, 56120, and 56910.

¹ The use of these vehicles is described in section 12.1.1. City Carrier Vehicle Depreciation is also split according to city carrier street components (load, access, route) based on MVS costs.

² A more detailed description of the development of space provision costs is provided in sections 15.1.1 and 15.1.3.

20.3.3 Volume Variable Costs

Volume variable space provision costs for building and leasehold depreciation are developed in the manner described in section 15.1.3 for space provision costs.

20.3.4 Distribution of Costs

The volume variable space provision costs of building and leasehold depreciation are distributed to classes and subclasses of mail and special services in the proportions described in section 15.1.4 for space provision costs.

20.3.5 Incremental Costs

Incremental costs equal volume variable costs for building and leasehold depreciation.

20.4 INDEMNITIES

20.4.1 Description and Rationale for Classification

This component covers the costs of indemnities and uninsured claims and write-offs. Indemnity costs are associated with claims for losses, both domestic and foreign, of Express Mail, registered mail, insured mail, and COD articles. These costs tend to vary with the numbers of such articles mailed, assuming the mix of such mail as to its value, fragility, and the rate of internal theft is constant. Therefore, these costs are classified as fully variable.

Uninsured claims and write-offs costs cover a variety of expenses such as bad debt adjustments, adjusted fire and theft losses, uncollectable receivables, and damage claims. Uninsured claims and write-offs are primarily related to non-volume-related factors, such as general economic conditions and acts of God, and are not related to special services. Thus, the costs are classified as institutional.

20.4.2 Accrued Costs

The accrued costs of indemnities are obtained from accounts 55321 and 55323.

Uninsured claims and write-offs accrued costs are obtained from accounts 52472, 55101, 55103, 55105, 55107, 55212, 55213, 55215, 55216, 55311, 56203, 56213, 56214, 56215, 56661, and 56665.

20.4.3 Volume Variable Costs

Because indemnity costs are classified as fully variable with changes in mail volume, they are fully volume variable.

Because uninsured claims and write-offs costs are classified as institutional, no accrued costs are volume variable.

20.4.4 Distribution of Costs

The costs of domestic mail indemnities (account 55321) are distributed to Express Mail, and the registry, insurance and COD special services on the basis of an analysis of the domestic claims disbursements for each. The costs of international mail indemnities (account 55323) are distributed to Express Mail, registry, and insurance categories on the basis of a similar analysis.

20.4.5 Incremental Costs

Incremental costs equal volume variable costs for indemnities.

20.5 INTEREST EXPENSE

20.5.1 Description and Rationale for Classification

Interest costs are incurred mainly as a result of borrowing money and also as a result of deferring payments on retirement liabilities. Borrowing occurs for capital acquisitions such as land, buildings, and leasehold improvements; mail processing equipment; motor vehicles; and other assets, including postal support equipment. Another major source of interest expense arises from costs associated with Civil Service Retirement System (CSRS) unfunded liability and annuitant cost-of-living-adjustments (COLAs). Miscellaneous interest expense stems from obligations such as untimely payments to the Thrift Savings Plan, special assessments, and backpay awards.

20.5.2 Accrued Costs

Accrued costs for interest for capital expenses are obtained from accounts 56870, 58102, and 58103. Retirement interest costs are found in accounts 58111 and 58114.

Miscellaneous interest costs are obtained from accounts 56617, 58113, 58115, and 58140.

20.5.3 Volume Variable Costs

Interest expense for capital is apportioned to equipment, vehicles, and facilities in proportion to depreciation expenses for these categories. Volume variable costs for facilities-related interest expense are based on current market rental cost and facility space variabilities. A portion of the current market rental cost, as described in section 15.1.3, is used as the basis for the volume variable cost calculation. The variability for these costs is determined in the same fashion as described for rental costs in section 15.1.3. Equipment-related and vehicle-related interest costs are volume variable to the degree described in the components dealing with depreciation.³

Retirement interest costs are volume variable to the same extent as all postal labor costs.

Miscellaneous interest expenses arise from activities unaffected by mail volume and are judged to be institutional.

20.5.4 Distribution of Costs

Volume variable facility-related interest is distributed as described in section 15.1.4. Volume variable interest on equipment-related and vehicle-related debt is distributed in the proportions described in the components dealing with depreciation.⁴

Volume variable retirement interest costs are distributed to classes and subclasses of mail and special services in the same proportions as the composite of all volume variable postal labor costs.

³ Equipment depreciation is described in section 20.1 and motor vehicle depreciation is described in section 20.2.

⁴ See footnote 3.

Miscellaneous interest costs are institutional and, therefore, none are volume variable.

20.5.5 Incremental Costs

Incremental costs for building and leasehold interest are equal to volume variable costs. Motor vehicle interest incremental costs are calculated in the same manner as motor vehicle depreciation incremental costs discussed in section 20.2. Mail processing equipment interest incremental costs are calculated in the same manner as mail processing equipment depreciation incremental costs, discussed in section 20.1.

Retirement interest cost has the same variability and distribution as all postal labor costs. The incremental costs for this component are calculated in the same manner as the incremental costs for all other labor cost components, in proportion to the amount of cost in each component. Product specific costs for interest are shown in Appendix I, Table I-1.

20.6 OTHER EXPENSES AND CREDITS

20.6.1 Description and Rationale for Classification

This component is composed of a number of cost and credit categories broadly grouped as follows:

Other operating expenses. This subcomponent contains the balance of postal operating expenses and transactions costs not included elsewhere. The largest elements in this subcomponent are accounts that reflect the differences between book value and actual value when the Postal Service disposes of land, buildings, equipment, and motor vehicles. The costs in this subcomponent are not volume-variable and are classified as institutional.

Reimbursements and miscellaneous income. These arise from a variety of items and services. The amounts of these revenues are determined by factors other than mail volume and are therefore classified as institutional.

20.6.2 Accrued Costs

Accrued miscellaneous expenses and credits are obtained directly from the postal accounts shown on the following table.

<u>Category</u>	<u>Accounts</u>
Other Operating Expenses	52160, 52412, 52810, 54260, 54270, 54610, 54620, 54630, 54650, 56830, 56840, 56860, 56930
Reimbursements and Miscellaneous Income	54960, 54961, 54963, 54965

20.6.3 Volume Variable Costs

All costs of this component are classified as institutional and are not volume variable.

20.6.4

Distribution of Costs

Because all costs in this component are institutional, none of the accrued costs are volume variable.

APPENDIX A
ACCOUNT AND SUBACCOUNT DATA

Tables A-1 and A-2 of this Appendix will no longer be produced. This is due to the fact that the same information contained in these tables is also contained in the Fiscal Year 2000 Cost Segments & Components Reconciliation To Financial Statements and Account Reallocations. Therefore, account and subaccount data discussed throughout the Fiscal Year 2000 Summary Description will now be referenced in this report.

Accrued costs by general ledger account and subaccount reflected in the accounting period 14 trial balance have been adjusted to reflect year-end audit adjustments and reconciled to FY 2000 financial statements.

The lump sum personnel cost accrual that relates to the Economic Value Added variable pay incentive program has been re-allocated from subaccount .183 to the appropriate labor subaccounts.

Costs reported in Headquarters administrative, program, and corporatewide activities finance numbers related to International Mail, Comprehensive Tracking and Tracing (CTT)/Delivery Confirmation and the Priority Mail Network have been separately identified in order to facilitate the assignment of these costs to the appropriate class of mail now and in the future.

Other costs not reported by account which have been identified separately and/or reallocated for the Costs Segments and Components report include maintenance administrative personnel costs (Cost Segment 11), and personnel costs related to the processing of international and domestic money orders (Cost Segment 18).

The information sources and methodologies used to accomplish the cost re-allocations described above can be found in the FY 2000 Statement of Revenues and Expenses.

APPENDIX B

IN-OFFICE COST SYSTEM CODES

This Appendix lists the codes used by the In-Office Cost System (IOCS) to identify distinct categories of mail and special services, mail-related functional activities, and certain service and administrative categories.

Activity codes associated with classes and subclasses of mail, special services, and other services are listed in Table B-1. The codes themselves are listed in five separate tables, B-2 through B-6 as follows:

B-2 Activity Codes (Categories)

1. Direct Mail
2. Mixed Mail
3. Window and Related Office Activities
4. Nonpostal Activities
5. Mail-Related Activities
6. General Services Activities
7. Out-of-Office Time
8. Supervisory Activities
9. Lunch and Leave Activities

B-3 Special Services Codes – Mail-Connected

B-4 Uniform Operation Codes

B-5 City Route Codes

B-6 Roster Designation Codes

TABLE B-1

**ACTIVITY CODES ASSOCIATED WITH CLASSES AND SUBCLASSES OF MAIL,
SPECIAL SERVICES, AND OTHER SERVICES**

	<u>ACTIVITY CODES¹</u>
First-Class Mail:	
Single-Piece Letters	x060
Presort Letters	x080, x081, x085, x086,
Single-Piece Cards	1020
Presort Cards	1022, 1035, 1040, 1045
Priority Mail	x160
Express Mail	x110, x111, 6231
Mailgrams	1100
Periodicals:	
In-County	x211
Outside County:	
Regular	x212
Nonprofit	x213
Classroom	x214
Standard Mail (A):	
Commercial Standard:	
Enhanced Carrier Route	x310
Regular	x340, x341, x345
Aggregate Nonprofit:	
Nonprofit Enhanced Carrier Route	x330
Nonprofit	x350, x351, x355
Standard Mail (B):	
Parcels Zone Rate	4400, 4493
Bound Printed Matter	4460, 4465, 4480, 4495
Special Standard	x420, x425, x430
Library Mail	x440
US Postal Service	x510

¹ x = 1, 2, 3, or 4, as appropriate, where 1 represents cards and letters, 2 represents flats, 3 represents irregular parcels and pieces, and 4 represents parcels.

TABLE B-1

**ACTIVITY CODES ASSOCIATED WITH CLASSES AND SUBCLASSES OF MAIL,
SPECIAL SERVICES, AND OTHER SERVICES**

	<u>ACTIVITY CODES</u>
Free Mail – Blind, Handicapped and Servicemen	x910, x915, x950
International Mail ² (combined)	x780
U.S. Origin to Canada ³	x631 - x656
U.S. Origin (to rest of world ⁴)	x731 - x756
Foreign Origin International	x810 - x895
Counted Mixed International ⁵	5431-5434, 5441-5444, 5451-5454, 5461-5464
Special Services:	
Registry	0060
Certified	0050
Insurance	0070, 0080
COD	0030
Special Delivery ⁰⁰¹⁰	
Money Orders	5080, 6080
International Money Orders	5081, 6081
Stamped Envelopes	5060, 6060, 5090, 6090
Special Handling	0020
Delivery Confirmation	0110, 0120
Signature Confirmation	0140
International Special Services (Excluding Money Orders)	0700
Post Office Box	6020, 6030
Other	0090, 0100, 0190, 0300
Others:	
Stamps	5040, 6040
Cards	5050, 6050
Meters	5070, 6070, 6073

² The x780 activity code refers to U.S. Origin and Foreign Origin activity codes collapsed together for domestic CRA reporting purposes. In order to accommodate additional international costing requirements, international activity codes have been disaggregated in new "international activity code" fields. Activity codes corresponding to domestic mail, special services, or other activities are not modified in the new international activity code fields.

³ These disaggregated values are only available in the new "international activity code" fields. The "x6yz" activity codes do not exist elsewhere.

⁴ These codes refer to U.S. Origin to countries excluding Canada in the new "international activity code" fields. Elsewhere, it refers to U.S. Origin mail destined in any country.

⁵ This represents additional detail for international activity codes resulting from counted items. An activity code of x780 resulting from a counted item would be assigned one of these codes representing class and shape in the "international activity code" fields. A record containing an international activity code of "5441" would have a value of "1780" in its other activity code fields.

TABLE B-2
ACTIVITY CODES

1. DIRECT MAIL

Direct mail codes are grouped by shape, class, and subclass of mail in the following order:

- Cards and Letters
- Flats
- Irregular Parcels and Pieces (IPPs)
- Parcels

Cards and Letters (Excludes Oversized Cards)

First-Class Mail

- | | |
|------|--|
| 1020 | Single-Piece Cards |
| 1022 | Combined Cards (various levels of sortation) |
| 1035 | Cards – Automation Presort |
| 1040 | Cards – Nonautomation Presort |
| 1045 | Cards – Automation Carrier Route Presort |
| 1060 | Single-Piece Letters |
| 1080 | Letters – Nonautomation Presort |
| 1081 | Combined Letters (various levels of sortation) |
| 1085 | Letters – Automation Carrier Route Presort |
| 1086 | Letters – Automation Presort |
| 1100 | Mailgrams |

Priority Mail

- | | |
|------|-----------------|
| 1160 | Priority Letter |
|------|-----------------|

Express Mail

- | | |
|------|---|
| 1110 | Express Letter (outside Express Mail section) |
| 1111 | Express Letter (in Express Mail section) |

Periodicals

- | | |
|------|--|
| 1210 | Periodicals Prior to Identification of Subclass (letter shape) |
| 1211 | Periodicals In-County |
| 1212 | Periodicals Outside-County Regular |
| 1213 | Periodicals Outside-County Nonprofit |
| 1214 | Periodicals Outside-County Classroom |

TABLE B-2

ACTIVITY CODES

Cards and Letters (Continued)

Standard Mail (A)

- 1310 Regular – Enhanced Carrier Route
- 1330 Nonprofit – Enhanced Carrier Route
- 1340 Regular – Nonautomation Presort
- 1341 Combined Regular – Nonautomation/Automation Presort
- 1345 Regular – Automation Presort
- 1350 Nonprofit – Nonautomation Presort
- 1351 Combined Nonprofit – Nonautomation/Automation Presort
- 1355 Nonprofit – Automation Presort

Postal Service Mail

- 1510 Postal Service

U.S. Origin International Mail To Canada (see Table B-1, page 2)

- 1631 Surface Mail – AO Regular Printed Matter
- 1633 Surface Mail – AO Books and Sheet Music
- 1636 Surface Mail – AO Matter For The Blind
- 1639 Surface Mail – AO "M" Bag
- 1641 Surface Mail – AO Publishers Periodicals
- 1671 Airmail – LC Letters and Letter Packages
- 1672 Airmail – LC Cards
- 1673 Airmail – LC Aerogrammes
- 1681 Airmail – AO Regular Printed Matter
- 1683 Airmail – AO Books and Sheet Music
- 1686 Airmail – AO Matter For The Blind
- 1687 Airmail – AO Publishers Periodicals
- 1689 Airmail – AO "M" Bag
- 1650 Other Services – Priority Mail (IPAS)
- 1651 Other Services – Express Mail
- 1652 Other Services – Global Priority Mail
- 1653 Other Services – Global Package Link
- 1655 Other Services – International Surface Airlift (ISAL)
- 1656 Other Services – International Surface Airlift (ISAL) "M" Bag

U.S. Origin International Mail (see Table B-1, page 2)

- 1780 International Mail – Combined U.S. Origin and Foreign Origin
- 1731 Surface Mail – AO Regular Printed Matter
- 1733 Surface Mail – AO Books and Sheet Music
- 1736 Surface Mail – AO Matter for the Blind

TABLE B-2

ACTIVITY CODES

Cards and Letters (Continued)

1739	Surface Mail – AO "M" Bag
1741	Surface Mail – AO Publishers Periodicals
1771	Airmail – LC Letters and Letter Packages
1772	Airmail – LC Cards
1773	Airmail – LC Aerogrammes
1781	Airmail – AO Regular Printed Matter
1783	Airmail – AO Books and Sheet Music
1786	Airmail – AO Matter for the Blind
1787	Airmail – AO Publishers Periodicals
1789	Airmail – AO "M" Bag
1750	Other Services – Priority Airmail (IPAS)
1751	Other Services – Express Mail
1752	Other Services – Global Priority Mail
1753	Other Services – Global Package Link
1755	Other Services – International Surface Airlift (ISAL)
1756	Other Services – International Surface Airlift (ISAL) – "M" Bag

TABLE B-2

ACTIVITY CODES

Cards and Letters (Continued)

Foreign Origin International Mail (U.S. or Foreign Destination)

- 1810 Surface Mail – LC Cards and Letters (First-Class)
- 1820 Surface Mail – AO Mail (Periodicals and Standard (A))
- 1880 Surface Mail – "M" Bag
- 1850 Airmail – LC Cards, Aerogrammes, and Letters
- 1860 Airmail – AO Mail (prints)
- 1890 Airmail – "M" Bag
- 1895 Airmail – Express

Free Mail

- 1910 Letters – Free Matter for the Blind or Handicapped
- 1915 Combined Letters – Free Matter for Blind/Handicapped and Military Free Mail
- 1950 Letters – Military Free Mail

Flats (Includes Oversized Cards, Excludes Mail Paid at Parcel Post Rate)

First-Class Mail

- 2060 Flats
- 2080 Flats – Nonautomation Presort
- 2081 Combined Flats (various levels of sortation)
- 2086 Flats – Automation Presort

Priority Mail

- 2160 Flats

Express Mail

- 2110 Express Flat (outside Express Mail section)
- 2111 Express Flat (in Express Mail section)

Periodicals

- 2210 Periodicals Prior to the Identification of Subclass (flat shape)
- 2211 Periodicals In-County
- 2212 Periodicals Outside-County Regular
- 2213 Periodicals Outside-County Nonprofit
- 2214 Periodicals Outside-County Classroom

TABLE B-2

ACTIVITY CODES

Flats (Continued)

Standard Mail (A)

- 2310 Regular – Enhanced Carrier Route
- 2330 Nonprofit – Enhanced Carrier Route
- 2340 Regular – Nonautomation Presort
- 2341 Combined Regular – Nonautomation/Automation Presort
- 2345 Regular – Automation Presort
- 2350 Nonprofit – Nonautomation Presort
- 2351 Combined Nonprofit – Nonautomation/Automation Presort
- 2355 Nonprofit – Automation Presort

Standard Mail (B)

- 2420 Special Standard
- 2425 Combined Special Standard – Sorted and Single-Piece
- 2430 Special Standard – Presort
- 2440 Library Mail

Postal Service Mail

- 2510 Postal Service

U.S. Origin International Mail To Canada (see Table B-1, page 2)

- 2631 Surface Mail – AO Regular Printed Matter
- 2633 Surface Mail – AO Books and Sheet Music
- 2635 Surface Mail – AO Small Packet
- 2636 Surface Mail – AO Matter For The Blind
- 2639 Surface Mail – AO “M” Bag
- 2641 Surface Mail – AO Publishers Periodicals
- 2670 Airmail – LC Flats (“1st Class”)
- 2681 Airmail – AO Regular Printed Matter
- 2683 Airmail – AO Books and Sheet Music
- 2685 Airmail – AO Small Packets
- 2686 Airmail – AO Matter For The Blind
- 2687 Airmail – AO Publishers Periodicals
- 2689 Airmail – AO “M” Bag
- 2650 Other Services – Priority Airmail (IPAS)
- 2651 Other Services – Express Mail
- 2652 Other Services – Global Priority Mail
- 2653 Other Services – Global Package Link
- 2654 Other Services – Global Priority Mail Guaranteed
- 2655 Other Services – International Surface Airlift (ISAL)
- 2656 Other Services – International Surface Airlift (ISAL) “M” Bag

TABLE B-2

ACTIVITY CODES

Flats (Continued)

U.S. Origin International Mail (see Table B-1, page 2)

2780	International Mail – Combined U.S. Origin and Foreign Origin
2731	Surface Mail – AO Regular Printed Matter
2733	Surface Mail – AO Books and Sheet Music
2735	Surface Mail – AO Small Packets
2736	Surface Mail – AO Matter for the Blind
2739	Surface Mail – AO "M" Bag
2741	Surface Mail – AO Publishers Periodicals
2770	Airmail – LC Flats (First-Class)
2781	Airmail – AO Regular Printed Matter
2783	Airmail – AO Books and Sheet Music
2785	Airmail – AO Small Packets
2786	Airmail – AO Matter for the Blind
2787	Airmail – AO Publishers Periodicals
2789	Airmail – AO "M" Bag
2750	Other Services – Priority Airmail (IPAS)
2751	Other Services – Express Mail
2752	Other Services – Global Priority Mail
2753	Other Services – Global Package Link
2754	Other Services – Global Priority Mail Guaranteed
2755	Other Services – International Surface Airlift (ISAL)
2756	Other Services – International Surface Airlift (ISAL) – "M" Bag

Foreign Origin Mail (U.S. or Foreign Destination)

2810	Surface Mail – LC Flats (First-Class)
2820	Surface Mail – AO Flats (Periodicals and Standard (A))
2880	Surface Mail – "M" Bag
2850	Airmail – LC Flats
2860	Airmail – AO Flats (prints)
2890	Airmail – "M" Bag
2895	Airmail – Express

Free Mail

2910	Flats – Free Matter for the Blind or Handicapped
2915	Combined Flats – Free Matter for Blind/Handicapped and Military Free Mail
2950	Flats – Military Free Mail

TABLE B-2
ACTIVITY CODES

Irregular Parcels and Pieces (Excludes Mail Over 8 Oz. and All Parcel Post Regardless of Weight)

First-Class Mail

- 3060 IPPs Up to 8 Oz.
- 3080 IPPs Up to 8 Oz. – Nonautomation Presort

Priority Mail

- 3160 IPPs Up to 8 Oz.

Express Mail

- 3110 Express IPPs Up to 8 Oz. (outside Express Mail section)
- 3111 Express IPPs Up to 8 Oz. (in Express Mail section)

Periodicals

- 3210 Periodicals Prior to Identification of Subclass (IPP shape)
- 3211 Periodicals In-County
- 3212 Periodicals Outside-County Regular
- 3213 Periodicals Outside-County Nonprofit
- 3214 Periodicals Outside-County Classroom

TABLE B-2

ACTIVITY CODES

Irregular Parcels and Pieces (Continued)

Standard Mail (A)

- 3310 Regular – Enhanced Carrier Route
- 3330 Nonprofit – Enhanced Carrier Route
- 3340 Regular – Nonautomation Presort
- 3350 Nonprofit – Nonautomation Presort

Standard Mail (B)

- 3420 Special Standard
- 3425 Combined Special Standard – Presort and Single-Piece
- 3430 Special Standard – Presort
- 3440 Library Mail

Postal Service Mail

- 3510 Postal Service

U.S. Origin International Mail To Canada (see Table B-1, page 2)

- 3631 Surface Mail – AO Regular Printed Matter
- 3633 Surface Mail – AO Books and Sheet Music
- 3635 Surface Mail – AO Small Packets
- 3636 Surface Mail – AO Matter For The Blind
- 3639 Surface Mail – AO "M" Bag
- 3641 Surface Mail – AO Publishers Periodicals
- 3670 Airmail – LC
- 3681 Airmail – AO Regular Printed Matter
- 3683 Airmail – AO Books and Sheet Music
- 3685 Airmail – AO Small Packets
- 3686 Airmail – AO Matter For The Blind
- 3687 Airmail – AO Publishers Periodicals
- 3689 Airmail – AO "M" Bag
- 3650 Other Services – Priority Mail (IPAS)
- 3651 Other Services – Express Mail
- 3652 Other Services – Global Priority Mail
- 3653 Other Services – Global Package Link
- 3655 Other Services – International Surface Airlift (ISAL)
- 3656 Other Services – International Surface Airlift (ISAL) "M" Bag

U.S. Origin International Mail (see Table B-1, page 2)

- 3780 International Mail – Combined U.S. Origin and Foreign Origin
- 3731 Surface Mail – AO Regular Printed Matter

TABLE B-2

ACTIVITY CODES

Irregular Parcels and Pieces (Continued)

3733	Surface Mail – AO Books and Sheet Music
3735	Surface Mail – AO Small Packets
3736	Surface Mail – AO Matter for the Blind
3739	Surface Mail – AO "M" Bags
3741	Surface Mail – AO Publishers Periodicals
3770	Airmail – LC
3781	Airmail – AO Regular Printed Matter
3783	Airmail – AO Books and Sheet Music
3785	Airmail – AO Small Packets
3786	Airmail – AO Matter for the Blind
3787	Airmail – AO Publishers Periodicals
3789	Airmail – AO "M" Bag
3750	Other Services – Priority Mail (IPAS)
3751	Other Services – Express Mail
3752	Other Services – Global Priority Mail
3753	Other Services – Global Priority Link
3755	Other Services – International Surface Airlift (ISAL)
3756	Other Services – International Surface Airlift (ISAL) – "M" Bag

TABLE B-2

ACTIVITY CODES

Irregular Parcels and Pieces (Continued)

Foreign Origin International Mail (U.S. or Foreign Destination)

- 3810 Surface Mail – LC (First-Class)
- 3820 Surface Mail – AO (Periodicals and Standard (A))
- 3880 Surface Mail – "M" Bag
- 3850 Airmail – LC
- 3860 Airmail – AO
- 3890 Airmail – "M" Bag
- 3895 Airmail – Express

Free Mail

- 3910 IPPs – Free for the Blind or Handicapped
- 3915 Combined IPPs – Free Matter for Blind/Handicapped and Military Free Mail
- 3950 IPPs – Military Free Mail

Parcels (Includes All Parcel Post Regardless of Weight)

First-Class Mail

- 4060 Parcels Up to 13 Oz.
- 4080 Parcels Up to 13 Oz. – Nonautomation Presort

Priority Mail

- 4160 Parcels

Express Mail

- 4110 Express Parcels (outside Express Mail section)
- 4111 Express Parcels (in Express Mail section)

Periodicals

- 4210 Periodicals Prior to the Identification of Subclass (parcel shape)
- 4211 Periodicals In-County
- 4212 Periodicals Outside-County Regular
- 4213 Periodicals Outside-County Nonprofit
- 4214 Periodicals Outside-County Classroom

TABLE B-2

ACTIVITY CODES

Parcels (Continued)

Standard Mail (A)

- 4310 Regular – Enhanced Carrier Route
- 4330 Nonprofit – Enhanced Carrier Route
- 4340 Regular – Nonautomation Presort
- 4350 Nonprofit – Nonautomation Presort

Standard Mail (B)

- 4400 Parcel Post
- 4420 Special Standard
- 4425 Combined Special Standard – Presorted and Single-Piece
- 4430 Special Standard – Presort
- 4440 Library Mail
- 4460 Bound Printed Matter – Single-Piece Rate
- 4465 Combined Bound Printed Matter – Nonlocal/Local, Single/Bulk
- 4480 Bound Printed Matter – Bulk Rate
- 4493 Drop Ship – Parcel Post
- 4495 Bound Printed Matter – Carrier Route

Postal Service Mail

- 4510 Postal Service

U.S. Origin International Mail To Canada (see Table B-1, page 2)

- 4631 Surface Mail – AO Regular Printed Matter
- 4633 Surface Mail – AO Books and Sheet Music
- 4635 Surface Mail – AO Small Packets
- 4636 Surface Mail – AO Matter For The Blind
- 4639 Surface Mail – AO “M” Bag
- 4641 Surface Mail – AO Publishers Periodicals
- 4660 Surface Mail – Parcel Post
- 4670 Airmail – LC
- 4681 Airmail – AO Regular Printed Matter
- 4683 Airmail – AO Books and Sheet Music
- 4685 Airmail – AO Small Packets

TABLE B-2

ACTIVITY CODES

Parcels (Continued)

4686	Airmail – AO Matter For The Blind
4687	Airmail – AO Publishers Periodicals
4689	Airmail – AO "M" Bag
4650	Other Services – Priority Mail (IPAS)
4651	Other Services – Express Mail
4652	Other Services – Global Priority Mail
4653	Other Services – Global Package Link
4655	Other Services – International Surface Airlift
4656	Other Services – International Surface Airlift (ISAL) "M" Bag
4690	Airmail – Parcel Post

U.S. Origin International Mail (see Table B-1, page 2)

4780	International Mail – Combined U.S. Origin and Foreign Origin
4731	Surface Mail – AO Regular Printed Matter
4733	Surface Mail – AO Books and Sheet Music
4735	Surface Mail – AO Small Packets
4736	Surface Mail – AO Matter for the Blind
4739	Surface Mail – AO "M" Bag
4741	Surface Mail – AO Publishers Periodicals
4760	Surface Mail – Parcel Post
4770	Airmail – LC
4781	Airmail – AO Regular Printed Matter
4783	Airmail – AO Books and Sheet Music
4785	Airmail – AO Small Packets

TABLE B-2

ACTIVITY CODES

Parcels (Continued)

U.S. Origin International Mail (Continued)

4786	Airmail – AO Matter for the Blind
4787	Airmail – AO Publishers Periodicals
4789	Airmail – AO "M" Bag
4750	Other Services – Priority Airmail (IPAS)
4751	Other Services – Express Mail
4752	Other Services – Global Priority Mail
4753	Other Services – Global Package Link
4755	Other Services – International Surface Airlift (ISAL)
4756	Other Services – International Surface Airlift (ISAL) – "M" Bag
4790	Airmail – Parcel Post

Foreign Origin International Mail (U.S. or Foreign Destination)

4810	Surface Mail – LC (First-Class)
4820	Surface Mail – AO (Periodicals and Standard (A))
4840	Surface Mail – Parcel Post
4880	Surface Mail – "M" Bag
4850	Airmail – LC
4860	Airmail – AO
4870	Airmail – Parcel Post
4890	Airmail – "M" Bag
4895	Airmail – Express

Free Mail

4910	Parcels – Free for the Blind or Handicapped
4915	Combined Parcels – Free Matter for Blind/Handicapped and Military Free Mail
4950	Parcels – Military Free Mail

2. MIXED MAIL

Mixed mail codes are applied to mail when one of the direct mail codes is not appropriate for identification of that mail in the IOCS. The codes are listed for mail classes and combinations of mail classes and for shapes.

Mail Classes and Combinations of Mail Classes

5300	First-Class Not Over 13 Oz. (domestic)
5340	Standard Mail (A) Mixed
5430	International Mail, U.S. Origin – Surface
5440	International Mail, U.S. Origin – Airmail

TABLE B-2

ACTIVITY CODES

2. MIXED MAIL (Continued)

Mail Classes and Combinations of Mail Classes (Continued)

- 5450 International Mail, Foreign Origin – Surface
- 5460 International Mail, Foreign Origin – Airmail
- 5470 International Mail, Foreign Origin and Destination – Surface
- 5480 International Mail Foreign Origin and Destination – Airmail

Detailed International Mixed (see Table B-1, page 2)

- 5431 International, U.S. Origin, Surface – Cards, Letters
- 5432 International, U.S. Origin, Surface – Flats
- 5433 International, U.S. Origin, Surface – IPPs
- 5434 International, U.S. Origin, Surface – Parcels
- 5441 International, U.S. Origin, Airmail – Cards, Letters
- 5442 International, U.S. Origin, Airmail – Flats
- 5443 International, U.S. Origin, Airmail – IPPs
- 5444 International, U.S. Origin, Airmail – Parcels
- 5451 International, Foreign Origin, Surface – Cards, Letters
- 5452 International, Foreign Origin, Surface – Flats
- 5453 International, Foreign Origin, Surface – IPPs
- 5454 International, Foreign Origin, Surface – Parcels
- 5461 International, Foreign Origin, Airmail – Cards, Letters
- 5462 International, Foreign Origin, Airmail – Flats
- 5463 International, Foreign Origin, Airmail – IPPs
- 5464 International, Foreign Origin, Airmail – Parcels

Shapes

- 5610 Letter Size
- 5620 Flat Size
- 5650 Mixed Letter and Flat Size
- 5700 IPPs and Parcels
- 5740 Mixed Mail – Handling Single Item
- 5745 Mixed Mail – Handling Container or Multiple Items
- 5750 Mixed All Shapes

TABLE B-2

ACTIVITY CODES

3. WINDOW AND RELATED OFFICE ACTIVITIES

5020	At Window Serving a Customer – Post Office Box
5030	At Window Serving a Customer – Caller Service
5040	At Window Serving a Customer – Selling Stamps
5050	At Window Serving a Customer – Selling Cards
5060	At Window Serving a Customer – Selling Envelopes – Plain
5070	At Window Serving a Customer – Setting Meters
5080	At Window Serving a Customer – Selling Money Orders
5081	At Window Serving a Customer – International Money Orders
5090	At Window Serving a Customer – Selling Envelopes – Printed
5110	At Window Serving a Customer – Change of Address/Form 3575
5120	At Window Serving a Customer – U.S. Passport Applications
5130	At Window Serving a Customer – Retail Products (jiffy bags, etc.)
5140	At Window Serving a Customer – Migratory Bird Stamp
5150	At Window Serving a Customer – Selling Certificate of Mailing
5160	At Window Serving a Customer – Alien Address Reporting
5170	At Window Serving a Customer – All Other Work
5180	At Window Serving a Customer – Permit Applications and Accepting Trust Fund Deposits
5194	At Window Serving a Customer – Liberty Cash
5195	At Window Serving a Customer – FirstClass Phonecard
6000	Customer Inquiry
6010	At Window Waiting for a Customer
6020	Window-Related Activity – Post Office Box
6030	Window-Related Activity – Caller Service
6040	Window-Related Activity – Selling Stamps
6045	Window-Related Office Activity – SSPU Work

TABLE B-2

ACTIVITY CODES

3. WINDOW AND RELATED OFFICER ACTIVITIES (Continued)

6050	Window-Related Activity – Selling Cards
6060	Window-Related Activity – Selling Envelopes – Plain
6070	Window-Related Activity – Setting Meters
6073	Window-Related Activity – Off-Site – Setting Meters
6080	Window-Related Activity – Money Orders
6081	Window-Related Activity – International Money Orders
6090	Window-Related Activity – Selling Envelopes – Printed
6110	Window-Related Activity – Change of Address/ Form 3575
6120	Window-Related Activity – U.S. Passport Applications
6130	Window-Related Activity – Retail Products (jiffy bags, etc.)
6140	Window-Related Activity – Migratory Bird Stamp
6150	Window-Related Activity – Selling Certificate of Mailing
6160	Window-Related Activity – Alien Address Reporting
6170	Window-Related Activity – All Other Work (includes preparing to open/close out window)
6180	Window-Related Activity – Permit Applications/Accepting Trust Fund Deposits
6194	Window-Related Activity – Liberty Cash
6195	Window-Related Activity – FirstClass Phonecard
6200	General Delivery, Customer Hold Mail, and Non-Boxholder Firms

4. NONPOSTAL ACTIVITIES (WORK FOR OTHER GOVERNMENT AGENCIES)

6270	Selective Service Registration
6275	Internal Revenue Service
6290	OMMS (Only Washington, DC Post Office)

5. MAIL-RELATED ACTIVITIES

6210	Platform Acceptance
6220	Special Delivery
6230	Registry
6231	Express Mail
6240	Nixie
6320	Supplies and Equipment
6330	Claims and Inquiry
6420	Carrier Performing Routine Office Work or Going to Vehicle
6430	Checking In/Obtaining Accountable Mail or Keys/Checking Vehicle/Safety Meeting
6435	Delivery Confirmation
6460	Vehicle Service Clerical Work
6480	Quality Control/Revenue Protection
6495	Headquarters/Area Test
6500	Conducting and Taking Scheme Exams
6511	Training – Letter Shape

TABLE B-2

ACTIVITY CODES

5. MAIL-RELATED ACTIVITIES (Continued)

- 6512 Training – Flat Shape
- 6514 Training – Parcel Shape
- 6516 Training – Mixed All Shapes
- 6517 Training – Registry
- 6518 Training – Other Special Services
- 6519 Training – Other Training
- 6521 Break/Personal Needs
- 6522 Clocking In or Clocking Out
- 6523 Moving Empty Equipment
- 6570 Central Mail Mark-Up
- 6580 Postage Due

6. GENERAL SERVICES ACTIVITIES

- 6610 Personnel and E&LR Work
- 6620 Accounting or Auditing
- 6630 General Administrative Services

Note: 6630 also includes:

- Transfer Office Work
- Industrial Engineering
- Marketing and Communication
- Secretarial Work
- Transportation-Related
- Production Control Planning
- Other Special Activities

- 6640 Time and Attendance at Non-PSDS Office
- 6650 PSDS/MODS/TACS – Time and Attendance
- 6660 PSDS/MODS/TACS – All Other

7. OUT-OF-OFFICE TIME

- 6710 City Carrier Street Time
- 6730 Special Delivery Messenger Street Time

8. SUPERVISORY ACTIVITIES

- 7170 Window Service Supervision
- 7220 Special Delivery Messenger Supervision
- 7410 Rural Delivery Carrier Supervision
- 7420 City Delivery Carrier Supervision
- 7460 Vehicle Service Clerical Work

TABLE B-2

ACTIVITY CODES

8. SUPERVISORY ACTIVITIES (Continued)

7470	Supervision of Mixed Clerk/Mailhandler Activities
7480	Quality Control/Revenue Protection
7500	Express Mail
7510	Training – Not Specified
7570	Central Mail Mark-Up
7631	Higher Level Supervisors
7632	Employee and Labor Relations
7633	General Supervision of Mail Processing
7634	General Supervision of Collection and Delivery
7635	Supervision of Two or More Clerical and/or Mailhandler Activities
7636	Supervision of Two or More of the Following Crafts:
	(1) City Delivery Carriers
	(2) Rural Carriers
	(3) Special Delivery Messengers
7637	Supervision of Clerks and/or Mailhandlers and At Least One of the Following:
	(1) City Delivery Carriers
	(2) Rural Carriers
	(3) Special Delivery Messengers
7750	Mail Processing Supervision
7610	Personnel and E&LR Work
7640	Time and Attendance at Non-PSDS Office
7650	PSDS/MODS /TACS– Time and Attendance
7620	Accounting or Auditing
7630	General Administrative Work
7210	Platform Acceptance
7230	Registry
7240	Nixie
7320	Supplies and Equipment
7330	Claims and Inquiry
7495	Headquarters/Area Test
7523	Moving Empty Equipment
7580	Postage Due

TABLE B-2

ACTIVITY CODES

9. LUNCH AND LEAVE ACTIVITIES

9010	Annual Leave
9020	Sick Leave
9030	Loaned to Others (when on Form 1232)
9040	Military Leave (continuation of pay)
9050	Other Paid Leave
9060	Jury Duty/Court Leave
9070	Non-Scheduled
9080	Terminated, Resigned, Retired
9090	Transferred
9110	Leave Without Pay (including AWOL)
9120	Split Shift
9130	Lunch
9140	Five-Minute Leeway Time (FLSA)
9150	Guaranteed Time
9200	CODES Record for Scheduled Sample Not Received
9201	Non-IOCS Occupation Code
9202	Sample Contains Insufficient Data for Coding
9203	Non-IOCS Roster Designation/Activity Combination
9206	Supervisor Lunch/Leave/Non-Scheduled

TABLE B-3

SPECIAL SERVICES CODES – MAIL-CONNECTED
(Includes Related Claims Work)

001	Special Delivery
002	Special Handling
003	Collect on Delivery (COD)
005	Certified
006	Registered
007	Insured – Numbered
008	Insured – Unnumbered
009	Business Reply
010	Merchandise Return
011	Delivery Confirmation – Electronic
012	Delivery Confirmation - Manual
014	Signature Confirmation
019	Return Receipt (Forms 3811/3811-A unattached)
030	Form 3547/3579
070	International Special Services (Excluding Money Orders)

Note: When one of the above special services is determined to be the IOCS observed activity, a zero (0) is added to the three-digit special service code to create a four-digit activity code. For example, if an observation involved registered mail (code 006) and the observed employee activity were such that a special service activity (as opposed to a mail class or subclass activity) description were appropriate, a zero would be added to code 006, and the activity would be coded 0060.

TABLE B-4

UNIFORM OPERATION CODES

00	Postage Due
01	Preparation of Mail
02	Outgoing Primary Distribution
03	Outgoing Secondary Distribution
04	Incoming Primary Distribution
05	Incoming Secondary Distribution
06	Nixie
07	Accepting Mail from Patron on Platform
08	Other Platform Work
09	Window Service
10	All Other Work
11	Distribution to Post Office Box Sections
12	Caller Service
13	Mixed Post Office Box/Caller
14	Central Mail Mark-Up
15	City Carrier Distribution
16	Rural Carrier Distribution
17	Claims and Inquiry
18	Registry Only
20	Sortation to Post Office Boxes
21	Special Delivery
22	Express Mail
23	Other Accountable Work
24	Window Post Office Box
25	Window Caller
26	Window General Delivery and Customer Hold Mail
27	Distribution to Carrier – Sorting to Sector Segment
28	Distribution to Carrier – Sorting to ABC/Walk Sequence
29	Distribution to Carrier – Other

TABLE B-5

CITY ROUTE CODES

71	Business – Foot
73	Business – Motorized
75	Residential – Foot
77	Residential – Curb
78	Residential – Park and Loop
80	Mixed Business and Residential – Foot
82	Mixed Business and Residential – Curb
83	Mixed Business and Residential – Park and Loop
84	Non-Parcel Post – Combination
85	Parcel Post – Combination
86	Exclusive Parcel Post
87	Collection (foot and motorized)
88	Special Delivery
89	Relay Route
90	OMMS (only Washington, DC post office)
98	Other Route Type
99	In-Office Training

TABLE B-6

ROSTER DESIGNATIONS OF SELECTED PERSONNEL

09	Supervisor
19	Professional Administrative and Technical
11	Clerk, Career Regular
31	Clerk, Hourly Rate Regular
41	Clerk, Career Substitute
61	Clerk, Casual
81	Clerk, Transitional
12	Mailhandler, Career Regular
32	Mailhandler, Hourly Rate Regular
42	Mailhandler, Career Substitute
62	Mailhandler, Casual
82	Mailhandler, Transitional
13	Carrier, Career Regular
33	Carrier, Hourly Rate Regular
43	Carrier, Career Substitute
63	Carrier, Casual
83	Carrier, Transitional
14	Special Delivery Messenger, Career Regular
34	Special Delivery Messenger, Hourly Rate Regular
44	Special Delivery Messenger, Career Substitute
64	Special Delivery Messenger, Casual
84	Special Delivery Messenger, Transitional

APPENDIX C

FORMATION OF MAIL PROCESSING DISTRIBUTION KEYS

General Approach

The mail processing distribution keys indicate the proportions of the volume-variable costs associated with each cost pool to be assigned to each rate element in the CRA. Therefore, the individual subclass entries for any cost pool's distribution key sum to one. The distribution keys are formed for each mail processing cost pool using the associated IOCS tallies. The distribution key entry for any subclass (δ_{ij} , where i indicates the cost pool and j indicates the subclass) is the ratio of the tally costs associated with that subclass (TC_{ij}) to the total tally costs of the tallies associated with the cost pool (TC_i):

$$\delta_{ij} = \frac{TC_{ij}}{TC_i}.$$

All tallies are used to form the distribution key, so the sum of TC_{ij} over all subclasses is TC_i , and thus the sum over all subclasses of the distribution key entries δ_{ij} is one.

The tally costs for a particular cost pool and subclass combination, TC_{ij} , are the sum of the direct tallies (DTC_{ij}), distributed mixed-mail tallies (MTC_{ij}), and distributed not-handling mail tallies (NTC_{ij}) for the cost pool and subclass:

$$TC_{ij} = DTC_{ij} + MTC_{ij} + NTC_{ij}.$$

Direct tallies, by definition, have an activity code that identifies the tally with a class or subclass of mail. Direct tally costs are assigned directly to the appropriate subclass. The IOCS activity codes and corresponding subclasses are listed in Appendix B, Table B-2. Certain class-specific mixed-mail codes, listed in the section Class-Specific Mixed-Mail Codes below, are also treated as direct activity codes for the purposes of distributing mixed-mail and not-handling tallies.

Mixed-mail tally costs (MM_{ik}) are divided into a large number of categories (indexed by k) corresponding to different mixed-mail item and container types. The categories for mixed items and containers are described in the section Specific Mail Codes Related to Mixed-Mail Codes below. For each mixed-mail category, a set of "distributing" tallies is identified. For categories corresponding to mixed-mail items (including empty items and items in "identified" containers,¹ the distributing set consists of direct tallies for the same cost pool and item type. For categories corresponding to "unidentified" and empty containers, the distributing set consists of direct tallies for the same cost pool and container type, plus distributed "identified" container tallies for the same cost pool container type. Thus, the distributed mixed-mail tally costs are:

$$MTC_{ij} = \sum_{k=\text{category}} MM_{ik} \times \frac{DTC_{ijk}}{DTC_{ik}}.$$

¹ The distribution of tally costs for items in identified containers sampled in the MODS and BMC Platform cost pools are carried out across multiple cost pools, since the direct items handled in the Platform cost pools are not necessarily representative of the items in containers. See Docket No. R2000-1, LR-I-106 (Part II) for details.

The additional subscript k on the distributing tally costs (DTC) indicates that the distributing tallies are partitioned by mixed-mail category. If the distributing set for a given category is empty, the distribution is carried out over all cost pools.

For non-allied cost pools, not-handling tally costs are distributed in proportion to the direct and distributed mixed-mail tallies in the same cost pool:

$$NTC_{ij} = NT_i \times \frac{DTC_{ij} + MTC_{ij}}{\sum_{j=\text{subclass}} (DTC_{ij} + MTC_{ij})}$$

For allied cost pools, not-handling tally costs are distributed in proportion to the direct and distributed mixed-mail tallies aggregated across a set of *i* distribution and allied cost pools²:

$$NTC_{i,j} = NT_i \times \frac{\sum_j (DTC_{i,j} + MTC_{i,j})}{\sum_i \sum_j (DTC_{i,j} + MTC_{i,j})}$$

Finally, any direct, mixed-mail, and not-handling tally costs assigned to the class-specific mixed-mail codes are distributed to subclass in proportion to the total distributed direct, mixed-mail, and not-handling tally costs for the associated activity codes listed in the following section.

Specific Mail Codes Related to Mixed-Mail Codes

The following table shows the codes for mixed items and containers. For discussion, details, and exceptions, see Docket No. R2000-1, USPS-T-17, and USPS-LR-I-106, part II.

Mixed-mail codes	Related activity codes	Tallies used for distribution
"Uncounted" mixed items: F9214 = 'A'-'P' and no direct activity code (including class-specific codes)	1000-4950 5340, 54XX selected 0010-0300 tallies (see LR-I-106 at II-41)	Direct tallies for same item type and cost pool
"Identified" mixed containers: F9219 = 'A'-'J', no direct activity code (including class-specific codes), positive sum of F9901-F9919, F9420, F9421	1000-4950 5340, 54XX selected 0010-0300 tallies (see LR-I-106 at II-41)	Direct tallies in same cost pool for shapes and/or item types identified in container
"Unidentified" mixed containers: F9219 = 'A'-'J', no direct activity code (including class-specific codes), sum of F9901-F9919, F9420, F9421 less than or equal to zero or error	1000-4950 5340, 54XX selected 0010-0300 tallies (see LR-I-106 at II-41)	Direct and "filled" identified container tallies for same container type and cost pool

Class-Specific Mixed-Mail Codes

Activity codes that identify the mail class (e.g., Periodicals) but not the CRA rate element (e.g., Regular Rate Periodicals) are redistributed according to the following table.

² For further details on which *i* cost pools are included in the distribution key, see Docket No. R2000-1, PART II of USPS-LR-I-106.

Mixed-mail codes	Related activity codes
5300	10XX,20XX,30XX,40XX
5340	13XX,23XX,33XX,43XX
5430	163X,164X,173X,174X,263X,264X,273X,274X,363X,364X,373X,374X,463X,464X,473X,474X
5440	167X,168X,177X,178X,267X,268X,277X,278X,367X,368X,377X,378X,467X,468X,477X,478X
5450	1810,1820,1880,2810,2820,2880,3810,3820,3880,4810,4820,4840,4880
5460	1850,1860,1890,1895,2850,2860,2890,2895,3850,3860,3890,3895,4850,4860,4870,4890,4895
5470	1810,1820,1880,2810,2820,2880,3810,3820,3880,4810,4820,4840,4880
5431	163X,164X,1655,1656,173X,174X,1755,1756
5432	263X,264X,2655,2656,273X,274X,2755,2756
5433	363X,364X,3655,3656,373X,374X,3755,3756
5434	463X,464X,4655,4656,4660,473X,474X,4755,4756,4760
5441	1650-1653,167X,168X,1750-1753,177X,178X
5442	2650-2653,267X,268X,2750-2753,277X,278X
5443	3650-3653,367X,368X,3750-3753,377X,378X
5444	4650-4653,467X,468X,4690,4750-4753,477X,478X,4790
5451	1810,1820,1880
5452	2810,2820,2880
5453	3810,3820,3880
5454	4810,4820,4840,4880
5461	1850,1860,1890,1895
5462	2850,2860,2890,2895
5463	3850,3860,3890,3895
5464	4850,4860,4870,4890,4895

APPENDIX D

DISTRIBUTION KEY DEVELOPMENT FOR VOLUME VARIABLE STAMP, CARD, AND METER TRANSACTION WINDOW SERVICE COSTS IN COST SEGMENT 3

Factors for the distribution of volume variable costs for stamps and meter transactions among classes and subclasses of mail are developed by the application of volume data obtained from the Origin-Destination Information System (ODIS), the Supplemental ODIS Survey, and by certain assumptions. These factors are presented as follows:

	<u>Percent</u>	
	<u>Stamped</u>	<u>Metered</u>
<u>First-Class Mail</u>		
Single-Piece Letters	50.8	40.9
Presort Letters	2.4	57.5
Single-Piece Cards	47.1	26.8
Presort Cards	3.4	3.8
<u>Priority Mail</u>	9.3	63.8
<u>Express Mail</u>	9.3	63.8
<u>Standard Mail (A)</u>		
Single-Piece Rate	4.7	9.6
Commercial Standard - Enhanced Carrier Route	0.9	1.9
Commercial Standard - Regular	3.7	8.9
Nonprofit - Enhanced Carrier Route	3.8	2.7
Nonprofit-Regular	11.0	11.2
<u>Standard Mail (B)</u>		
Parcels Zone Rate	0.8	13.6
Bound Printed Matter	3.0	97.0
Special Standard	1.6	14.9
Library Mail	1.6	14.9
<u>International</u>		
Surface - Other Articles	4.0	60.0
- Periodicals	1.0	1.0
- Parcel Post	4.0	91.0
Airmail - Letters & Cards	22.0	73.0
- Other Articles	5.0	90.0
- Parcel Post	3.0	95.0
International Surface Airlift	0.0	16.0
International Priority Airmail	0.0	53.0

APPENDIX E

DISTRIBUTION OF MIXED MAIL COSTS TO DIRECT MAIL ACTIVITY CODES

Mixed mail costs are distributed to direct mail activity codes by basic function within route type for city carriers.

Basic Functions: Outgoing, Incoming, Transit

For these basic functions, the mixed mail code costs are distributed to direct mail activity codes using the following procedures:

1. The set of direct mail activity codes related to each mixed mail code being distributed is identified in Table E-2.
2. The costs for the direct mail activity codes within each set are summed by route type within each basic function to obtain a total direct mail activity code cost for each set.
3. For each set, the cost for each direct mail activity code is divided by the total direct mail activity code cost to obtain a ratio for each direct mail activity code cost in the set to the total cost for the set.
4. The mixed mail code cost related to each set is multiplied by each ratio for the set to determine the distribution of the mixed mail code cost for the set to each of the direct mail activity codes.

The procedure is illustrated by the example given in Table E-1, which assumes the following conditions:

- The route type is 87 – Collection (foot and motorized).
- The basic function is outgoing.
- The mixed mail code is 5300.

TABLE E-1

AN EXAMPLE OF THE DISTRIBUTION OF MIXED MAIL CODE COSTS
TO DIRECT MAIL CODE COSTS

<u>Activity Code</u>	<u>Direct Mail Code (dollars)¹</u>	<u>Direct Mail Code Distribution Ratio²</u>	<u>Distribution of Mixed Mail Code (dollars)³</u>
1060	A(1060)	$A(1060)/A(t)=C(1060)$	$C(1060)*(Y)=Y(1060)$
1080	A(1080)	$A(1080)/A(t)=C(1080)$	$C(1080)*(Y)=Y(1080)$
1085	A(1085)	$A(1085)/A(t)=C(1085)$	$C(1085)*(Y)=Y(1085)$
	<hr/> A(t)	<hr/> 1.000	<hr/> Y

¹ Total Direct Mail Activity Code Costs (because this is an example, all the related direct codes are not included). $A(t)=A(1060)+A(1080)+A(1085)$, where:

A(1060) is Direct Mail Activity Code 1060 cost for the Basic Function - OUTGOING

A(1080) is Direct Mail Activity Code 1080 cost for the Basic Function - OUTGOING

A(1085) is Direct Mail Activity Code 1085 cost for the Basic Function - OUTGOING

A(t) is the sum of the above Direct Mail Activity Code Costs.

² Direct Mail Code Distribution Ratio. $1.000=C(1060)+C(1080)+C(1085)$, where:

C(1060) is ratio of Direct Mail Activity Code 1060 cost divided by Total Direct Mail Code Cost

C(1080) is ratio of Direct Mail Activity Code 1080 cost divided by Total Direct Mail Code Cost

C(1085) is ratio of Direct Mail Activity Code 1085 cost divided by Total Direct Mail Cost.

³ Total Mixed Mail Code 5300 dollars to be distributed. $Y=Y(1060)+Y(1080)+Y(1085)$, where:

Y(1060) is Mixed Mail Code 5300 dollars distributed to Direct Mail Activity Code 1060

Y(1080) is Mixed Mail Code 5300 dollars distributed to Direct Mail Activity Code 1080

Y(1085) is Mixed Mail Code 5300 dollars distributed to Direct Mail Activity Code 1085

Y is the sum of the above Mixed Mail Code 5300 cost.

Basic Function: Other

For this basic function, the procedure for distributing mixed mail code costs to direct mail activity code costs is the same as for the basic functions outgoing, incoming, and transit, with one exception: for each set, the direct mail activity code costs used to develop each direct mail activity code cost ratio are the sum of the outgoing, incoming, transit, and other basic function costs of each direct mail activity code. Using the previous example, the direct mail activity code costs that would be used to distribute the basic function -- Other Code 5300 dollars -- are the following:

1. $A(1060) = A(1060)(O) + A(1060)(I) + A(1060)(T) + A(1060)(O')$, where:

$A(1060)$	is Direct Mail Activity Code dollars used to distribute the Mixed Mail basic function -- OTHER 5300 dollars
$A(1060)(O)$	is Direct Mail Activity Code dollars for the basic function -- OUTGOING
$A(1060)(I)$	is Direct Mail Activity Code dollars for the basic function -- INCOMING
$A(1060)(T)$	is Direct Mail Activity Code dollars for the basic function -- TRANSIT
$A(1060)(O')$	is Direct Mail Activity Code dollars for the basic function -- OTHER

2. $A(1080) = A(1080)(O) + A(1080)(I) + A(1080)(T) + A(1080)(O')$, where:

$A(1080)$	is Direct Mail Activity Code dollars used to distribute the Mixed Mail basic function -- OTHER 5300 dollars
$A(1080)(O)$	is Direct Mail Activity Code dollars for the basic function -- OUTGOING
$A(1080)(I)$	is Direct Mail Activity Code dollars for the basic function -- INCOMING
$A(1080)(T)$	is Direct Mail Activity Code dollars for the basic function -- TRANSIT
$A(1080)(O')$	is Direct Mail Activity Code dollars for the basic function -- OTHER

3. $A(1085) = A(1085)(O) + A(1085)(I) + A(1085)(T) + A(1085)(O')$, where:

$A(1085)$	is Direct Mail Activity Code dollars used to distribute the Mixed Mail basic function -- OTHER 5300 dollars
$A(1085)(O)$	is Direct Mail Activity Code dollars for the basic function -- OUTGOING
$A(1085)(I)$	is Direct Mail Activity Code dollars for the basic function -- INCOMING
$A(1085)(T)$	is Direct Mail Activity Code dollars for the basic function -- TRANSIT
$A(1085)(O')$	is Direct Mail Activity Code dollars for the basic function -- OTHER

Table E-2 displays direct mail codes grouped by mail shape and by corresponding specific mixed mail codes (also by class and shape) used in the mixed mail distribution process.

TABLE E-2

DIRECT MAIL CODES RELATED TO MIXED MAIL CODES

Mixed Mail Codes	Related Codes for Specific Types of Mail			
	<u>Letter-Size</u>	<u>Flats</u>	<u>IPPs</u>	<u>Parcels</u>
5300	1020-1086	2060-2086	3060-3080	4060-4080
5340	1310-1360	2310-2360	3310-3360	4310-4360
5460	1780	2780	3780	4780
5610	1020-1160 1211-1510 1780 1910-1950			
5620		2060-2160 2211-2510 2780 2910-2950		
5650	1020-1160 1211-1510 1780 1910-1950	2060-2160 2211-2510 2780 2910-2950		
5700			3060-3160 3211-3510 3780 3910-3950	4060-4160 4211-4510 4780 4910-4950
5750	1020-1160 1211-1510 1780 1910-1950	2060-2160 2211-2510 2780 2910-2950	3060-3160 3211-3510 3780 3910-3950	4060-4160 4211-4510 4780 4910-4950

APPENDIX F

FACILITY SPACE AND EQUIPMENT CATEGORIES, EQUIPMENT COSTS BY CATEGORY, AND FACILITY SPACE FACTORS

This appendix lists the categories used in space and equipment attribution and distribution and provides the costs or factors used to determine category costs. Table F-1 lists the mail processing equipment categories that are used for mail processing equipment depreciation and interest expense (Cost Segments 20.1 and 20.5), maintenance labor (Cost Segment 11.2), and parts and supplies (Cost Segment 16.3). These expenses are determined for the categories shown in Table F-1 so that different variabilities and distribution keys can be applied to each category. Table F-2 shows the costs for each of these categories for mail processing equipment annual depreciation, maintenance labor costs, and parts and supplies costs. As described in Section 20.1, each category has a specific variability and distribution key.

Table F-3 lists the facility space categories. These categories are used for the costs of space provision, which includes rents (Cost Segment 15.1), depreciation for facilities (Cost Segment 20.3) and interest expense (Cost Segment 20.5), and for facility space related costs, which includes fuel and utilities (Cost Segment 15.2), custodial and building services (Cost Segments 11.1, 11.3, 16.3) and protection force (Cost Segment 18.1). The above space provision costs are apportioned to these categories based on the relative rental value for each category as shown in Table F-4. The above facility space related costs are apportioned to these categories based on the relative square footage for each category as shown in Table F-4. As described in Section 15.1, each category has a specific variability and distribution key.

TABLE F-1

MAIL PROCESSING EQUIPMENT CATEGORIES

1. Optical Character Readers (OCRs)
2. Mail Processing Bar Code Sorters (MPBCSs)
3. Delivery Bar Code Sorters (DBCSs)
4. Carrier Sequence Bar Code Sorters (CSBCSs)
5. Letter Sorting Machine (LSMs)
6. Flat Sorting Machine (FSMs)
7. Remote Bar Coding System (RBCS)
8. Computer Forwarding Systems (CFS)
9. Edge, Face & Cancel - Letters
10. Edge, Face & Cancel - Flats
11. Culling
12. Sack Sorting Machine (SSM)
13. Small Parcel and Bundle Sorter (SPBS)
14. Parcel Sorting Machine (PSM)
15. Air Contract Data Collection System (ACDCS)
16. Strapping
17. Tray Transport and Staging Systems
18. General & Logistics: BMC
19. General & Logistics: Non-BMC
20. Mail Transport Equipment
21. Powered Transport Equipment

TABLE F-2

MAIL PROCESSING EQUIPMENT-RELATED COSTS FOR FY 2000

Equip. Group	--- Equipment Description -	Cost Seg. 20 Annual Depreciation	Cost Seg. 11 Maintenance Labor Costs	Cost Seg. 16 Parts, Supplies & Contractors
1	OCRs	\$56,830,298	\$77,027,063	\$13,216,928
2	MPBCSs	5,067,015	48,246,832	5,626,316
3	DBCSs	158,037,359	210,749,143	23,705,183
4	CSBCSs	28,768,913	6,701,589	7,302,571
5	LSMs	572,032	605,199	14,119
6	FSMs	36,706,048	68,513,417	7,084,632
7	Remote Bar Code Sorting System	88,920,339	25,801,963	6,661,681
8	CFS	5,367,105	13,774,884	4,132,674
9	Edge, Face, & Cancel – Letters	63,553,345	95,570,136	14,664,896
10	Edge, Face, & Cancel – Flats	556,232	2,268,600	175,622
11	Culling	2,286,014	4,910,373	139,376
12	SSM	5,131,985	20,337,051	5,062,442
13	SPBMs	33,129,188	39,104,469	23,050,986
14	PSMs	13,382,513	19,965,603	4,089,283
15	ACDCS	203,278	3,403,180	1,311,628
16	Strapping	2,749,205	11,031,101	779,210
17	Tray Transport & Staging Systems	37,378,001	30,125,822	3,310,773
18	General And Logistics: BMC	52,390,020	22,171,202	1,882,270
19	General And Logistics: Non-BMC	56,138,397	21,013,191	1,581,250
20	Mail Transportation Equipment	-	6,495,584	168,876,941
21	Powered Equipment	9,745,909	32,288,054	3,103,682
	TOTAL	\$656,913,196	\$761,137,457	\$295,980,680

TABLE F-3

FACILITY SPACE CATEGORIES

Lobby

1. Window Service
2. Self-Service Postal Center
3. Post Office Boxes

Mail Processing

4. Priority Mail
5. Express Mail
6. Computer Forwarding System
7. Bulk Mail Acceptance Unit
8. Registry
9. Claims & Inquiry
10. Other Accountables
11. Other Non-accountables
12. Optical Character Readers (OCRs)
13. Mail Processing Bar Code Sorters (MPBCSs)
14. Delivery Bar Code Sorters (DBCSS)
15. Carrier Sequence Barcode Sorters (CSBCs)
16. Letter Sorting Machine (LSMs)
17. Flat Sorting Machine (FSMs)
18. Parcel Sorting Machine (PSM) & Non-Machinable Object (NMO) Machine
19. Facer/Canceler - Letters
20. Facer/Canceler - Flats
21. Culling
22. Sack Sorting Machine
23. Small Parcel and Bundle Sorter (SPBS)
24. Remote Barcoding System
25. Multislide
26. Air Contract Data Collection System
27. Central Banding Operation - Letters
28. Central Banding Operation - Flats
29. Other Equipment
30. Sorting to Letter Cases
31. Sorting to Flat Cases
32. Sorting to Hanging Sacks
33. Sorting to Rolling Containers
34. Sorting to Pallets
35. Other Sorting Operations
36. Rewrap
37. Postage Due
38. Other Manual Operations

Delivery

39. City Carriers
40. Rural Carriers
41. Special Delivery
42. Accountables Cage

TABLE F-3 (Continued)
FACILITY SPACE CATEGORIES

Platform

43. Interior & Exterior Platform

Administrative & Support

44. Office Space

45. Mail Processing Equipment Maintenance

46. Other Equipment Maintenance

47. Employee Facilities

48. Vehicle Maintenance Facilities (VMF)

49. Covered Vehicle Storage (CVS)

50. Vacant & Tenant

51. Headquarters, Headquarters-Field Related, and Area Offices

52. Mail Transport Equipment Centers

53. Storage Facilities

TABLE F-4

FACILITY SPACE SQUARE FEET AND RENTAL COSTS
FOR FY 2000 BY CATEGORY

SPACE CATEGORY		<u>SQUARE FEET</u>	<u>RENTAL VALUE</u> (000s OF \$)	<u>RENT PER SQ. FT.</u> (\$)
1	Window Service	22,100,993	212,370	9.61
2	Self-Service Postal Center	2,548,278	26,190	10.28
3	Post Office Boxes	28,917,727	283,935	9.82
4	Priority Mail	1,983,044	20,130	10.15
5	Express Mail	1,089,108	11,432	10.50
6	Computer Forwarding System	2,333,228	19,012	8.15
7	Bulk Mail Acceptance Unit	1,735,057	15,263	8.80
8	Registry	1,467,804	13,372	9.11
9	Claims & Inquiry	531,576	4,797	9.02
10	Other Accountables	1,150,938	10,558	9.17
11	Other Non-Accountables	414,123	3,961	9.56
12	Optical Character Readers (OCRs)	2,434,751	19,893	8.17
13	Mail Processing Bar Code Sorters (MPBCSs)	3,535,504	28,690	8.11
14	Delivery Bar Code Sorters (DBCSSs)	9,970,250	82,120	8.24
15	Carrier Sequence Bar Code Sorter (CSBCSs)	2,063,589	19,829	9.61
16	Letter Sorting Machine (LSMs)	98,647	790	8.01
17	Flat Sorting Machine (FSMs)	5,583,295	45,458	8.14
18	Parcel Sorting Machine & NMO Machine	3,787,746	32,236	8.51
19	Facer/Canceler – Letters	2,553,414	20,759	8.13
20	Facer/Canceler – Flats	388,373	2,928	7.54
21	Culling	1,871,813	15,522	8.29
22	Sack Sorting Machine (SSMs)	2,835,463	23,416	8.26
23	Small Parcel And Bundle Sorter	6,211,895	48,578	7.82
24	Remote Barcoding System	958,551	20,528	21.42
25	Multislide	1,037,498	8,295	8.00
26	Air Contract Data Collection System	481,665	3,963	8.23
27	Central Banding Operation – Letters	678,587	5,598	8.25
28	Central Banding Operation – Flats	338,211	2,803	8.29
29	Other Equipment	1,789,595	14,711	8.22
30	Sorting To Letter Cases	7,097,089	62,467	8.80
31	Sorting To Flat Cases	7,782,054	69,762	8.96
32	Sorting To Hanging Sacks	4,520,129	38,423	8.50
33	Sorting To Rolling Containers	11,724,044	106,048	9.05
34	Sorting To Pallets	460,598	3,438	7.46
35	Other Sorting Operations	2,295,631	21,325	9.29
36	Rewrap	306,504	2,602	8.49
37	Postage Due	514,526	4,592	8.92
38	Other Manual Operations	2,787,478	24,524	8.80
39	City Carrier	38,649,724	400,885	10.37
40	Rural Carrier	9,611,994	87,288	9.08

TABLE F-4 (Continued)

FACILITY SPACE SQUARE FEET AND RENTAL COSTS
FOR FY 2000 BY CATEGORY

SPACE CATEGORY		<u>SQUARE FEET</u>	<u>RENTAL VALUE</u> (000s OF \$)	<u>RENT PER SQ. FT.</u> (\$)
41	Special Delivery	213,208	1,877	8.80
42	Accountables Cage	855,011	8,685	10.16
43	Interior & Exterior Platform	38,400,251	255,069	6.64
44	Office Space	38,697,152	343,051	8.87
45	Mail Processing Equipment Maintenance	3,837,013	32,863	8.56
46	Other Equipment Maintenance	772,894	6,925	8.96
47	Employee Facilities	23,878,169	220,581	9.24
48	VMF	7,399,782	70,729	9.56
49	CVS	5,556,449	39,584	7.12
50	Vacant & Tenant	6,875,374	60,737	8.83
51	Hq, Hq-Field Related, and Area Offices	5,795,556	92,005	15.88
52	Mail Transportation Equipment Centers	1,209,252	10,285	8.51
53	Storage Facilities	9,074,769	77,182	8.51
TOTAL		339,205,375	3,085,065	9.02

APPENDIX G

GLOSSARY OF POSTAL SERVICE ACRONYMS

ACDCS	Air Contract Data Collection System
ADP	Automatic Data Processing
ADPC	Automatic Data Processing Center
AIC	Account Identifier Code
AMC	Air Mail Center
AMF	Air Mail Facility
AO	Autres Objects (Other Articles - International Mail)
APC	All Purpose Container
ASC	Accounting Service Center
BAM	Business and Mixed
BBM	Bulk Business Mail
BCR	Bar Code Reader
BCS	Bar Code Sorter
BMC	Bulk Mail Center
BMC OTR	Bulk Mail Center Over-the-Road
CCS	Carrier Cost Survey
CAG	Cost Ascertainment Grouping
CAT	Curblin Access Test
CFS	Computer Forwarding Systems
CFM	Cubic-Foot-Mile
COD	Collect on Delivery
COLA	Cost-of-Living Allowance
CRA	Cost and Revenue Analysis
CSBCS	Customer Service Bar Code Sorter
CSRF	Civil Service Retirement Fund
CTT	Comprehensive Tracking and Tracing
CVS	Covered Vehicle Storage
DBCS	Delivery Bar Code Sorters
E&TS	Engineering and Technical Support
EAS	Executive and Administrative Schedule
EEO	Equal Employment Opportunity
EMA	Equipment Maintenance Allowance
EPCS	Expanded Postmaster Criteria System
ERMC	Eastern Region Mail Containers
FAT	Foot Access Test
FEDSTRIP	Federal Standard Requisition and Issue Procedure
FEGLI	Federal Employees Group Life Insurance
FEHBP	Federal Employees Health Benefit Program
FERS	Federal Employees Retirement System
FICA	Federal Insurance Contributions Act
FLSA	Fair Labor Standards Act
FMSS	Facilities Management Support Services
FRB	Federal Reserve Bank
FSM	Flats Sorting Machine
FY	Fiscal Year
GSA	General Services Administration
IBU	International Business Unit
IES	Industrial Engineering Survey
IOCS	In-Office Cost System
IPP	Irregular Parcels and Pieces
ISSC	Information Systems Service Center
LC	Lettres et Cartes (Letters and cards - International Mail)
LDC	Labor Distribution Code

APPENDIX G

GLOSSARY OF POSTAL SERVICE ACRONYMS (Continued)

LSM	Letter Sorting Machine
LTV	Load Time Variability
MDR	Multiple Delivery Residential
MES	Mail Equipment Shop
MISD	Management Information Systems Department
MODS	Management Operating Data System
MOM	Military Official Mail
MPBCS	Mail Processing Bar Code Sorters
MPLSM	Multiposition Letter Sorting Machine
MRU	Mailbag Repair Unit
MSC	Management Sectional Center
MTE	Mail Transport Equipment
MTSC	Maintenance Technical Support Center
MVS	Motor Vehicle Service
NMICS	National Maintenance Information and Control System
NMO	Non-Machinable Object
NPO	Non-Personnel Office
OBRA	Omnibus Budget Reconciliation Act
OCR	Optical Character Reader
ODIS	Origin-Destination Information System
OMMS	Official Mail Messenger Service
OPM	Office of Personnel Management
PAL	Parcel Airlift Mail
PAT	Parcel Access Test
PCES	Postal Career Executive Service
PIRS	Productivity Information Reporting System
PMPC	Priority Mail Processing Center
POA	Postal Operations Administrator
PPD	Pieces Per Possible Delivery
PRC	Postal Rate Commission
PSDS	Postal Source Data System
PSM	Parcel Sorting Machine
PUAS	Postal Union of the Americas and Spain
P&DC	Processing and Distribution Center
P&DF	Processing and Distribution Facility
RBCS	Remote Barcoding System
REC	Remote Encoding Center
R&D	Research and Development
RD&E	Research, Development, and Engineering
RPW	Revenue, Pieces, and Weight System
SAM	Space Available Mail
SCF	Sectional Center Facility
SDR	Single Delivery Residential
SOA	Statements of Account
SPBS	Small Parcel and Bundle Sorter
SPLSM	Single-Position Letter Sorting Machine
SSM	Sack Sorting Machine
SSPC	Self-Service Postal Center
STS	Street Time Sampling
TEP	Total Equivalent Pieces
TPH	Total Piece Handling
TRACS	Transportation Cost System

APPENDIX G

GLOSSARY OF POSTAL SERVICE ACRONYMS (Continued)

UPU	Universal Postal Union
USPS	United States Postal Service
VMF	Vehicle Maintenance Facility
VSD	Vehicle Service Driver
WSC	Workload Service Credits

APPENDIX H

CALCULATING POSTAL PRODUCT COSTS: MARGINAL COSTS

INTRODUCTION

In this appendix, the conceptual basis is described for the product costs measured in the development of the annual Cost and Revenue Analysis report (CRA); the consistency between the cost calculations and that conceptual basis is demonstrated. The cost calculations in the CRA are shown to be firmly based on the appropriate economic cost concepts.

In the economic approach to product costs, two pieces of costing information are required, the marginal cost and the incremental cost. The Postal Service has advanced these cost concepts as the basis for setting postal rates.¹

The marginal cost of a product is the cost of producing another unit of output. If a product's price exceeds its marginal cost at current levels of production, a positive contribution is made toward paying the common costs of production. On the other hand, if the product's price is less than its marginal cost, the firm is incurring losses on that product at its current output level. To avoid incurring losses on a product, a firm's price for the product must at least equal the product's marginal cost. Marginal cost, consequently, is the natural starting point for price or rate setting.²

As described above, marginal cost includes only costs that vary with the level of output and does not account for any fixed cost or infra-marginal cost.³ (This latter cost is the amount of variable cost that has been incurred in producing all the previous units of output up to the current level of production.) If marginal cost is not constant, the current marginal cost may be greatly different from that experienced at lower levels of production.

Another costing concept, average incremental cost, is required to incorporate all fixed and variable costs specific to a particular product. The total cost incurred as a result of the provision of all units of a given product is called the incremental cost of that product. The average incremental cost is simply the ratio of a product's incremental cost divided by the number of units produced.⁴ Because incremental costs refer to all costs associated with a single product, the amount of that product can be used to find the average or per-unit incremental cost. The importance of this costing concept lies in the fact that if all products cover their incremental cost then no single product is being cross-subsidized. The procedures for calculating incremental costs are described in Appendix I.

CALCULATING POSTAL COSTS

A key issue in understanding the development of costs in the CRA is the relationship between the economic cost concepts listed above and the costs actually calculated in the CRA. To facilitate that understanding, the key cost concepts will be defined and their calculation will be illustrated. The links between these calculated costs and marginal and incremental cost will be explained along the way.

¹ See William J. Baumol, *Testimony before the Postal Rate Commission*, Docket No R87-1, 1987; and *Testimony before the Postal Rate Commission*, Docket No. R90-1 on Remand, 1994; and John Panzar, *Testimony before the Postal Rate Commission*, Docket No. R90-1 on Remand, 1994.

² See Michael D. Bradley, Jeff Colvin, and Marc Smith, "Measuring Product Costs for Ratemaking: The United States Postal Service," in *Regulation and the Evolving Nature of Postal and Delivery Services*, ed. M. A. Crew and P. R. Kleindorfer (Boston: Kluwer Academic Publishers, 1993).

³ The exclusion of fixed costs does not imply that attribution should be based on short-run marginal costs. Fixed costs will exist even in the long run. See William J. Baumol, *Testimony before the Postal Rate Commission*, Docket No. R87-1, 1987.

⁴ For a discussion of incremental costs see William J. Baumol, *Testimony before the Postal Rate Commission*, Docket No. R87-1, 1987 and *Testimony before the Postal Rate Commission*, Docket No. R90-1 on Remand, 1994.

The first important CRA cost is unit volume variable cost and it is a measure of the costs caused by a product at the margin. That is, it measures the additional cost associated with the provision of additional output. Specifically, the formula for unit volume variable cost for class i (UVVC _{i}) is:

$$UVVC_i = \frac{\text{Volume-Variable Cost}_i}{\text{Volume}_i}$$

Clearly, unit volume variable cost for class i critically depends upon the calculation of that class's volume variable cost. A class's volume variable cost is found by multiplying the elasticity of cost with respect to the volume of that class times total cost:⁵

$$VVC_i = C * \epsilon_{Ci}$$

$$\text{where: } \epsilon_{Ci} = \frac{\% \Delta C}{\% \Delta V_i}$$

Another important cost calculation in the CRA is institutional cost. Institutional cost is simply the difference between total cost and volume variable cost. Institutional cost may arise because of general fixed cost and/or from the existence of overall economies of scale.

Both unit volume variable cost and incremental cost have close relationships to the economic cost concepts presented above. Conceptually, unit volume variable costs are a method of calculating marginal cost. This relationship can be seen by re-examining the formula for calculating volume variable costs:

$$VVC_i = C * \frac{\% \Delta C}{\% \Delta V_i}$$

or,

$$VVC_i = C * \frac{\frac{\Delta C}{C}}{\frac{\Delta V_i}{V_i}} = \frac{\Delta C}{\Delta V_i} * V_i = MC_i * V_i$$

This means that unit volume variable costs equal marginal costs:

$$UVVC_i = \frac{VVC_i}{V_i} = \frac{MC_i * V_i}{V_i} = MC_i$$

⁵ This elasticity is often known as the "volume variability" of the class.

In similar fashion, there is a relationship between marginal costs and incremental costs. Incremental costs are calculated by a formula very similar to marginal costs, with one exception. Rather than multiplying each unit of volume by the marginal cost of the last unit, incremental cost (IC) multiplies each unit by its own marginal cost. To this number is added product specific costs (PSC_i), which are non volume variable cost specific to a given subclass of mail.

$$IC_i = \sum_{j=1}^{V_i} MC_{ij} V_{ij} + PSC_i$$

Note, if there are no product specific costs and the marginal cost of each unit is the same, then the marginal cost and incremental cost are the same.

CALCULATING MARGINAL COSTS

In the previous section, the theoretical consistency was demonstrated between well-established economic cost concepts and the postal cost concepts employed in the development of the CRA. Whether the costs actually calculated in the CRA are consistent with that theory is another matter, however. This second type of consistency is investigated in this section.

The Postal Service has many different products that are provided through the application of many different technologies: collection, sorting, delivery, and transportation are some examples. As a result, the estimation of a single, top down cost equation for the entire Postal Service at the level of accuracy required for rate proceedings is simply not feasible. Instead, the estimation of the cost of postal products is conducted on a disaggregated basis. This "bottom-up" approach proceeds by estimating the volume variable cost of each product in the various postal activities (like processing, delivery, or transportation) required to provide it.⁶ These "component volume variable" costs are summed across activities for each product to get the overall volume variable cost per product. Consistent with the theory described above, this can be shown to equal marginal cost.

This multi-step approach to calculating marginal cost requires identification of the cost driver for each postal activity and the determination of the addition to cost in each of these activities that arises from additional provision of each product. Once these activity marginal costs, by product, are determined for each activity, the product-specific marginal cost is simply the sum of each product's activity marginal costs.

The Postal Service analyzes the costs a product incurs in each of many activities or "cost elements." The cost elasticity of output is estimated within each of these cost elements. In most cases, however, there are insufficient data to estimate the output cost elasticity directly and an effort is made to determine the cost driver for each cost element. This means that element cost is a composite function of volume, where the cost effects of additional volumes are captured through the action of the driver.

For example, the purchased transportation cost segment contains cost elements for the costs incurred by the Postal Service for various purchased highway transportation accounts. Because the Postal Service pays contractors on a cubic-foot-mile basis, purchased highway contract costs are "driven" or caused by cubic-foot-miles of transported mail. An econometric analysis is used to estimate the cost elasticity of the cost driver, cubic-foot-miles, and the link between cubic-foot-miles of transportation and volume by class is estimated in a separate system. As other examples, carrier access costs are driven by the number of stops made by the letter carrier to deliver mail, and carrier "load" costs are driven by pieces of each mail shape that a letter carrier loads into a mail receptacle.

⁶ Activity marginal costs can be measured in several ways. Examples of methods of measuring marginal costs include econometric estimation, engineering studies, studies of time/motion relationships, and simulations.

EXAMPLES OF ELEMENT COST DRIVERS AND VOLUME MEASURES				
<u>Element</u>	<u>System</u>	<u>Driver</u>	<u>Cost</u>	<u>Cost Variable</u>
Inter-BMC Highway Transportation	TRAC	Cubic-Foot-Miles		Contract Cost
City Carrier Access	CCS	Number of Stops		Carrier Walking Time

Given this background, we now provide a description of the main analytical approaches used to determine volume variable costs in the CRA. The CRA methodology for determining volume variable costs per piece can be summarized briefly in the following four steps:

1. Divide Costs Among Segments and Components
Costs are divided up into components for analysis. Accounting costs are first divided among 19 cost segments. The segments are then further divided into identifiable cost components and then into subcomponents (or elements), each representing a discrete activity; there are approximately 65 components and over 100 elements.
2. Identify a Cost Driver and Find Volume Variable Costs
For each cost element, a cost driver is identified that reflects the essential activity of that element. For example, the cost driver for Inter-BMC highway transportation is cubic-foot-miles. The volume variable cost pool is then found by using the relationship between the element's cost and its cost driver. The relationship is first used to create volume variable costs according to methods described below.
3. Distribute Costs to Products
After the pool of volume variable costs is determined, it is distributed to the various products. These methods of distribution are also discussed below.
4. Calculate Unit Volume Variable Cost
Total volume variable cost for each product is determined by summing the volume variable costs for that product across components. Unit volume variable costs are then found by dividing a product's total volume variable costs by its originating volume.

Steps 1 and 4 are universal across all components, but methods for applying steps 2 and 3 differ. There are three primary methods for applying steps 2 and 3, which determine the relationship between the cost driver and cost, and the assignment of volume variable costs to products. The three measurement methods are entitled:

- a. the volume variability/distribution key method,
- b. the constructed marginal cost method, and

- c. the piggyback method.

These methods are described below.

A. The Volume Variability/Distribution Key Method

In this method, the relationship between the component cost and the cost driver is estimated in one of three ways: econometric modeling, functional analysis, or operational assumption. Essentially, these methods require the estimation of a cost elasticity between the driver and cost. This elasticity measures the percentage response in cost from a given percentage increase (or decrease) in the driver and is the key parameter in determining the volume variable cost pool. Once this elasticity is estimated, it is multiplied by total component cost with the resulting product being volume variable costs. The formula for volume variable cost is thus:

$$\text{Volume - Variable Cost} = \text{Total Cost} * \left[\frac{\% \Delta \text{Cost}}{\% \Delta \text{Cost Driver}} \right]$$

The distribution of volume variable costs to the products is done with a "distribution key." The distribution key is typically the cost driver used to calculate cost elasticity, and classes are assigned cost in the same proportions that they have of the cost driver. For example, if First Class mail accounts for 80 percent of the cubic-foot-miles of Inter-BMC highway transportation, it would receive 80 percent of Inter-BMC transportation volume variable cost.

This second step, distribution, may seem reminiscent of the fully distributed costing approach in which costs are assigned to products on the basis of an arbitrary factor like volume of output or labor hours. However, because of the relationship of the distribution key (the cost driver) to total component cost, the distribution step is not arbitrary. In fact, under the assumption that the cost driver responds proportionately to volume increases, it can be demonstrated that this method produces marginal cost.⁷ That is, if the component's volume variable cost, by class, were divided by a measure of class volume, the resulting volume variable cost per piece would equal the marginal cost of that class as long as the relationship between the cost driver and class volume is linearly homogenous.

The volume variability/distribution key approach thus provides the desired measure of product cost and marginal cost, but contains a calculation method that depends upon measuring the cost driver rather than mail volume. This is of great value in a service firm like the Postal Service because obtaining a good measure of intermediate product or intermediate volume is often difficult. For example, measuring "volume" in functions like transportation and processing is difficult. Does the number of handlings determine volume? Is distance traveled part of volume? These types of issues make volume measurement difficult but do not preclude easy measurement of the cost driver.

If, however, there is reason to believe that the relationship between mail volume and the cost driver is not linearly homogenous, then that relationship can be specifically investigated. This type of investigation leads to our second method of measuring volume variable cost.

B. The Constructed Marginal Cost Method

This method was specifically designed to produce marginal costs because it does not require an assumption about the relationship between the cost driver and mail volume. It proceeds, initially, like the volume variability/distribution key method by estimating the elasticity between the cost driver and component cost. The distribution step does not depend upon assigning proportions of the cost driver to individual classes but

⁷ Bradley, *op.cit.*

rather depends upon estimation of the elasticity of the cost driver with respect to mail volume. In this method, volume variable cost is given by the product of total cost and both cost elasticities:

$$\text{Volume - Variable Cost} = \text{Total Cost} * \left[\frac{\% \Delta \text{Cost}}{\% \Delta \text{Cost Driver}} \right] * \left[\frac{\% \Delta \text{Cost Driver}}{\% \Delta \text{Mail Volume}} \right]$$

It can be demonstrated mathematically that this method provides the marginal cost by class.⁸

C. The Piggyback Method

In this final method, a support cost component, like facility costs, is assumed to be as volume variable as another primary cost component, such as carrier labor costs, and is distributed to the classes of mail in the same proportions as the primary cost component. For example, the calculation of the volume variable cost for supervisors' labor and, to some degree, facility costs follows this method. Supervisors' costs piggyback those of the supervised personnel.

Piggybacking, in effect, increases the cost pool for each of the primary components on which piggybacking takes place. Because each support cost component links to and uses the volume variability of a specific primary component, the primary component's accrued cost is, in essence, increased by the amount of the support component's cost. The sum is then multiplied by the primary component's volume variability to find the total volume variable cost.

The distribution of piggybacked costs to each class of mail in the same percentages as the primary component implies that all classes of mail are assigned the cost of the support components in the same proportion. In the case of delivery costs, piggybacking means that each class of mail requires the same mix of carrier labor, supervisor input, and facility space. The same factor intensity is thus required for each product and there is an assumed symmetry in work done for each class. Consequently, piggybacking implies a constant mix of factor expenses both as output grows and across products. The reasonableness of these implicit assumptions is an empirical question, and the scope of activities included in the piggybacking approach must be limited in order to make this treatment appropriate.

⁸ *Ibid.*

APPENDIX I

CALCULATING POSTAL PRODUCT COSTS: INCREMENTAL COSTS

INTRODUCTION

This appendix describes the methods used to calculate incremental cost for Fiscal Year 2000.¹ To understand the methods and their application, it should be recognized that calculating Fiscal Year incremental costs is akin to calculating "base-year" incremental costs in a postal rate case. In such a rate case, "test-year" incremental costs must be calculated to apply the incremental cost test and calculation of base-year incremental costs is a preliminary step to that final calculation. The methods described in this appendix were derived to permit accurate calculation of both base-year and test-year incremental cost in a way that is consistent with existing Postal Service and Postal Rate Commission costing methodologies.

BASIC METHODOLOGY

To be consistent with the postal cost structure, the calculation of incremental cost is embedded in that structure. Consequently, the methods of incremental cost calculation will be more accessible if a brief review of the structure of the CRA is presented first. The current method of volume variable cost calculation depends upon a "calibrated" cost model as opposed to an "estimated" cost model.² An estimated model has its parameters estimated econometrically from a single set of data. A calibrated model has its parameters determined from a variety of sources, with some estimated econometrically, some determined from engineering studies, and some established by judgment.

In the calibration approach, the structure of the model is first determined and then the model is "calibrated;" that is, the structure of the model is populated with chosen values for the parameters. After calibration, the model can then be solved (or simulated) for the desired variables. In the case of the volume variable cost model, the model is populated with variabilities and distribution keys from a variety of sources and is then "solved" to calculate both base-year and test-year volume variable costs.

The calibration methodology can be illustrated through a simple example. Suppose that the postal costing structure had three products: Class A, Class B and Class C and four cost pools: Pool 1 (Retail), Pool 2 (Transportation), Pool 3 (Mail Processing), and Pool 4 (Delivery). The structure of the product cost model in this simple case can be envisioned as a 4 X 3 matrix with the rows representing the cost pools and the columns representing the classes. Such a matrix can be represented as:

¹ A more thorough discussion of the methods of calculating incremental cost can be found in Michael D. Bradley, Jeff Colvin and John Panzar, "Issues in Measuring Incremental Cost in a Multi-function Enterprise, Managing Change in the Postal and Delivery Industries, Kluwer Academic Publishers, 1997 and Michael D. Bradley, Jeff Colvin and John Panzar "On Setting Prices and Testing Cross-Subsidy with Accounting Data," Journal of Regulatory Economics, July 1999.

² For some introductory discussions of calibration, see, Adrian Pagan, "Calibration and Econometric Research: An Overview," Journal of Applied Econometrics, Dec. 1994 or Danny T. Quah, Business Cycle Empirics: Calibration and Estimation: An Introduction, Economic Journal, November 1995, p 1594-1596.

	Product A	Product B	Product C
Retail Cost	VVC_{RA}	VVC_{RB}	VVC_{RC}
Transportation Cost	VVC_{TA}	VVC_{TB}	VVC_{TC}
Mail Processing Cost	VVC_{MA}	VVC_{MB}	VVC_{MC}
Delivery Cost	VVC_{DA}	VVC_{DB}	VVC_{DC}

For each cell, the volume variable cost for the individual class is given by the product of the cells accrued cost, (C), its variability (γ) and the class' share of the distribution key (2). For example, Class A's volume variable retail cost is given by the product of accrued cost for retail, (C_R), the variability for retail (γ_R) and Class A's share of the retail distribution key (2_{RA}). Mathematically, the volume variable retail cost for class A is given by:

$$VVC_{RA} = C_R \varepsilon_R \theta_{RA}$$

The product cost model, in this case, can be represented by four equations, one for each of the cost pools. The first equation represents the retail cost pool, the second the transportation cost pool, the third the mail processing cost pool and the fourth represents the delivery cost pool.

$$\begin{aligned} C_R &= C_R \varepsilon_R \theta_{RA} + C_R \varepsilon_R \theta_{RB} + C_R \varepsilon_R \theta_{RC} \\ C_T &= C_T \varepsilon_T \theta_{TA} + C_T \varepsilon_T \theta_{TB} + C_T \varepsilon_T \theta_{TC} \\ C_M &= C_M \varepsilon_M \theta_{MA} + C_M \varepsilon_M \theta_{MB} + C_M \varepsilon_M \theta_{MC} \\ C_D &= C_D \varepsilon_D \theta_{DA} + C_D \varepsilon_D \theta_{DB} + C_D \varepsilon_D \theta_{DC} \end{aligned}$$

The structure of the model is determined by the cost pool breakout and product definitions. The Postal Service accounting system typically provides the cost pools but the model must be calibrated by selecting the values for the variabilities (the γ_j) and the distribution keys (the 2_{ij}).³

Incremental costs are calculated from the same base-year model as volume variable costs. There is an essential difference in the method of calculation, however. Volume variable costs incorporate only the cost of the last unit produced, whereas incremental costs incorporate the costs of all of the units produced.

To see how this works, consider the purchased highway transportation cost pool. There are no specific fixed costs in this cost pool and the cost driver is cubic foot-miles (CFM) of transportation. Volume variable cost is found by multiplying the variability of the cost driver (CFM) times accrued cost. Mathematically, this is the same as multiplying the marginal cost of the last CFM provided times the total

³ There are instances in which the cost pool definition depends upon systems other than the pure accounting system. For example, in mail processing, cost pools may in part be defined by MODS data or IOCS data.

number of CFMs. The total volume variable cost is then distributed to products with the TRACS distribution key.

Incremental cost, on the other hand, recognizes the fact that not all CFM cost the same amount to produce. Incremental cost is found by multiplying each CFM times its own marginal cost, not the marginal cost of the last CFM.⁴ Incremental costs thus allows for the fact that the marginal cost changes over the range of the product's output.

In any cost component for which the variability is less than one hundred percent, like in purchased highway transportation, the marginal cost of the driver (CFM) declines with increases in the driver (CFM). In other words, the cost of obtaining an additional CFM falls as the number of purchased CFMs increases. This means the cost to the Postal Service of providing the last CFM of transportation is below the cost of providing previous CFMs of transportation. It also means that a product's incremental purchased highway transportation cost will exceed its volume variable purchased highway transportation cost.

More generally, this means that for any cost component with a variability less than one hundred percent the incremental cost of a product in that cost component must exceed its volume variable cost in the component. If the variability in a cost component equals one hundred percent then the product's incremental cost equals its volume variable cost, as the driver's marginal cost is constant.

To understand the calculation of incremental cost, we must consider the structure of the product cost model. Formally speaking, the calibrated model has a "constant elasticity" structure. That is, when the product cost model is used to calculate volume variable cost, in either the base year or the test year, the elasticity parameters are held constant. For example, the same elasticity parameters are used to calculate both base- year and test-year volume variable costs.⁵ As was explained above, when the elasticity parameter is less than one, then the model implies that the marginal cost of producing another unit declines as the number of units produced increases. This characteristic is exactly what is required to calculate incremental cost and the incremental cost calculation takes advantage of this aspect of the constant elasticity form of the model, an aspect that the volume variable cost calculation ignores. It is at this point in the calculations that incremental cost begins to exceed volume variable cost.

THE RELATIONSHIP BETWEEN VOLUME VARIABLE COST AND INCREMENTAL COST.

To understand the relationship among these cost measurements in the CRA structure, note that there are eight different types of cost pools in the CRA. The eight cost pool types are defined by the nature of the cost generating process causing costs to arise. A cost pool can be assigned to one of the eight types by answering a series of questions about the nature of the costs in the pool.

The first question to be asked is whether or not the costs are fixed or variable. A **fixed cost** is one that does not vary with the level of output.⁶

⁴ The mathematics of incremental cost calculation are given in the next section.

⁵ A bit of care in terminology is essential to avoid confusion here. Typically the terms 'elasticity' and "variability" are used interchangeably but in this instance they should not be treated so. Although the model has a "constant elasticity" structure as described above, it does not have a constant variability structure. A component's overall variability is sometimes calculated as the ratio of volume variable costs to accrued costs. A divergence between the two concepts occurs in the roll-forward process, where the variability ratio will change with volume changes, even within the model's constant elasticity framework.

⁶ See, Jeffery M. Perloff and Dennis W. Carlton, Modern Industrial Organization, HarperCollins, 1994, at 51.

A good example of a fixed cost is the fee a government charges for a firm to incorporate and conduct business. Whether the firm produces a lot or a little, it must pay the fee. Another example is the monthly rent that a lawyer must pay for an office after signing a one-year lease. The monthly rent must be paid regardless of how much business the lawyer does.

In contrast, a **variable cost** is one that does vary with the level of output. If the costs in the cost pool are fixed, then they are clearly not volume related and the volume related causality link can not be applied to calculate incremental cost. Instead, the nature of the costs must be examined to find out if there are any specific-fixed costs. Specific-fixed costs do not vary with the level of volume but are associated with only one product. They are caused by the provision of that product and that product alone; they are thus included in that product's incremental cost. Fixed and common costs neither vary with the level of volume nor are they caused by the provision of single product. They are not included in the incremental cost of any product.

When a cost pool contains variable costs, the choices, in terms of tracing cost causality, are more extensive. Consequently, a series of questions are required to determine the correct cost allocation method. The first question in the series asks whether or not only one product is handled in the cost pool. If so, then the entire cost in the cost pool is incremental to the product being handled. In fact, incremental cost equals the accrued cost for the cost pool. The only remaining issue is whether or not incremental cost equals volume variable cost. If the variability in the cost pool is equal to one, the two are equal. If the variability is less than one, incremental costs exceeds volume variable cost in the cost pool.

For many cost pools, there is more than one product handled, so cost attribution is not so straightforward. In these cost pools, two questions must be answered to determine proper cost attribution. The first question is whether or not there are any intrinsic costs. An **intrinsic cost** is a variable cost, in the sense that it varies with the level of output, but it does not vary at the margin.⁷ These costs are not increased by additional volume of the product. Nevertheless, they are caused by the provision of the entire volume of the product and are thus incremental to that product. When there are intrinsic costs in a cost pool, then both the volume-related costs and the intrinsic costs are attributed to the product that caused them to arise. Other products in the cost pool will cause volume-related incremental costs but will not generate intrinsic costs.

An example of this type of cost pool is given by the manual Priority Mail cost pool. All costs are labor costs and are variable costs. However, the cost pool arises because of the intrinsic characteristics of Priority Mail and would not exist but for that product. If there were no Priority Mail, this cost pool would disappear. The volume variable costs for non-Priority Mail products would not disappear, but both the Priority Mail's volume variable cost and all of the institutional cost would disappear. This latter set of costs are intrinsic to Priority Mail so the incremental cost for Priority Mail in this cost pool is the sum of Priority Mail's volume variable cost and all of the institutional cost. In this instance, the institutional costs are intrinsic costs.

The final set of cost pools include variable costs, include more than one product, but have no intrinsic costs. In these cost pools incremental costs are all volume related. If the variability is equal to one, incremental cost will be equal to volume variable cost as the marginal cost is constant. On the other hand, incremental costs in these cost pools will exceed volume variable cost when the variability is less than one as incremental cost accounts for the fact that some volume is produced at a higher marginal cost.

In sum, in any cost pool the incremental cost of a product will come from its volume-related incremental cost and its product-specific cost which is the sum of any specific fixed and intrinsic costs in the cost pool.

Cost Pools and The Relationship Between Cost Measurements		
Cost Pool	Cost Types	Cost Relationship
Type 1	Fixed and Common	IC = VVC = 0
Type 2	Fixed and Specific	IC > VVC
Type 3	Variable, One Product, Variability = 1	IC = VVC
Type 4	Variable, One Product, Variability < 1	IC > VVC
Type 5	Variable, More than 1 Product, Intrinsic Costs, Variability = 1	IC > VVC
Type 6	Variable, More than 1 Product, Intrinsic Costs, Variability < 1	IC > VVC
Type 7	Variable, More than 1 Product, No Intrinsic Costs, Variability = 1	IC = VVC
Type 8	Variable, More than 1 Product, No Intrinsic Costs, Variability < 1	IC > VVC

THE ANALYTICAL STRUCTURE OF THE INCREMENTAL COST CALCULATION

The total cost in a component is the sum of the variable cost, which is related to the total amount of the driver and any fixed costs that occur in the component.⁸ These fixed costs might be associated with individual products or they might be common to all products in the component. We can express total component accrued cost, C_j as:

$$C_j = \sum_{i=0}^n F_{ij} + \alpha_j D_j^{\epsilon_j}$$

In this equation, F_{ij} represent fixed costs (F_{ij} for " $i > 0$ " is the specific fixed cost in the component for product i , F_{0j} is the fixed and common cost in the component), α_j measures the cost of the inputs, ϵ_j is the elasticity of the component, and D_j represents the cost driver. With this notation, we can define the volume variable cost for product " i " in component " j " as:

⁷ Intrinsic costs would include thing like the premium costs associated with an expedited air transportation network.

⁸ When there are intrinsic costs included in the cost component, the analytic structure is a bit more complicated. Because this is a rare occurrence in the CRA, this detail is not presented here. For a complete discussion of the analytical structure of intrinsic costs see, "Direct Testimony of Michael D. Bradley on Behalf of the United States Postal Service," USPS-T-22, Docket No. R2000-1.

$$VVC_{ij} = \varepsilon_j \alpha_j D_j^{\varepsilon_j} \frac{D_{ij}}{D_j},$$

where the D_{ij} represents product "i" portion of the cost driver. This function can also be used to define the incremental cost of product i . It is the cost that is caused by the inclusion of product i in the output vector:

$$\begin{aligned} IC_{ij} &= C_j - C_j (D_j - D_{ij}) \\ &= \sum_{i=0}^n F_{ij} + \alpha_j D_j^{\varepsilon_j} - \left[\sum_{i=0}^n F_{ij} - F_{ij} + \alpha_j (D_j - D_{ij})^{\varepsilon_j} \right] \end{aligned}$$

A little algebra leads to a simpler expression:

$$IC_{ij} = F_{ij} + \alpha_j D_{ij}^{\varepsilon_j} (1 - (1 - \theta_{ij})^{\varepsilon_j}),$$

where θ_{ij} is the share of the driver devoted to product "i."

TABLE I-1

PRODUCT SPECIFIC COSTS BY COST SEGMENT AND MAIL CLASS
(Costs in Thousands of Dollars)

Components	First- Class	Priority Mail	Express Mail	Standard Mail	Parcel Post	Interna- tional	Money Orders	P.O. Box	Sp. Ser. Other	TOTAL
3.0 CLERKS AND MAILHANDLERS, CAG										
A-J POST OFFICES										242,927
3.1 Mail Processing		147,448	91,589			3,890				227,990
3.2 Window Service		147,448	76,652			3,890				
3.3 Administrative and Support Activities			10,479							10,479
3.4 Expedited Delivery			4,458							4,458
7.0 CITY DELIVERY CARRIERS, STREET ACTIVITY										11,972
7.1 Route			11,972							5,164
7.2 Access			5,164							6,808
			6,808							
13.0 Mail Equipment Shops										145
14.0 TRANSPORTATION										237,045
14.1 Domestic Transportation		62,032	175,013							
15.0 BUILDING OCCUPANCY										2,350
15.1 Rents		478				1,872				1,725
15.3 Communications and Other Expenses		375				1,350				625
		103				522				
16.0 SUPPLIES AND SERVICES										20,225
16.3.4 Other Miscellaneous		7,087				13,138				12,625
Postal Supplies & Services		7,087				5,538				7,600
ADP Supplies & Services						7,600				
16.3.5 Advertising	27	41,621	5,705	6,781	126	14,459	5,276	289	13,523	87,807

TABLE I-1 (cont.)

PRODUCT SPECIFIC COSTS BY COST SEGMENT AND MAIL CLASS
(Costs in Thousands of Dollars)

Components	First-Class	Priority Mail	Express Mail	Standard Mail	Parcel Post	International	Money Orders	P.O. Box	Sp. Ser. Other	TOTAL
18.0 ADMINISTRATION AND AREA OPERATIONS	18,920	17,906								
18.1 Administration Personnel		5,963				28,912	1,380			67,118
18.1.1 Headquarters		5,963				15,055	1,380			22,398
18.1.1 Money Orders						14,275				20,238
18.2 Administration Support	18,920	11,943				780	1,380			2,160
18.2.1 Supplies and Services	17,572	10,721				13,857				44,720
18.2.2 Miscellaneous Support	1,348	1,222				12,280				40,573
						1,577				4,147
19.0 GENERAL MANAGEMENT SYSTEMS										
20.0 OTHER ACCRUED EXPENSES (SYSTEM WIDE)										
20.1 Equipment Depreciation		80				2,129				2,209
20.3 Building and Leasehold Depreciation						2,129				2,209
20.5 Interest Expense										
Building and Leasehold										
TOTAL	18,947	276,652	284,279	6,781	126	64,545	6,656	289	13,523	671,798