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Digest of A Performance Audit of Utah State Mail Services

Utah has the ability to consolidate its major mail service operations and in so doing, lower the cost of mail services. Cost savings would result through better utilization of the Department of Administrative Services Bureau of Central Mail Services automated mail processing equipment. Success of a consolidation effort now is both important and timely. Important because \$365,000 to \$585,000 can be saved annually and timely because postal rates will be increasing and building space not previously available may be available with a major service user.

The U. S. Postal Service (USPS) is emphasizing the use of machine-readable mail by offering rate discounts to users willing to perform tasks normally performed by the USPS. A first-class mail rate discount up to 20 percent is possible if one, users are willing to print a code, that can be scanned by automated equipment (barcode), on their mail so the USPS can electronically process it and two, presort mail by zip code so the USPS won't have to.

Utah agencies currently presort mail to get a portion of this discount but only the Central Mail office has the ability to barcode a large quantity of its outgoing mail. Unfortunately, it is not as simple as sending all mail to the Central Mail office. Every agency within state government has need for mail services, most utilize the state's Central Mail office while others have independently operated systems. These large, independent agencies (Department of Human Services and the State Tax Commission) have been unwilling to place their mail in Central Mail's custody because they are concerned with past Central Mail problems and they do not want to lose their autonomy. They also fear giving up their mail operations only to find a higher priced system under the control of the Department of Administrative Services. The following summaries briefly describe the major finding and conclusions of our audit:

Utah Can Benefit From Automated, Centralized Mail Services. A centralized, automated mail processing system can be beneficial for most mail users if mail volume is sufficient to support the expense of automation. Utah has most of the equipment needed for such a system but, without centralization, lacks the mail volume needed to operate the equipment efficiently. The primary equipment in Utah's possession is a multi-line optical character reader (MLOCR) which is capable of optically scanning typewritten and computer generated mail to read addresses, compare those addresses against a national database, and print a computer code address on the mail. A centralized mail system could

reduce costs by \$365,000 to \$585,000 depending on postal rate changes. The larger portion of this cost reduction would come from centralization of outgoing mail but savings are also possible from the centralization of incoming mail and consolidation of mail pick-up/delivery services.

Duplication of other mail related services may also be reduced by centralization. Our review of major state mail services found that the state maintains mail processing equipment at each major service center. An example of this duplication is equipment used to insert letters in envelopes, called inserters. Each of the three major centers has an inserter and perceives the need for updated equipment. None has the inserting volume necessary to justify new equipment purchases on their own. A second example of duplication is in mail courier services. Both Central Mail and Human Services have mail pick-up and delivery routes for the state's office buildings. A number of these routes are duplicative. Route elimination and consolidation is possible.

Problems Need to be Resolved Before Centralization Can Occur. There are also problems within the structure of the Department of Administrative Services and the Bureau of Central Mail Services that may impede the success of mail service consolidation. Central Mail service costs appear high because of unique overhead charges that other agencies do not have. In addition, there is some user agency misunderstanding as to how Central Mail fees are derived. This structure problem is compounded by the confusing cost allocation system used by Administrative Services. Also, past management decisions created concerns among state agencies as those decisions resulted in questionable rates and pricing structures. We believe the result is a credibility problem that can damage efforts to centralize mail services.

Chapter I Introduction

Utah state agencies have the ability to consolidate mail service operation and, in so doing, lower the cost of services. Lower costs would result from the better utilization of the automated equipment currently owned and operated by the Department of Administrative Services' Central Mail Services. Now is an appropriate time to consider consolidation because increasing postal rates will make cost savings important in the future and conditions within the state's agencies make the success of consolidation more likely now than it has been in the past. Projected postal rate changes would reduce the savings now enjoyed by some of Utah's agencies. This rate structure change in combination with the placement of the main operations of the centralized system at the facility of a major mail user would result in the greatest possible savings. Under the current postal rate system, centralization could save the state \$365,000 per year. However, with the advent of a new rate structure savings could be as much as \$585,000 per year.

While savings are possible through centralization, there is a cost. Some Utah agencies operate mail systems independent of the state's central mail system. These independent agency operators appear to be operating at about the same cost as Central Mail's underutilized automated system. Comparable costs makes the decision to consolidate more difficult because consolidation also takes operational control away from the individual agencies and places it with the Department of Administrative Services. Agencies with their own systems are not confident in Administrative Service's ability to lower costs and successfully provide the expected level of service. In addition, the University of Utah has significant mail volumes and is located close enough to the state's major operations that it also may benefit from greater automation and centralization.

Agency Mail Operations Differ

Utah's mailroom operations vary from agency to agency. Each has a unique mix of users, space, mail volume, and mail type defining its mail stream (the type and flow of mail). Agency mailrooms also face the challenge of operating systems that support agency programs. Often program staff prepares mail in ways that are convenient for their own needs but does not work well within a mail system. Many program staff continue to shun production mail choosing to continue producing handwritten products. Each of the independent agencies reviewed for this report maintains a basically manual system but develops and updates its systems with lower cost automation equipment or with some Central Mail participation. The

result has been a balancing of service and cost that is acceptable to the agency's mail system users but is far less cost efficient than high-volume automated systems.

Administrative Services' Central Mail operation prepares and delivers the mail of most state offices. Its services include sorting, barcoding (printing machine-readable zipcodes on mail with an MLOCR), and metering mail in addition to operating courier and mail preparation services. Each service user is billed independently for the services provided. Small volume users are pleased with the level of service they receive while some larger volume users have been contracting with Central Mail for rate reductions. Central Mail is empowered by the Legislature to be the focal point of the state's mailing operations.

Administrative Services invested in automating Central Mail with the hope of getting the independent agencies to use the system. At the time of this audit, Central Mail had not succeeded in obtaining mail service rights for the two largest independent agencies. The failure to get their support has resulted in Central Mail direct costs that are comparable to those of manual systems but are higher than would be expected from an automated system. Central Mail has been placed in a difficult position with higher costs attributable to Administrative Service's cost allocations and the purchase of a multi-line optical character reading mail sorting machine (MLOCR). At the current mail volume, Central Mail can operate its automated system and maintain direct cost comparable to those of manual systems. The only options available for lowering Central Mail's costs are to either increase volume and operate at a more efficient level or to sell the MLOCR at a reduced price. Selling the equipment and reverting to either a manual system or an outside contractor may not reduce direct costs. If there were to be no further investment in Utah's mail systems a reasonable decision would be to maintain the status quo.

There are three large mailing agencies that are independent of Central Mail and utilize their own staff for mail services. First, the State Tax Commission mail operation prepares and delivers mail solely for the Tax Commission. Its mail volume is a result of outgoing tax forms, tax information, tax refunds, and incoming tax returns. The Tax Commission does use Central Mail for outgoing mail sorting. The Tax Commission is unique in its need for immediate access to incoming mail so tax payments can be deposited rapidly. For this reason, Tax operates its own small optical character reader (OCR) that is only capable of reading barcodes. The nature of their mail requires certain security provisions. Second, the Department of Human Services has a high, regular volume of computer generated production mail that encompasses welfare checks, medical cards, and other time-sensitive mail.

Although they utilize basically manual sorting systems, both the Tax Commission and Human Services have proven that some efficiency can be gained by the use of production mail streams. Tax and Human Services are operating systems with outgoing mail volumes that are primarily computer generated production mail or standardized forms with computer generated addressing. The Tax Commission also benefits from pre-barcoded return mail allowing for greater efficiency of incoming mail processing. The result is both are comparable to DAS

Central Mail when looking at direct costs. However, Central Mail has dissimilar mail streams which reduce efficiency but counters with mail handing equipment that increases efficiency.

The third large mail operation in the state system is the University of Utah with a large, divergent mail system user population. The University's mail users are independent and do little to prepare their mail to allow greater efficiency through the use of automated equipment. Much needs to be done before the University would be fully ready to participate in a consolidated program but use of Central Mail's automated equipment for the University's outgoing production mail may be of benefit. The University has been included in parts of this review.

Logistically, higher education's mail services are faced with the collection and distribution of mail from each department on their campuses, much like a local U.S. Post Office mail carrier. University mail systems must also be capable of handling large student mailings throughout the year. Each mail operation also deals with their agency's internal mail which often is as voluminous as their external mail. Our review of the University of Utah's mail services included a test run of the university's outgoing mail on the state's MLOCR. This test clearly demonstrated that a majority of the university's mail is not ready for automated processing as less than 50 percent was machine readable. The volume of mail that was machine-readable is primarily production mail that can be processed today. Direct cost and postage saving are immediately possible using the MLOCR's sort capability rather than having to sort manually. Until the university's mail users are educated in ways to improve their mail and change to new mailing procedures, the University will not benefit from centralization and its costs cannot be reduced. For these reasons, the University of Utah is not reviewed further in this report.

Mail Systems Are Changing

There have been and will continue to be changes in U. S. Postal Service (USPS) regulations, Utah State mail system requirements, and the demands placed on all mail users. These changes indicate Utah may benefit from greater automation and consolidation of its mailing functions. Each independent group in the state recognizes this situation and each is working to lower costs while maintaining their independent status. Achieving the greatest possible savings is contingent on both consolidation of agency mail streams to reach more efficient mail volumes and greater automation to take advantage of the cost savings resulting from the use of equipment capable of processing large mail volumes.

The USPS is attempting to entice users to do more mail preparation work with rate discounts while also increasing the cost of first class mail. The emphasis of the USPS is to increase the amount of machine readable mail processed thus increasing efficiency and

reducing costs. It is very likely that rates will increase within a year to a suggested first class maximum of 31 or 32 cents. Discounts from the new rate will probably favor those with automated equipment capable of printing machine readable barcodes for 11 digit zipcodes. This extension of the 5 digit zip code is called plus four or plus six and allows a

greater number of delivery points (up to 1,000,000 in every zip code) and low delivery error rates.

Discussions with U.S. Postal Rate Commissioners indicate an all or nothing approach in the future, either mail will be prepared completely for automation (sorted and barcoded) or it will be charged at the full rate. They are discussing a two-tiered system with no intermediate discounts. The national trend is to centralize operations to allow for the greater efficiency of automated equipment. The major goals are first to barcode mail with a machine readable zip code, preferably with the additional four or six digits. And, second to present mail to the USPS pre-sorted to each zip code.

Audit Scope and Objectives

This audit was requested by the General Government/Capital Facilities Appropriation Subcommittee as a follow-up of a prior audit. The Office of the Legislative Auditor General released the report Mailroom Issues (Report #93-01) in February 1993 stating that the Department of Administrative Services had given insufficient time and effort to major state mail processing issues. Equipment had been purchased without adequate analysis and delegation agreements allowing individual agencies to process their own mail were based on inconclusive evidence. Our audit recommended that agencies continue on their current courses until further studies could be conducted. The subcommittee requested the implementation of these recommendations be reviewed and that the mail study be expanded to other governmental agencies including higher education.

Our survey found little progress has been made in meeting the prior report's recommendations. No studies had been conducted on consolidation or on the delegation agreements. We decided to review the issue of centralization because of the potential cost savings possible through greater efficiency. With efficiency in mind, we limited our scope to the centralization of agency mail within the Greater Salt Lake area only because mail volumes outside the Greater Salt Lake area were not sufficient to justify their inclusion. Due to the changing environment of the mail industry we used the services of Ken Wiley and Associates, a highly recommended mail services consultant.

The following identifies the major objectives of our fieldwork:

Determine if Utah can benefit from automated, centralized mail services.

Determine if problems need to be resolved before centralization can occur.

Chapter II Utah Can Benefit From Automated, Centralized Mail Services

Moving to a centralized, automated mail processing system can reduce mail operating costs by \$365,000 to \$585,000 per year. Potential savings occur from lower per mailpiece operating costs, postal rate discounts for sort/barcoding outgoing mail, and consolidating courier deliveries. The state has most of the equipment necessary to achieve these potential savings and has the potential to efficiently utilize its equipment by centralizing the mail volumes of its independent agencies under one mail operation. Additionally, computer software can be added to Utah's existing system that would allow automated processing of both outgoing and incoming mail.

In the near future a centralized automated system may be forced upon the state and other large mail users as the U.S. Postal Rate Commission eliminates or reduces certain postal discounts to encourage the use of machine readable mail. The current independent state mail operations lack the capability for cost savings that high volume centralized (automated) systems offer. In addition, our analysis shows that centralization and commingling of state mail can result in further reductions in postal rates. The state can also benefit by centralization and automated sorting of incoming mail. Finally, our analysis indicates that Utah is in a better position than most states to benefit from centralization.

Utah's mailroom operations vary from agency to agency. Each has a unique mix of users, space, mail volume, and mail type defining its mail stream (the type and flow of mail). Agencies with independent mail system operations can be hampered by agency program staff who prepare mail for their own needs rather than the needs of the agency's mail system. Many continue to shun machine readable (production) mail choosing to continue using white mail that is not machine readable. The state does not have a coordinated program to educate the individual agency users on the advantages of using production mail.

In our opinion, each of the independent agencies reviewed for this report maintains a basically manual system but develops and updates its systems with lower cost automation equipment. The result has been a balancing of service and cost that is acceptable to the system's users but is far less cost efficient than high-volume automated systems. In contrast, Central Mail has a more automated system but it is burdened by high operational costs because it does not have sufficient volume to justify its sophisticated equipment. Consequently, all of the state's mail operations and users could benefit from a centralized automated mail operation.

Mail Systems Are Moving Toward Automated, Centralized Operations

In an attempt to foster user automation, the USPS offers discounted rates below the standard first class rate of 29 cents. These rates encourage users to prepare mail that is machine readable. It currently costs the USPS \$39 per thousand to process and deliver hand addressed mail (white mail) compared to only \$3 for machine readable mail (production mail). Many believe that future postal discounts will force large users (such as state governments) toward a more automated centralized (large volume) operations.

Currently most state agencies are receiving one of two discounted rates offered by the USPS. For example, both the Department of Human Services and the Tax Commission presort by zip code and batch their production mail in large quantities qualifying for a discount from the standard 29 cent first class rate to a 24.8 cent per piece rate (a 4.2 cent reduction). In contrast, the Department of Administrative Services not only sorts and batches their production mail but they also add a plus-four barcoding on the envelope that qualifies the mail for a 23.3 cent rate (a 5.7 cent reduction).

The 23.3 cent rate is the lowest rate offered by the USPS for first class mail. The USPS's goal in offering this rate is to encourage barcoding and quantity pre-sorting by the large users so the cost savings of automation can be realized. Barcoding can either be achieved by an upfront option that attaches the coded information at the time the mail is generated or by the use of a sophisticated optical scanning system, called a multi-line optical character reader (MLOCR), used in conjunction with a rapid access database. An MLOCR uses an optical scanner to read addresses. This information is compared to a national database for correctness and, if found accurate, transformed into a machine readable barcode. The Department of Administrative Services uses an MLOCR to barcode and sort mail.

It is anticipated that the USPS will force more users to add the plus-four barcoding by eliminating or reducing the intermediate discounts, the 24.8 cent rate now offered for quantity presorted mail without barcoding. Contact with U.S. Postal Commissioners and experts in mail operations confirm that the 24.8 cent rate currently given to quantity pre-sorted mail that is not barcoded will be eliminated or reduced. Some expect this change to happen within the next few years others believe the change may happen more quickly.

In addition to the rate savings, barcoding and sorting via automation reduces costs for service organizations because their operations become more efficient as slow manual systems are replaced by automated equipment. However, automated barcoding and sorting can result in lower costs and be more efficient only if users process sufficient volume. The next section indicates the financial advantages the state could realize through centralization and automation of all mail services.

Utah Mail Operations Lack the Efficiency of a High-Volume Automated System

Utah mail operations can save approximately \$190,000 annually by increasing the efficiency of the existing mail operations through centralization. This savings would be the result of a reduction in direct labor costs. Centralization can also result in postal rate reductions that can generate savings ranging from \$65,000 to \$285,000 annually. Finally, incoming mail can also be more efficiently processed with a labor cost savings of about \$75,000 annually.

Mail operation efficiency is dependent on reducing the cost of producing and handling mail. Mail production costs are those costs necessary to transform information into mail. These costs would include: folding, labeling, placing information in envelopes, and sealing the envelopes. Mail handling costs are those costs associated with processing mail to prepare it for the USPS. Producing and handling are related because how mail is produced has an effect on the ability to automate the handling phase. Unfortunately, most of Utah's mail handling costs are labor intensive because individual agency volumes are not sufficient to justify the expense of more efficient mail handling equipment. In our opinion, all of the state mail operations would benefit from efficiency offered by centralization.

High-Volume Operations Are More Efficient

Currently, all major mail operations in Utah operate at roughly the same efficiency level (a direct cost of five cents per piece of outgoing mail). The majority of this cost is for either manual or automated sorting of mail in an attempt to get the lowest possible postage rate. Given the volume of mail processed by each of the organizations, none has the necessary volume to attain the lowest rates or offset the cost of needed automated equipment. Figure I shows the relative direct cost of outgoing mail for the state's major mail processing centers in comparison to the projected direct cost of a centralized system.

Figure I Agency Outgoing Mail Direct Costs					
Service Provider	Cost per Mailpiece				
State Central Mail	5.2 Cents				
Tax Commission	5.3 Cents				
Human Services	4.9 Cents				
University of Utah	5.0 Cents				
Centralized State System	3.2 Cents				

Figure I shows the direct cost efficiency gained by combining the mail volumes of Central Mail, the Tax Commission, and Human Services in a centralized MLOCR operation. A centralized, automated mail system could reduce direct cost of metering and sorting by 1.8 to 2.1 cents per piece of mail. This could result in a direct cost savings of approximately \$190,000 annually among the three state operations. The University of Utah is not figured into this analysis and once an effective centralized mail operation was functioning this organization could be added at some future time along with other state organizations. The centralized system's direct costs would not only be significantly lower than those of the standalone agencies but should also be lower than the cost of contracting for presorting services with a private vendor.

However, Figure I only includes direct cost savings through efficiency but does not include comparisons of postage rates or overhead charges. A centralized system would also reduce the postage of most production mail to the lowest automated discount rate of 23.3 cents per piece of mail compared with the current rate of 24.8 that many of the agencies are getting. The postage savings are more difficult to determine because actual savings depend upon the success of barcoding and commingling large quantities of outgoing mail into the same zip plusfour codes.

Central Mail now sends about 5 million pieces of mail at the reduced rate and we estimate other state agencies have about 5 million pieces of production mail that could qualify for the reduced rate. Under current postal procedures to qualify for the reduced rate of 23.3 cents per piece the mail has to be barcoded with a plus-four zipcode and sorted by three digits into groups of at least 50 or sorted by five digits into groups of at least 10. If Central Mail is able to commingle this increased volume, a significantly higher percentage of Utah government mail can go out at the reduced rate.

We estimate postal savings could be more than \$65,000 annually. However, postal savings could be far greater than \$65,000 if postal rate changes eliminate or increase the existing 24.8 cent per piece rate for sorted but not barcoded mail. If this rate is eliminated the postal rate savings from a centralized mail operation could be more than \$285,000 annually.

Figure I also does not identify the administrative overhead that may be attached to each of these operations. Administrative overhead, or indirect costs, are often used to criticize Central Mail because these costs are added to each agency's bill. The agency not only pays for the cost of mailing but, as an internal service organization, pays for the administration of the program. Agencies view this as a duplication of costs since they already have their own administrative costs. This concern is discussed in more detail in Chapter III.

Increasing the Mail Volume Processed on MLOCR Results in Savings

The MLOCR becomes more efficient as its volume increases toward operating capacity. Currently the volume of mail processed on the MLOCR by Central Mail is about 5 million pieces annually. Figure II superimposes the reduction in processing costs of an MLOCR as its volume increases over the efficient range of manual sorting operations. For our purposes we have used a model with two dedicated MLOCR employees. Manual sorting efficiency is based on the addition of new sorting staff as volume increases. As Figure II shows the current volume of mail processed on the MLOCR by Central Mail does not approach the volume necessary to be more cost efficient than a manual system.

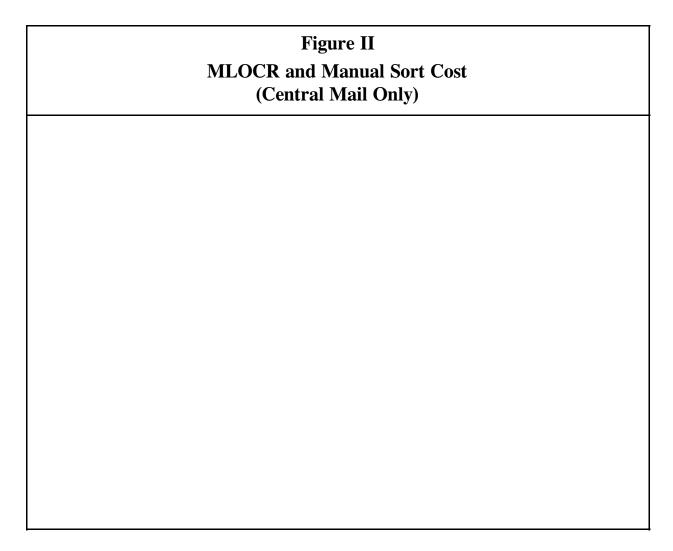


Figure II indicates that an automated sorting system, at higher mail volumes, can be considerably more efficient than a manual system. A manual sorting operation is at peak efficiency between 2.5 and 5 cents per piece, based on national statistics. However, operating at a volume of about 5 million pieces annually the MLOCR costs about 3.1 cents per piece to process mail. Consequently, the cost to operate the MLOCR at the present level is no more efficient than a manual system and is, therefore, not cost effective because it unnecessarily ties up capital without increasing efficiency. Given higher operating volumes, the MLOCR's efficiency increases.

According to our consultant who is an expert in mail processing equipment, the MLOCR purchased by Central Mail is a very good piece of equipment. The manufacture reports this MLOCR has the capability to process (sort and barcode) 15,000 pieces of mail per hour. For our analysis we used a much more conservative rate of 10,000 pieces of mail per hour. Consequently, our analysis indicates the MLOCR can do the work of 20 full-time equivalent mail sorters. A mail sorter in a manual system operating at peak efficiency can sort 428

pieces of mail per hour. It is clear that the MLOCR, with sufficient volume, is many times more efficient than a manual system.

Our cost model indicates that Central Mail's MLOCR has a direct operating cost of \$156,000 annually. This cost includes equipment depreciation, maintenance, operator compensation (two dedicated employees), and miscellaneous costs. In our opinion, to be cost effective the MLOCR needs to process about 6.4 million pieces of mail annually, 30% more than Central Mail's volume of 5 million machine readable pieces projected for Fiscal Year 1994.

The MLOCR has the capacity to process about 20 million pieces of mail annually (at 10,000 pieces per hour). Central Mail's current utilization of 5 million pieces annually uses no more than 25% of the MLOCR's capacity. However, our estimates show that the Tax Commission has an outgoing volume of 1.9 million pieces of mail annually and Human Services has 4.2 million pieces. Both are at least 85 percent machine readable. The addition of this mail could push the annual volume of mail processed by the MLOCR to about 10 million pieces. With the increased volume comes increased efficiency which produces lower operating costs. This greater efficiency is demonstrated in Figure III.

Figure III
MLOCR and Manual Sort Cost
(Total Outgoing)

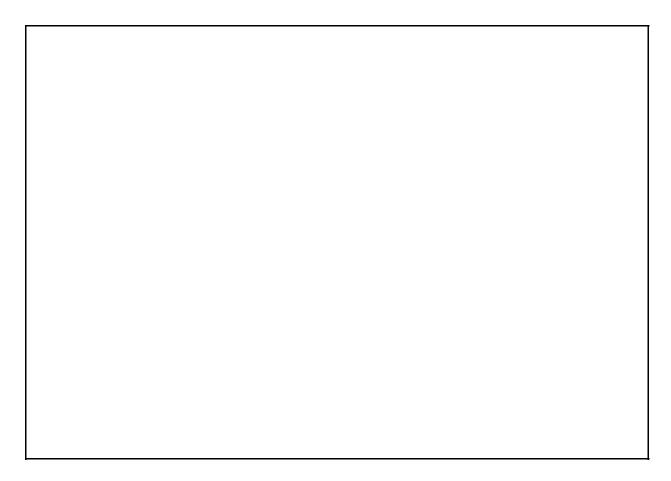


Figure III models the direct cost of sorting outgoing mail, not the total cost of mail preparation. As shown, the direct costs of processing mail on the MLOCR drop as the volume of mail processed increases. With the projected volume increasing from 5 to 10 million pieces of mail annually the direct cost to process on the MLOCR decreases from 3.1 to 1.7 cents per piece. However, processing 10 million pieces of mail annually on the MLOCR is still only half of the equipment's capacity. Addition cost reductions can be achieved with increased volume. The MLOCR has the capacity to process incoming mail which also is being processed manually by most state agencies.

Incoming Mail Can Be Sorted On The MLOCR

The MLOCR can be used for incoming mail as well as outgoing. The state has about 9 million pieces of incoming mail, half of which should be machine readable on the MLOCR. For this usage Central Mail's MLOCR needs a different software package that, rather than identifying addresses and zipcodes found at the bottom portion of the address, can identify names and titles on the upper portion of the address. Addition of this software package and appropriate directory programming would allow sorting of incoming machine readable mail.

This volume, given the capacity of the MLOCR, means an additional savings of roughly \$75,000 annually is possible with machine sorting. The savings are a result of reduced manual sorting labor costs. This software costs between \$20,000 and \$30,000 in addition to the cost of developing a directory.

The Tax Commission sorts a large portion of its incoming mail on an old, limited OCR. This system reads barcodes affixed to the Tax Commission's return envelopes. According to the Tax Commission's equipment manufacturer, the single barcode reading machine is obsolete and has no resale value. It may, however, be possible to attach that machine's bins to Central Mail's MLOCR to increase its number of bins and thus its utility. The manufacturer does not believe any equipment beyond the software upgrade would be necessary for the MLOCR to handle all of the state's existing production mail, both incoming and outgoing.

Central Mail Services and Human Services, unlike the Tax Commission, sort their incoming mail manually. Manually sorting Central Mail and Human Services incoming production mail requires approximately \$75,000 given an average sorting speed of 428 pieces per hour. The MLOCR has the capacity to handle all the production mail of the three agencies without adding additional staff. Figure IV demonstrates the possible reduction in per unit sorting costs if both outgoing and incoming mail are sorted by the MLOCR.

Figure IV

MLOCR and Manual Sort Cost

(Total Incoming and Outgoing)



Figure IV also demonstrates the additive effect of incoming mail on the cost of sorting outgoing mail. The additional 4.7 million pieces of incoming mail creates a total sorting base of 14.7 million which reduces the per unit cost to 1.1 cents for all MLOCR processed mail.

Greater efficiency is possible with the introduction of equipment capable of handling larger volumes of white mail. A representative of a major equipment manufacturer explained a feature that is adaptable to our MLOCR that would allow Central Mail to more quickly process both outgoing and incoming white mail. He and our consultant both recommend Central Mail consider adding an a semi-automated encoding desk, called an optimizer, to the MLOCR operation. This equipment, dependent on user needs, can cost from \$10,000 to \$60,000 and uses a dedicated employee to manually barcode non-machine readable mail via a computer software program. Central Mail would need to do a cost analysis of its impact upon the mail stream. We believe this equipment could only be economical if all white mail were at a single facility; separate facilities would be better off continuing the current hand sort system. Further, USPS service reduction in incoming mail sorting has and will continue to force more work on individual users.

Utah Is in a Position to Benefit from Further Centralization

The primary factors that place Utah in position to benefit from further centralization are: existing statutory provisions, Utah's localized population, and the level of automation already available. Many states do not have the ready capability of centralization Utah enjoys. We contacted ten states thought to have good mail operations during the current and prior audits. Each state approaches its mail in a different manner with no one state showing greater efficiency or effectiveness. None appears to have Utah's centralization possibilities. Given a centralized location, agency budgetary constraints, and the fact that direct cost savings as great as 20% are possible when agency mail streams are combined, Utah agencies should find centralization desirable. Utah's potential savings from better utilization and ability to accept different agency mail streams may allow greater levels of centralization than other states. Utah's has an increased ability to consolidate its mail services for a number of reasons.

First, there is authority within the **Utah Code** allowing for centralization. Current statutes grant control of all mail services to DAS Central Mail and allows delegation of services if there is a net cost savings or an improvement in state services - as a whole. Delegation agreements were and continue to be verbal agreements that have allowed the Tax Commission and Human Services to process their own mail because they have appeared to have competitive costs. We found some states have not addressed centralization as an issue and certainly do not have the legal authority Utah has to centralize .

Second Utah's population center is along the Wasatch Front keeping major state agency operations including mail services in a centralized location. Utah's three major mail operational centers are within a one and one-half mile radius and operate similar courier services, often to the same buildings. This localization sets Utah apart from other states. Few states have localized populations, most states we contacted had dispersed population bases that may allow mail centralization by city or even by building but makes it difficult to consolidate the majority of the state's mail operation.

And third, Utah, through a poor purchase decision, has most of the automation equipment it would need to operate a consolidated system. There is no consensus as to how mail should be processed at the state level, but a number of states are moving toward greater automation and centralization. Utah, with an MLOCR, has a head start.

We believe centralization of Utah government mail operations has significant advantages that should be seriously considered and acted upon. However there are also concerns that have to be addressed by Central Mail before it is prudent to proceed with centralization, Chapter III addresses these concerns in greater detail.

Other Mail Functions May Benefit From Centralization

Maximizing the use of the MLOCR is not the only benefit of centralization. Two other examples where Utah may also find centralization beneficial are mail insertion and courier routing. Insertion of pages in envelopes, like sorting, is a function that can benefit from the use of automated equipment. Courier services can benefit from the elimination of duplicate pick-up and delivery routes.

New Inserter May be Justified with Centralization

Mail inserters currently in use by the state's agencies are old and have maintenance problems. Each of the three agencies using their own inserters has discussed replacing their equipment with more automated models. Much of the talk has centered on the purchase of intelligent equipment that can take advantage of barcodes on letters to insert a variety of pages. Such equipment is expensive and of questionable value to Utah given the low volume of mail in need of multiple page insertion.

Our review found that volumes are not sufficient to justify an intelligent inserter for any one agency or even the entire state. Prior to this audit the Tax Commission (Tax) requested an intelligent inserter. The Tax Commission did not perform a need analysis to justify its request. Tax manually inserts about 287,000 pieces of mail, at an annual cost of approx. \$15,000, that could be done by an intelligent inserter. Intelligent inserters cost a minimum of \$106,000 for a simple four station machine and between \$150,000 and \$200,000 for one that would meet the state's size needs. Non-intelligent, upgradeable inserters cost \$50,000 (\$80,000 with on-line capability).

In our consultant's opinion, a better option for the state might be insertion equipment with on-line capability. On-line equipment, combines inserting with the functions of cutting, folding, and sealing now done on other machines. This consolidation of functions along with electronic control equipment allows on-line equipment to be 25 to 30% faster than the equipment currently used in Utah's mail operations. Given that the industry calculates the payback period for inserter investments as 3 years, the on-line option appears viable in a centralized operation while the intelligent inserter option does not. We calculate, using existing information, the state's inserting volume would have to be almost three times the current level to justify an intelligent inserter over a standard system.

Centralization allows justification of new equipment because it distributes costs over a larger volume of mail. Unfortunately, mail handling equipment is designed for larger

volumes. This makes it difficult for any one organization to justify the price of new

equipment. Balancing volume and cost is necessary to justify expenditures for mail processing equipment and software.

Centralization Eliminates Courier Duplication

A major, labor intensive function of mail operations is the pick-up and delivery of mail, commonly called courier service. Currently both the Central Mail office and the Department of Human Services have courier services that should be combined in a centralized system. Our review of these services found duplicative services that could be combined. Conservatively, at least one route could be eliminated at a savings of approximately \$35,000 per year.

Further savings are possible with mail user education. The major users have high service demands that require more service effort than is necessary and far more than the service level provided by the U. S. Postal Service. Some mail service users have their mail picked-up and delivered three and four times each day. Much of this level of service appears to be based on convenience and expectation not on need. State mail users we interviewed believed they could get by with fewer pick-ups and could not say why they had the level of service they were receiving. Mail users pay an average of \$1.42 for a mail pick-up/delivery stop and Central Mail makes 270 stops each work day.

Currently, the level of service provided for mail pick-up and delivery is set by Central Mail. Some service users have had little say in their number of deliveries they are forced to accept the number set by Central Mail. Our conversations with service users indicate that no more than two stops are necessary in any given day and that service users with greater needs should pay for the additional cost of more stops.

Recommendations:

- 1. We recommend the Department of Administrative Services centralize existing state mail operations after complying with the recommendations in chapter III of this report.
- 2. In the event of consolidation, we recommend the Department of Administrative Services Central Mail purchase software that enables MLOCR sorting of the state's incoming mail.
- 3. In the event of consolidation, we recommend the Department of Administrative Services examine the effectiveness of white mail processing with a semi-automated encoding station.

- 4. We recommend the Department of Administrative Services Central Mail analyze the state's mail insertion needs.
- 5. In the event of centralization, we recommend courier services be combined to gain greater efficiency.
- 6. We recommend Central Mail study user pick-up/delivery needs to determine if a standardized program of two stops per day with additional user charges for more stops.

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Chapter III Problems Need to be Resolved Before Centralization Can Occur

There is more to the issue of successfully centralizing mail systems than simply reducing monetary costs. Central Mail has suffered from credibility problems with major non-Central Mail users as a result of decisions and actions of past management. We believe Central Mail has a number of problems that need to be addressed prior to a change from independent agency operations to a centralized system. Past management has made decisions that have lead to inappropriate purchases and that have eroded mail service relations between state agencies.

Central Mail's costs appear high to prospective users due to the large amounts of overhead charged and Central Mail's allocation of these overhead costs. Management decisions resulted in questionable user rates and pricing structures that favor one user over another to create a larger base of operation. Concerns have resulted in hesitancy of non-users to place their trust in Central Mail's management even though rates are competitive.

Our review found larger independent mail system operators are concerned with the loss of control over their own mail and with the credibility of the Central Mail organization. The independent mail operators' concerns are based on what they characterize as poor past management decision-making by DAS and Central Mail. Management decisions related to the purchase and use of equipment have hurt the organization. These issues need to be addressed because centralization, and the resulting savings for the state, cannot occur without cooperation.

Utah's Central Mail is an internal service fund entity responsible for funding its own operations by charging its users for services rendered. In addition to the actual direct cost of operating a mail function and its own administrative overhead, Central Mail must contribute to the cost of operating various state agencies for federal billing purposes, and must contribute to the cost of the administrative overhead of the Division of General Services. These costs are necessary to accurately account for full cost of services that are charged to the federal government for state operated federal programs. They are not well understood by user agencies.

This full costing allocation method has lead to a situation where some state agencies question the cost of state mail service operations. Specifically, users ask what costs should be included in the rates charged. Currently, Central Mail charges most mail users for all direct

and indirect costs, and for some large volume users, offers discounts. This latter practice forces the question of inequity between users. In addition to creating the question of competitiveness with private mail service vendors, the question of Administrative Service's ability to manage a larger-scaled mail operation also exists.

The Perception of Poor Administrative Decisions Has Raised Concerns

Independent state agencies are concerned with Central Mail's ability to manage a larger, centralized mail operation. This question of management ability is based on other state agencies perceptions of past DAS Central Mail decisions. These non-Central Mail affiliated agencies believe that questionable decisions stem from Administrative Services' desire to gain efficiency by bringing all state agency outgoing mail volume under that department's control, as outlined in the **Utah Code**, rather than focus on the quality and cost of mail services. The following outlines some Central Mail actions over the last two years on: (1) the purchase of an MLOCR, which was covered in some detail in our previous report; (2) the use of the MLOCR; and (3) the process undergone to prepare for the purchase of intelligent inserting equipment.

The MLOCR purchased in July 1991 represented purchasing a want rather than a need. Although a need analysis was performed it was inconclusive and used faulty assumptions. In our opinion, the best information available may have opposed the purchase. It was known from the outset that the state's Central Mail division did not have the outgoing mail volume sufficient to support the purchase. Central Mail still made the purchase assuming all the outgoing mail from the independent agencies would be centralized and processed through the MLOCR. When the other agencies did not join in, Central Mail was left processing low-volumes on high-volume equipment. Consequently, Central Mail users have paid higher rates than they expected to pay over the last few years.

We are concerned by the lack of action taken by Central Mail to use the MLOCR to sort more than 2 million pieces of incoming production mail received annually by Central Mail. In order to increase operational volumes and justify the MLOCR, Central Mail has aggressively pursued the centralization of outgoing mail with the various state agencies. While the independent agencies have not agreed to centralization, Central Mail has overlooked the opportunity to process incoming mail on the MLOCR. On several occasions, during the 1992 audit, we discussed with past agency officials the value of sorting the large volume of incoming mail on the MLOCR rather than manually sorting. Central Mail's officials responded positively to that suggestion. At our exit conference in January 1993 for the letter report entitled **Mailroom Issues**, agency officials stated that they needed to re-program the MLOCR to process incoming mail and that it could be done in the near future. More than a year later, when we began this audit, nothing had been done to prepare the MLOCR for

processing incoming mail.

Our concern is while Central Mail is searching for ways to more effectively use the MLOCR they overlooked the large volume of incoming mail they already control. Our consultant, Ken Wiley, has stated that the MLOCR should be used to sort incoming mail. He also stated that our MLOCR does not have the software to sort incoming mail; the sorting of incoming mail is not as simple as re-programming the equipment, as thought by previous Central Mail management. He suggested Central Mail needs to purchase software and optical scanners at an estimated cost of \$40,000. In his opinion, this \$40,000 purchase is cost justified by the greater efficiency offered over existing methods. We have been surprised by both Central Mail's lack of progress on sorting incoming mail and past management's lack of knowledge concerning the MLOCR.

Our current review included a brief analysis of the state's need for an intelligent inserter. An intelligent inserter is a machine that can read a code on a mailpiece and select up to 5 other documents to be inserted in that mailpiece's envelope. Given manufacturer stated volume requirements and the low volume of the state's multi-page needs, we quickly concluded that the entire state mail system does not currently have the volume necessary to justify a fully intelligent inserter. Even so, there has been a great deal of activity among state agencies supporting the purchase of such equipment.

During the course of this audit, agencies operating independently of Central Mail have expressed concerns regarding Central Mail's expertise and ability to efficiently manage a centralized state mail operation. We believe these concerns are partly a result of independent agency perceptions of decisions made by previous management. Since the success of a centralized operation is dependant upon feelings of trust and confidence by its users, it is clear that prior to centralization current Central Mail management needs to develop a workable relationship with future users. Our consultant believes the current management of Central Mail is qualified and capable of operating a centralized mail operation. We believe the Department of Administrative Service's management needs to establish qualifications for management positions within a centralized operation.

Prior to centralization, Administrative Services needs to form a committee of users with representation from both the Tax Commission and the Department of Human Services. We believe this committee should also employ the services of an independent consultant to assist in the development of a centralized mail operation. The goal of this committee is a detailed implementation plan for centralization.

Central Mail's Rate Structure Needs Examination

Central Mail needs to more clearly allocate the costs that make up its rate structure. Also, the independent user agencies do not understand the justification for some of the overhead

charges and, as such, are fearful that centralization will lead to increased prices. In our opinion, Central Mail does not have detail documentation to support the service area (such as metering, sorting, and pick-up/delivery) rates proposed for Fiscal Year 1995. Central Mail has subdivided charges into service areas but the charges do not reflect the actual cost of providing these services. Accurate cost data would provide Central Mail more management control and give users reliable information concerning the cost of services provided. Also, some necessary overhead charges appear unrelated to the mail function and are higher than overhead charges reported by state agencies. This lack of understanding has caused concern among state agencies.

Proposed Rate Structure Needs to be Documented

Central Mail does not have documentation to support the service area rates charged on the proposed 1995 rate schedule. Rather, the rates are a reaction to losses in the preceding years. Central Mail estimated a loss of \$207,000 by the end of Fiscal Year 1993. Consequently, management decided to eliminate this deficit with a price increase for all service areas. This 53 percent increase was based on the 1992 rate structure and no attempt was made to identify problem service areas. This resulted in a price increase for all service areas that did not represent the actual value necessary to recover costs for individual service areas but rather an across the board increase.

Agency staff and officials explained many different reasons why the 1993 loss occurred, but have not provided any clear evidence linking the operating loss to specific service areas. Some state agencies are concerned that, in a centralized operation, rates could get out of control if costs are not closely monitored. We concur with this concern and believe that the proposed 1995 rate increases have to be broken out by service area and documented with the best available information. Clear documentation of operating costs by service area is necessary to control future increases and to measure operating efficiency. Also, users depend on accurate cost figures when deciding to increase or decrease utilization in any of the service areas.

In 1992 Central Mail had a rate structure with costs documented by individual operating function. In our opinion, the analysis of the direct operating costs for the 1992 data appears to be a reasonable effort to establish actual costs. However, we believe overhead needs to be allocated using a common unit of measurement, such as pieces of mail, rather than a set percentage. We recommend Central Mail re-examine the increases assigned for Fiscal Year 1995 and reallocate utilizing historic cost data.

Overhead Charges Are Misunderstood

Central Mail's overhead charges account for 43 percent of the fees charged to system

users. Overhead charges are derived from the indirect costs of administering and supporting Central Mail that cannot readily be attributed to the individual service areas. Unfortunately, the structure of Utah's Department of Administrative Services has created a situation where Utah's Central Mail operation has three levels of indirect overhead costs. The result is confusion as to just what a Central Mail function costs and what a user should be charged.

Under the current system, fees need to be sufficient to cover not only Central Mail administrative costs but also contribute to General Services' administrative costs, costs of DAS sister agencies, and costs of some agencies outside DAS. To the user, some of these charges may appear to be unrelated to the mail function. The charges do add to Central Mail's fees and are incurred by the state whether or not Central Mail exists. Our contacts with state agencies showed that many agency personnel do not understand Central Mail's overhead charges and, as such, do not make fair or accurate appraisals when they perform cost comparisons. During this audit, agencies would inappropriately compare Central Mail's total costs inclusive of overhead with their own direct costs not including their own department's overhead. Failure to include their own overhead costs and failure to account for the agency allocation Central Mail pays results in a biased comparison.

The three levels of overhead used to establish Central Mail costs are the key to this misunderstanding. Central Mail overhead includes Central Mail, General Services, and allocated expenses for services rendered by other agencies. Central Mail overhead includes expenses incurred in the operation of the mail system that are not directly attributable to a specific service. An example is the preparation of monthly billing charges which does not expedite the actual mail function but is directly attributable to the mail function. General Services overhead includes a weighted portion of the expenses incurred by General Services in the management of Central Mail, such as budget development for Central Mail at the departmental level. Allocated expenses include a portion of the supporting agency expenses for state operation of federal programs. These supporting agencies include DAS sister agencies such as finance and purchasing and general government agencies such as the Offices of the Treasurer and Attorney General. Figure V demonstrates the cost effect of the additional overhead charges on Central Mail functions.

Figure V Central Mail Functions and Costs					
Function	Central Mail	General Services	Agency Allocation	Total	
Metering (per piece)	\$.019	\$.001	\$.002	\$.022	
Labeling (per piece)	.027	.001	.003	.031	
O.C.R. (per piece)	.034	.002	.004	.041	
Main Sort (per piece)	.017	.001	.002	.020	
Pick UP/Delivery (per month)	41.670	1.720	5.200	48.600	

As Figure V shows, the addition of General Services and agency allocation overhead to Central Mail's costs adds significantly to operating costs and ultimately to system user fees. The resulting 14 percent cost increase can make Central Mail's costs appear uncompetitive with the operating costs of other agencies. While it currently costs Central Mail 2.9 cents in direct costs to process with the MLOCR, the cost goes up to 4.1 cents when all overhead costs are added in. This increase is the same for other Central Mail functions.

During this audit we asked the Tax Commission and Human Services to develop their own overhead costs, neither could clearly identify their own overhead costs. For example, departmental and divisional overhead expenses are often excluded in the calculation of some agencies' mail function costs. The correct allocation of these overhead expenses is important when comparing the efficiency of one agency to another. Most of the departmental level expenses will exist with or without the mail function and will still be paid for by the state.

Larger Mail Service Users Receive Discounts

Central Mail has attempted to increase its mail volume by offering discounts to large production mail users. Most notably, Central Mail has formally contracted with Employment Security and informally contracted with the Tax Commission and the State Office of Education. In each case the discount is meant to fully recover the variable costs associated with MLOCR pre-sorting the users outgoing mail but only contributes a small portion to Central Mail's fixed costs. Discounting is a concern because it may allow individual users to negotiate lower rates at the expense of other state mail service users. Ideally, rates should be based on actual full cost so each user pays a fair share.

Employment Security's contract was signed in 1992 and has not been updated. This agreement is for metering and MLOCR sorting of approximately 1.3 million pieces of uniform production mail each year. Normally, Central Mail would charge a per piece price of 2.1 cents for metering and 2.1 cents for sorting. Rather than pay the full 4.2 cents, Employment Security receives a total sorting and metering fee reduction of 1.2 cents and pays a flat 3 cents per piece. The reasons given by Central Mail for this arrangement are: (1) that Employment Security owns its own metering machine and (2) that the large volume of Employment Security prepared mail aids in lowering the per unit operating cost of the MLOCR.

Ownership of the metering equipment, for the given volume, accounts for 0.3 cents (depreciation and maintenance) of the 1.2 cent discount. This means that Employment Security is given a .9 cent per piece discount for the efficiency gained by the volume and preparation of its mail. Of the 3 cents per piece paid by Employment Security, meter operation costs, on average, 1.5 cents per piece. The remaining 1.5 cents paid by Employment Security is for sorting the large quantity of prepared (faced and boxed) mail. In essence, Employment Security receives a 30% discount from the sorting rate paid by all other users for preparing mail. We have no evidence showing Central Mail computed these values in an effort to insure Employment Security paid the full cost of the service. In our staff dedicated model of MLOCR operation, however, we can show that the Employment Security contract does contribute about \$15,000 per year to the MLOCR's fixed operating costs lowering the cost to all other users by about 4%.

The informal agreements with the Tax Commission and the State Office of Education function in much the same way. Each receives a 15% discount for large volumes of user-prepared mail. Central Mail gets mail that is less costly to process because the mail arrives boxed with all addresses facing the same way thus reducing operator effort. Again, the additional volume moves the MLOCR operation to a more efficient per unit level in theory decreasing the per unit rate of the operation. We could not identify any comprehensive study of direct and indirect costs done by Central Mail to justify the amount of the discounts or the reason the discounts have been given and continued. Our discussions with agency staff found discounts were given to get mail volume for the MLOCR and we believe it is commendable Central Mail is trying to improve the equipment's utilization. Such action, however, should be delineated and reviewed as mail volumes change.

Discounting raises a question in the equity of some state agencies receiving discounts at the expense of others. There is no clear definition in the establishing legislation addressing this issue. The **Utah Code** only implies that the benefit of the mail system should be to the state. In the case of bringing in mail from a user not covered by the legislation, the tactics taken by Central Mail appear reasonable because the state benefits. If the discount user is covered by the legislation there is no net gain for the state only for the individual user. We believe discounting should be eliminated and replaced by a system based on actual cost recovery.

Central Mail Is Competitive with Private Vendors

An alternative to the current operation and to centralization is the privatization of all or part of the state's mail operations. While it is possible to privatize mail sorting, we do not believe it would be in the state's best interests. Pre-sort privatization would remove a major function from the system but would not eliminate all the overhead associated with that function. Even at the current low level of MLOCR operation, Central Mail's direct cost of pre-sorting is competitive with the rate charged by Utah's sole private vendor. If MLOCR volume increases through centralization, Central Mail would be able to pre-sort for significantly less than the outside source.

Much of the confusion, as to the benefit of privatization, stems from the comparison of Central Mail's costs and those of agencies with internal mail operations. The agencies tend to look at Central Mail's total cost of pre-sorting and compare that to the cost of the private vendor. If private pre-sorting were used, the maximum reduction in the state's costs would be the direct operating cost of the MLOCR and a portion of Central Mail's overhead, a reduction of about \$180,000. The private vendor's fee would be \$175,000. If mail volume increased to the level associated with centralization, costs would still only be reduced \$180,000 and the charge would be \$350,000.

Recommendations:

- 1. We recommend DAS Central Mail conduct a detailed cost analysis on the use of the MLOCR for sorting incoming mail to aid in fee setting.
- 2. We recommend DAS Central Mail examine mail inserting needs for the state and its larger mail service users.
- 3. We recommend Department of Administrative Services officials identify the qualifications of the director of a centralized mail operation and assure that someone qualified is assigned to that position.
- 4. We recommend the Department of Administrative Services work closely with independent user agencies to use the expertise of existing employees when staffing a centralized operation.
- 5. We recommend Department of Administrative Services officials identify user agency centralization concerns and work closely with those agencies to build a relationship of trust and confidence.

- 6. We recommend the Department of Administrative Services, with the aid of users committee inclusive of the Tax Commission, the Department of Human Services, other users, and a qualified consultant, design a centralization implementation plan inclusive of timing needs, agency incoming and outgoing mail handling needs, and rate structures.
- 7. We recommend the Department of Administrative Services review its overhead cost allocation system.
- 8. We recommend that prior to any consolidation, the Department of Administrative Services review its cost accounting of Central Mail to develop more accurate values for direct and indirect costs.
- 9. We recommend the Department of Administrative Services set policy stating the goals of its rate setting program.
- 10. We recommend Central Mail eliminate rate discounts.