REPORT OF

THE

STATE AUDITOR

Division of Central Services
Department of Personnel & Administration

Performance Audit
May 2003

LEGISLATIVE AUDIT COMMITTEE
2003 MEMBERS

Senator Ron Tupa
Chairman

Representative Tambor Williams
Vice-Chairman

Senator Norma Anderson
Representative Fran Coleman
Representative Pamela Rhodes
Senator Stephanie Takis
Senator Jack Taylor
Representative Val Vigil

Office of the State Auditor Staff

Joanne Hill
State Auditor

David Kaye
Deputy State Auditor

Marty Galvin
Nancy Howe
Heather Moritz
Jonathan Trull
Legislative Auditors

STATE OF COLORADO

JOANNE HILL, CPA
State Auditor

OFFICE OF THE STATE AUDITOR
(303) 869-2800
FAX(303)869-3060

Legislative Services Building
200 East 14th Avenue
Denver, Colorado 80203-2211

May 28, 2003

Members of the Legislative Audit Committee:

This report contains the results of a performance audit of the Division of Central Services within the Department of Personnel & Administration. The audit was conducted pursuant to Section 2-3-103, C.R.S., which authorizes the State Auditor to conduct audits of all departments, institutions, and agencies of state government. The report presents our findings, conclusions, and recommendations, and the responses of the Department of Personnel & Administration.

Joanne Hill

TABLE OF CONTENTS

STATE OF COLORADO
OFFICE OF THE STATE AUDITOR **REPORT SUMMARY**

JOANNE HILL, CPA
State Auditor

Division of Central Services
Department of Personnel & Administration
Performance Audit
May 2003

Authority, Purpose, and Scope

This performance audit of the Division of Central Services was conducted under the authority of Section 2-3-103, C.R.S., which authorizes the State Auditor to conduct audits of all departments, institutions, and agencies of state government. The audit was conducted in accordance with generally accepted government auditing standards. Audit work was performed from December 2002 through March 2003.

This report contains findings and 12 recommendations for improvements that are needed in the Division of Central Services' operations. We would like to acknowledge the efforts and assistance extended by the management and staff of the Department of Personnel & Administration during the course of this audit. The following summary provides highlights of the comments contained in the report.

Overview

The Division of Central Services (Division), which is found in the Department of Personnel & Administration, is required by statute (Section 24-30-1104, C.R.S.) to perform specific services (e.g., printing, microfilming, copying, and graphic design, among others) for executive branch agencies located within the four-county Denver Metro area (i.e., Adams, Arapahoe, Denver, and Jefferson counties). Statutes also require the Division to charge its users the full cost of providing a particular service and stipulate that Division prices must be competitive with the private sector. Our audit focused on the operations of six of the Division's service units (i.e., the Print Shop, Mail Services, Design Center, Imaging and Microfilm Services, Quick Copy, and Copier Management units) and the Division's administrative section. These units were appropriated approximately $11 million and 85 FTE for Fiscal Year 2003. The Division's funding comes from the state agencies that use its services.

For further information on this report, contact the Office of the State Auditor at (303) 869-2800.

Overall Service Delivery

Statutes state that the Division's primary goal is meeting the service needs of state departments in efficient and economical ways. The Division has not demonstrated that it has met this goal for two main reasons. First, the Division is not pricing many of its services at a full cost recovery level. As a result, we could not determine whether its prices are truly competitive thus making the Division the most economical vendor for its customers. Second, the Division has not adequately fulfilled its statutory planning, control, and coordination responsibilities. This has resulted in a fragmented and duplicative service delivery system for agencies seeking services that the Division cannot provide. Specifically, the Division has not adequately identified and assessed the service capabilities of other state agencies, nor has it actively referred its customers to these operations when appropriate. We also found that the Division does not always maximize the use of price agreements or other methods to aggregate customer demand and provides little guidance to its customers regarding the relative cost-benefit of using one private sector vendor over another. These problems have likely increased the cost of service delivery. To address these issues, the Division needs to develop a business plan that addresses (1) service delivery planning, control, and coordination; (2) competitiveness; and (3) the financial viability of its own internal service units.

Service Pricing

The Division establishes prices for more than 160 separate services that it provides through the six service units included in the scope of our audit. We reviewed the Division's rate-setting methodologies and found deficiencies including the use of incomplete expense data, inaccurate productivity assumptions, and the lack of adequate customer demand information. These problems contributed to ongoing deficits in three of the Division's service units (i.e.,the Print Shop, Design Center, and Imaging and Microfilm Services units) during in Fiscal Years 1998 through 2002. Further, in Fiscal Year 2000 several of the Division's service units, including the Print Shop, took intentional losses to eliminate excessive fund balances per federal guidelines. If the Division cannot correct its pricing methodology problems so that all services are priced at a full-cost recovery level while still remaining competitive with the private sector, it should consider eliminating its financially problematic service units and directing customers to alternative vendors.

We also found problems in pricing and management approaches used in the Division's Copier Management unit. Unlike the Print Shop, Design Center, and Imaging and Microfilm Services units, however, the Copier Management unit has posted excessive profits in recent years. Excessive profits are the result of flaws in the Division's pricing strategy, which overcharges many users while undercharging others. In addition, we found that if the Division instituted a more active approach for managing copier rentals, state agencies could save an estimated $134,000 per year.

Our recommendations and the responses of the Department of Personnel & Administration can be found in the Recommendation Locator.

RECOMMENDATION LOCATOR
Agency Addressed: Department of Personnel & Administration

Rec. No.	Page No.	Recommendation Summary	Agency Response	Implementation Date
1	16	Improve the planning, control, and coordination of services under the Division of Central Services' authority by creating a work group to study improvements to existing service delivery approaches.	Agree	June 2004
2	20	Conduct a comprehensive review of the Division of Central Services' statutory authority to identify laws that may be outdated or obsolete.	Agree	December 2003
3	23	Improve the Division of Central Services' pricing strategies for the Print Shop unit by requiring accurate productivity assumptions and customer demand projections.	Agree	July 2003
4	25	Improve the Division of Central Services' pricing strategies for the Design Center unit by requiring accurate productivity assumptions and customer demand projections.	Agree	July 2003
5	26	Improve the Division of Central Services' pricing strategies for the Imaging and Microfilm Services unit by requiring the use of accurate, complete, and well-documented expense data.	Agree	July 2003
6	28	Develop a strategy to return the Division of Central Services' Print Shop, Design Center, and Imaging and Microfilm Services units to profitability while remaining competitive with the private sector.	Agree	February 2004
7	31	Reduce the cost of operating office copiers overseen by the Division of Central Services by implementing an active copier management system.	Agree	December 2003

RECOMMENDATION LOCATOR
Agency Addressed: Department of Personnel & Administration

Rec. No.	Page No.	Recommendation Summary	Agency Response	Implementation Date
8	35	Reduce the cost of operating office copiers overseen by the Division of Central Services by: (a) eliminating the flat rate billing policy and replacing it with a policy that charges customers the actual cost of operating their individual copiers; (b) establishing and enforcing clear performance standards for accurate and complete billing information; (c) discontinuing the practice of paying vendors to collect meter information; (d) eliminating the five-digit account number system; and (e) abolishing centralized paper purchasing requirements.	a. Partially Agree b. Agree c. Partially Agree d. Agree e. Partially Agree	a. June 2004 b. June 2003 c. July 2003 d. September 2003 e. June 2004
9	37	Reduce the cost of operating office copiers and eliminate excess profits by abolishing the user fee imposed by the Division of Central Services on copiers acquired through the permissive price agreement.	Agree	November 2003
10	38	Develop a formal policy that establishes reasonable profit and loss targets for all service units within the Division of Central Services.	Agree	October 2003
11	39	Improve the Division of Central Services' price-setting methodologies by establishing a formal policy for management review and approval of pricing recommendations.	Agree	August 2003
12	40	Modify the Division of Central Services' process for conducting private sector price comparisons to ensure a more balanced, accurate, and thorough review.	Agree	February 2004

Description of the Division of Central Services

Overview

The Division of Central Services, which is found within the Department of Personnel & Administration, was created in 1977 to meet the service needs of state departments, institutions, and agencies in efficient and economical ways. The Division is composed of six units: Administration (which includes the Statewide Travel Management Program); Reprographics (i.e., Copier Management, Design Center, Print Shop, and Quick Copy); Imaging and Microfilm Services; Mail Services; Fleet Management and Motor Pool Services; and Facilities Maintenance and Planning. The latter two units (i.e., Fleet and Facilities Maintenance) and the Statewide Travel Management Program were not included in the scope of this audit.

The Division was appropriated approximately $47.9 million and 162 FTE for Fiscal Year 2003. Of this total, approximately $25.9 million was for operating expenses, utilities, and Capitol Complex repairs and security (54 percent); $15.2 million was for vehicle leases and purchases (32 percent); and $6.8 million was for personal services (14 percent). There are about 85 FTE appropriated to the service units included in the scope of this audit, including 8 FTE located in the Division's Administration Section. The service units included in our audit scope received approximately $11 million of the Division's total appropriations for Fiscal Year 2003. All of this funding is either cash funds or cash funds exempt (i.e., intergovernmental transfers of funds from agencies that use the Division's services). During Fiscal Year 2002 the service units included in the scope of our audit paid about $530,000 for overhead expenses related to the Division and Department of Personnel & Administration.

The Division's responsibilities are described in Section 24-30-1101, et seq., C.R.S. These statutes also delineate a geographical service area for the Division (i.e., Adams, Arapahoe, Denver, and Jefferson counties) and require executive branch agencies located within this area to use the Division to obtain certain goods and services (e.g., printing, mail, microfilming, copier, and graphic arts services) unless they can demonstrate that the private sector can provide them at a better price or quality. Agencies outside this area may also use Division services but are not required to do so.

Section 24-30-1108, C.R.S., requires all programs operated by the Division to cover their full operating costs by charging appropriate fees. Full cost is defined by law as "the cost of all material, labor, and overhead." Statutes also require Division services to be priced at a rate that is either competitive with or lower than private sector rates. In addition, statutes establish a revolving fund to account for program expenditures and revenues and direct the Executive Director of the Department to keep "a full, true, and accurate record" of the cost of providing a particular service.

Service Unit Descriptions

A description of the service units included in the scope of our audit follows. It should be noted that the Division recently established the Integrated Document Factory to create certain administrative efficiencies, including combining support activities for all service units except the Imaging and Microfilm Services unit. The new administrative support section created by this reorganization employs 7 FTE who provide accounting, inventory, purchasing, and related support for the Copier Management, Design Center, Print Shop, Quick Copy, and Mail Service units. The FTE information shown below represents the actual number of filled positions at each of the units. There are currently 14 vacant positions.

- **Copier Management**—This unit assists executive branch agencies in the acquisition and placement of copiers within their respective offices. The State has negotiated a mandatory price agreement with two vendors, Minolta and Ikon, to lease and service copiers within the four-county region. At their discretion, state agencies outside of the Division's service region, as well as school districts, cities, and other political subdivisions, may also participate in this agreement. This unit currently manages 265 copiers within the Division's four-county service region. An additional 2,900 copiers are managed at the agency or local level through the permissive portion of the price agreement. This unit currently employs 0.5 FTE.

- **Design Center**—This unit provides commercial art and graphic design services. In Fiscal Year 2002 the unit worked approximately 3,800 production hours completing customer requests. This unit currently employs 4 FTE.

- **Mail Services**—This unit provides a variety of mail processing services including postage metering, folding, labeling, zip code presorting, and interdepartmental mail delivery. In Fiscal Year 2002 the unit metered nearly 16 million pieces of mail and completed approximately 2,600 delivery runs. This unit currently employs 26 FTE.

- **Print Shop—**This unit prints forms, letterhead, brochures, reports, newsletters, and other materials for state agencies. In Fiscal Year 2002 the unit produced over 31.1 million impressions. This unit currently employs 7 FTE.

- **Quick Copy—**This unit operates a centralized copy center located at the Division's Integrated Document Factory in north Denver. The Quick Copy unit typically handles smaller printing requests (i.e., jobs with 5,000 or fewer copies). In Fiscal Year 2002 the unit produced almost 51.7 million impressions. This unit currently employs 8.5 FTE.

- **Imaging and Microfilm Services—**This unit provides microfilming, optical scanning, and compact disk production services. In Fiscal Year 2002 the unit scanned over 2.7 million images and microfilmed almost 3.4 million documents. This unit currently employs 10 FTE.

Service Unit Revenues and Expenditures

The following table shows revenue, expenditure, and income data since Fiscal Year 1998 for the six service units included in the scope of our audit. One cash fund is used to account for all financial transactions related to all six service units.

Division of Central Services Revenues, Expenditures, & Income Data Selected Service Units, Fiscal Years 1998-2002						
Service Unit	**Item**	**Fiscal Year 1998**	**Fiscal Year 1999**	**Fiscal Year 2000[1]**	**Fiscal Year 2001**	**Fiscal Year 2002**
Copier Management	Revenue	$1,063,259	$1,129,226	$505,846	$980,538	$1,070,041
	Expense	$908,515	$973,221	$1,068,351	$919,487	$831,876
	Income	$154,744	$156,005	($562,505)	$61,051	$238,165
Design Center	Revenue	$388,421	$375,740	$296,667	$311,433	$381,720
	Expense	$398,652	$371,637	$314,838	$326,575	$390,373
	Income	($10,231)	$4,103	($18,171)	($15,142)	($8,653)
Imaging and Microfilm Services	Revenue	$316,792	$561,205	$651,976	$847,353	$576,775
	Expense	$483,239	$530,721	$806,903	$784,695	$861,120
	Income	($166,447)	$30,484	($154,927)	$62,658	($284,345)
Mail Services	Revenue	$5,427,718	$6,049,290	$5,600,088	$5,708,797	$6,069,756
	Expense	$5,355,172	$5,907,456	$5,598,443	$5,653,367	$5,863,478
	Income	$72,546	$141,834	$1,645	$55,430	$206,278
Print Shop	Revenue	$1,616,152	$1,051,634	$854,768	$858,702	$892,197
	Expense	$1,605,412	$1,092,045	$1,010,833	$917,375	$924,550
	Income	$10,740	($40,411)	($156,065)	($58,673)	($32,353)
Quick Copy	Revenue	$969,397	$1,426,069	$1,134,030	$1,474,576	$1,536,186
	Expense	$1,013,701	$1,224,420	$1,269,415	$1,450,280	$1,484,221
	Income	($44,304)	$201,649	($135,385)	$24,296	$51,965
Total Income		**$17,048**	**$493,664**	**($1,025,408)**	**$129,620**	**$171,057**

Source: OSA analysis of Division of Central Services' data.

[1] The unusually large loss in Fiscal Year 2000 resulted from temporary fee reductions and rebates instituted in the Copier Management, Print Shop, and Quick Copy units that year. These measures were taken in response to a request from federal authorities to reduce the Division's revolving fund balance.

The table shows that several of the Division's service units have operated at deficits in recent years. This issue is discussed in more detail throughout the remaining chapters of the report.

Service Delivery

Chapter 1

Overview

This chapter focuses on the Division's role in delivering services to executive branch agencies located in the Denver Metro area. The statutory framework governing the Division's operations envisions a cost-effective internal service delivery system for the Division's customers that also allows for the use of other agency-based and private service providers when appropriate. We found that the Division has not demonstrated that it has fully achieved this statutory vision for several reasons, including problems with its pricing, cost comparison, and service coordination responsibilities. This chapter discusses the general improvements that are needed to ensure that state agencies receive the most cost-effective services possible. Chapter 2 discusses more detailed improvements that are needed in the Division's pricing strategies, cost comparison methodologies, and general operating policies.

As discussed in the Description, Section 24-30-1101, et seq., C.R.S., sets forth a framework for the Division's operations. The General Assembly enacted these laws in the late 1970s to provide Denver Metro-area executive branch agencies with efficient, economical, competitive, and practical options for procuring certain commonly needed services (e.g., printing, microfilming, graphic arts, mail, and office copiers, among others). At that time, the General Assembly decided that state agencies located in the Denver Metro area would benefit from the efficiencies created from aggregating demand and centralizing service delivery. The law also recognized that some agencies had existing service operations of their own and allowed these operations to continue functioning as long as they were cost-beneficial. Statutes were later amended to specifically allow agencies to obtain services directly from the private sector if the cost and quality of those services were competitive.

Because the statutory framework governing the Division's operations allows agencies to use other service providers when it makes sense to do so, the law also directs the Division to fulfill certain coordination, control, and planning responsibilities. Centralized planning, control, and coordination of service activities is necessary, according to Section 24-30-1101(1)(e), C.R.S., to:

> ...most effectively utilize resources committed to existing services and to assure the best services at competitive costs to user agencies while preserving the managerial prerogatives and responsibilities assigned to department and agency heads....

Additional laws speak to the Division's role and responsibilities in these areas, including mandates found in Sections 24-30-1104 & 1105, C.R.S. These statutes call for the Division (under the direction of the Executive Director of the Department of Personnel & Administration) to work with agencies to conduct short- and long-range planning, establish procedures and standards for managing all service functions located within the four-county area, approve or disapprove the acquisition of new service equipment, and continually review and assess all existing and future service operations to establish priorities for those that are necessary and desirable. We also note that Section 24-30-1108, C.R.S., requires the Division to charge its customers the full cost of providing a particular service and to price services at rates competitive with or lower than the private sector.

Overall, the statutes lay out a cost-effective, yet flexible system for meeting the service needs of state agencies located within the Denver Metro area. In addition, if the Division can meet statutory prerogatives to price its services at a full-cost recovery level while still being competitive with the private sector, it should be an agency's first-choice vendor. Further, in cases where the Division cannot fulfill a particular need, through its coordination functions, the statutes devise a system whereby the Division should have the information it needs to direct customers to the "next best alternative" (i.e., another vendor that can meet a customer's needs at a good price). This could include another state agency that has the capability to perform that work (e.g., the Correctional Industries' Print Shop) or a private vendor through a price agreement or a bidders list.

We found that the service delivery system envisioned in Section 24-30-1101, et seq., C.R.S., does not currently exist because the Division lacks an effective business plan that ensures state agencies are guided to the most cost-effective solutions. The Division needs to develop a business plan that addresses (1) service delivery planning, control, and coordination; (2) competitiveness; and (3) the financial viability of its internal service units. These issues are discussed in more detail below.

Planned, Controlled, and Coordinated Service Delivery

The Division is not adequately planning, controlling, and coordinating service delivery to ensure its customers receive the most cost-effective services possible. The lack of planning, control, and coordination has resulted in fragmentation of demand and duplication of services which, in turn, may increase the State's cost for acquiring services in terms of lost buying power and unused internal capacity. For example, industry pricing practices typically contain economies of scale from which state agencies can benefit—that is, larger jobs generally cost less per unit than smaller ones. Except for copier rentals, we found that the Division does not aggregate agency demand for the services under its control. Therefore, the State may be missing opportunities to save taxpayers' money through volume buying arrangements. Increasing the availability of price agreements for services such as four-color printing (a service that the Division does not currently perform) is needed to address this issue.

We also found duplication of services in the Denver Metro area. In cases where the Division cannot meet a service need, state agencies have two options: using another service provider within the state system or using a private sector vendor (discussed later in this section). To learn more about the capabilities of existing agency-based service operations, we visited several state departments and higher education institutions. We found that many of the agencies located within the Division's service area provide their own print, microfilm, graphic arts, mail metering, and quick copy services (among others). For example, we found print shops operating at the Department of Public Health and Environment, the Department of Transportation, the Auraria Higher Education Center, the University of Colorado Health Sciences Center's medical school, and the General Assembly. In addition, the Colorado School of Mines operates its own quick copy center and the Department of Revenue performs its own microfilm, scanning, and graphic arts services. Several state agencies also perform their own mail metering services (e.g., Department of Transportation, Division of Wildlife).

Overall, we found that as of February 2003, there were over 80 FTE employed in graphic arts, print, and related positions in agencies headquartered within the four-county area. Twenty-seven of these employees work for the Division of Central Services; the remainder work for other agencies. The following table shows a partial list of the agency-based service operations we identified, their capabilities, Fiscal Year 2003 budgets, and FTE:

Overview of Selected Service Operations at State Agencies Within the Division of Central Services' Service Region			
Agency	**Capabilities/Equipment**	**FY 2003 Budget**	**FTE**
Department of Revenue Division of Motor Vehicles	6 microfilming machines	$446,900	12
Department of Public Health & Environment	1 offset press, 1 Xerox DocuTech machine, binding equipment	$291,500	2
Department of Transportation	3 offset presses, 2 Xerox DocuTech machines, binding equipment	$705,100	15
University of Colorado Health Sciences Center/Medical School	4 offset presses, 1 Xerox DocuTech machine, binding equipment	$1,321,400	12
Department of Revenue Graphic Arts Section	numerous computers and printers	$175,900	3
Colorado School of Mines	1 Xerox DocuTech machine and various copiers	$72,500	1
Auraria Higher Education Center	5 offset presses, binding equipment, 2 Xerox DocuTech machines, various copiers	$1,059,300	10
General Assembly	3 duplicating presses, 1 copier, various binding equipment	$262,400	3
	Total	**$4,335,000**	**58**

Source: Office of the State Auditor analysis.

As previously noted, Correctional Industries also operates a print shop at the Centennial Correctional Facility in Cañon City that can perform color printing, forms production, high-speed digital copying, collating, binding, and desktop publishing services (among others). Although this operation is not located in the Division's service region, it does serve many of the same agencies. In fact, Section 17-24-111(1)(a), C.R.S., requires all state agencies to purchase their printing services from Correctional Industries unless they operate their own print shop or Correctional Industries cannot provide a particular service at a competitive price or quality. We interpreted this requirement to apply to agencies outside of the Division's service area, since agencies in the Denver Metro area "have" their own print shop at the Division. Statutes give the Department of Personnel & Administration the responsibility for certifying that an agency has permission to procure printing services from the private sector in cases where Correctional Industries' services are not competitive. As discussed later in this chapter, however, the Department is not currently fulfilling this statutory responsibility, even though referring some customers to the Correctional Industries Print Shop could result in cost savings. Further, the Correctional Industries Print Shop provides additional benefits to the State by teaching inmates skills that they can use upon release and reducing idleness during incarceration.

Overall, the previous table shows that in addition to the Division's resources, the State spends more than $4.3 million a year to run other service operations in the Denver Metro area. During our site visits, the audit team observed idle equipment at some of the other agencies, indicating unused production capacity that could be used to serve customers that the Division cannot serve. In addition, managers at some of the agency-level service operations expressed their willingness to take on outside work if it would benefit the State. Further, at least three other state agencies (i.e., the Department of Transportation, Correctional Industries, and the Auraria Higher Education Center) have the capabilities to perform four-color printing jobs—a service the Division does not currently provide. In fact, during the period January through June 2002, the Division sent about $155,100 worth of this type of work to the private sector without exploring whether another state printing operation could perform the work for less cost. Overall, the Division has very limited information on the capabilities of other agency-level service operations, even though its own rules establish a system for collecting such data. The Division also lacks policies and procedures for routinely referring its customers to these operations when appropriate. In addition, if the Division had better information about the other service operations in its region, it could improve the overall efficiency of the service delivery system by recommending consolidation and elimination opportunities to agency decisionmakers and the General Assembly.

We also found that the Division provides limited guidance to its customers regarding the use of private sector vendors. With the exception of the price agreement for copier rentals mentioned previously, customers must rely on a list of registered private vendors that can perform printing, mail, graphic design, and similar services when the Division cannot complete a particular project. This list does not provide customers with comparative pricing data or other information that would demonstrate the value of choosing one vendor over another. Lack of meaningful data on the relative costs of using one vendor over another may increase the cost of service delivery.

Competitiveness

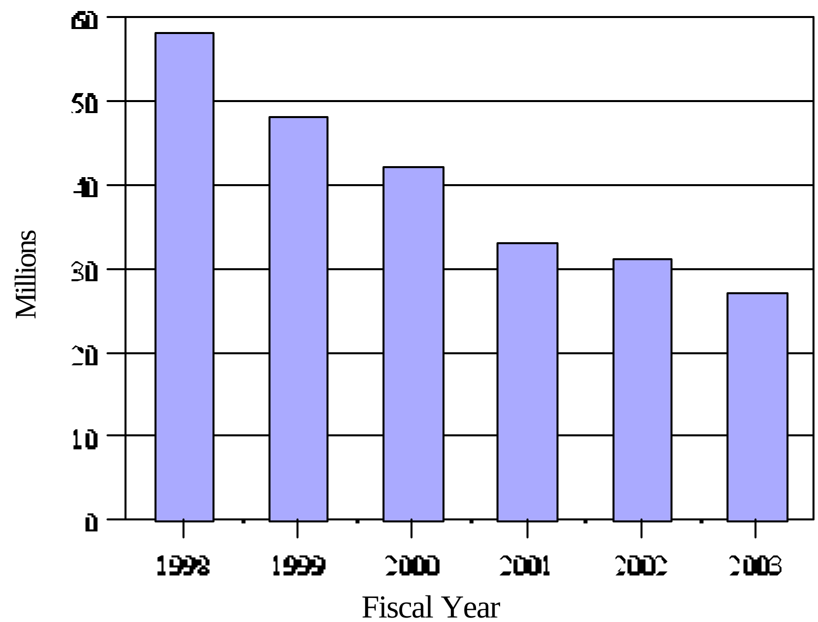
Statutes require the Division's service operations to be competitive. Because of the rate-setting issues discussed in Chapter 2, we did not conduct a comprehensive pricing analysis of all of the Division's services. Certain data suggest, however, that other vendors may be a more cost-effective choice for state agencies. Specifically, we found that the hourly rate that the Division's Print Shop currently charges is much higher than the rate charged by Correctional Industries' Print Shop (i.e., $50.52 compared with $35.35—a 43 percent difference). Using the number of production hours that the Division's Print Shop employees worked in Fiscal Year 2002 (about 9,700), we found that agencies would have saved approximately $147,100 if they had opted to use Correctional Industries' Print Shop instead of the Division's. Of course, turnaround time and other considerations may factor into an agency's final vendor choice.

We found additional examples of the Division's inability to successfully compete for state business. For instance, in September 2002 the General Assembly solicited bids for various printing needs (e.g., calendars, journals, and the initial versions of legislative bills). The Division's Quick Copy unit bid on this job, as did three private sector vendors. A private sector vendor was selected for this particular job because of the cost savings involved. The copying of legislative documents exemplifies the type of service that the General Assembly envisioned could be performed more cost-effectively in-house when it created the Division in 1977. If the Division cannot successfully compete for this type of business, it is questionable whether the State should continue to provide these services when other, more cost-effective options obviously exist.

Financial Viability

Ongoing financial problems in several of the Division's service units (i.e., the Print Shop, Design Center, and Imaging and Microfilm Services units) also highlight the need to review the existing service delivery model. For example, the Print Shop unit has continually operated at a loss over the last four fiscal years and is positioned to post another deficit in Fiscal Year 2003. We also found that demand for the Print Shop's services has declined dramatically in recent years and that this trend is likely to continue. The following graph shows the decline in the number of impressions produced by the Print Shop since Fiscal Year 1998 (over 50 percent):

Print Shop Impressions



Source: OSA analysis of actual and estimated Division data.

Chapter 2 describes the specific shortcomings we found in the Print Shop's pricing strategies that have contributed to its ongoing fiscal problems. We further note that management actions to address the Print Shop's financial difficulties (e.g., staffing cuts and price increases) have been largely ineffective in correcting the unit's problems in any lasting fashion.

Overall Service Delivery

State agencies will always have routine printing, graphic design, copying, and microfilming needs, and consequently, improving the cost-effectiveness of delivering these services is important. In order to achieve the coordinated, cost-effective service delivery system envisioned by statute, several steps need to be taken. First, the Division needs to improve its pricing strategies so that its customers are charged the full cost of providing a particular service. At the same time, the Division needs to address the problems we found in its private sector pricing comparison methodology. Chapter 2 provides specific recommendations regarding these issues. Once these problems are addressed, the Division will be able to demonstrate that its prices are truly competitive with other vendors and, therefore, position itself as the clear vendor of choice for the agencies located in its service region. If the Division cannot establish prices for certain services or service units that both cover costs and are still competitive, however, it should eliminate those services or service units. There is no compelling reason for the State to continue providing a service that it can purchase elsewhere at a lower cost.

Next, the Division needs to improve its planning, control, and coordination activities so that it can establish a stronger network of service providers to meet the customer needs that it cannot meet itself. This should include complying with Section 24-30-1104(1)(i), C.R.S., which mandates ongoing study and assessment of all service operations found within the four-county area. Section 24-30-1104(1)(b), C.R.S., also speaks to this issue by requiring the Division to "review all existing and future service applications, planning systems, personnel, equipment, and facilities to establish priorities for those that are necessary and desirable." The Department should create a work group composed of existing customers, managers of other agency-based service operations, private sector vendors, and other interested parties to study the benefits and relative costs of various service delivery approaches. This may include strengthening the existing centralized service delivery concept, further decentralizing service delivery through a coordinated network of internal and external vendors, or some combination thereof. It may also result in recommendations for eliminating or consolidating existing service operations, negotiating additional price agreements, expanding the data available to agencies on the relative cost of services available from businesses on the State's registered vendor list, expanding or contracting the Division's statutory service region, or related suggestions. The Department should then use the work group's findings to report to the General Assembly so that needed statutory and/or resource allocation changes can be made.

Recommendation No. 1:

The Department of Personnel & Administration should improve the planning, control, and coordination of services under its authority by creating a work group to study improvements to existing service delivery approaches, including the concepts outlined in this audit report. The work group's findings should be used to produce an effective business plan for the Division of Central Services. The Department should provide the plan to the Legislative Audit Committee and the Joint Budget Committee by June 30, 2004, for their review and to facilitate possible legislative changes.

Department of Personnel & Administration Response:

Agree. The Department of Personnel & Administration agrees with the overall findings and recommendations contained in this report. Specifically, related to Recommendation No. 1, the Department of Personnel & Administration will create a focus group to review various service delivery approaches. This focus group will be integrated into the Division's strategic planning process. The resulting strategic plan for the Division will be communicated to the General Assembly by June 30, 2004.

The Department, however, must add a cautionary note regarding the import of the specific information contained in the report narrative. For example, in the description section the report indicates that several of the Division's service units have operated at deficits in recent years. Although this is accurate, the Department believes that it is important to note that the deficits for the majority of service units have been small as a percentage of expense. In fact, the range of profit/loss in most cases fall within the auditor's suggested range of 8.3 percent as identified in Recommendation No. 10.

In addition, the report narrative related to Recommendation No. 1 addresses the issue of cost competitiveness of the Division's services. Correctional Industries, like the private sector, has a much different cost structure than the Division. For example, they are both able to aggregate pricing for services to allow some services to be priced as loss leaders. The Department would further point out that being competitive consists of more than just cost (quality, turnaround, reliability, etc.) In many cases the customer selects the Division because other vendors (including Correctional Industries) are unable to meet key customer requirements. Although the Department believes that improvements are needed in planning, control, and coordination of Division activities, the Department believes it would be misleading to conclude that the Division is not cost competitive based solely on the two examples referenced in the audit.

Auditor's Addendum

The focus of this comment is on planning, coordination, and control of services provided by the Department of Personnel & Administration to state agencies. The Department has not determined, as required by statutes, if its service delivery approach is cost-effective. The Department has experienced problems with rate-setting—suffering continual losses in some areas while building up excessive

fund balances in others. We emphasize that it is the Department's statutory responsibility to demonstrate that it is delivering the best service at the lowest price. To date, this has not been done.

Outdated Statutes

Another problem illustrating the need for a comprehensive examination of the State's in-house support services is the statutory scheme itself. The laws governing the Division of Central Services' operations were first enacted in 1977. Throughout our audit we noted that some of these statutory provisions, as well as a related law governing the acquisition of print services statewide, need to be updated or repealed to eliminate possible confusion about the Division's authority and responsibilities. Specific laws that need revision include the following:

- As mentioned previously, Section 17-24-111(1)(a), C.R.S., requires state agencies to purchase printing services from the Correctional Industries Print Shop in Cañon City unless an agency operates its own print shop. Statutes further state that if Correctional Industries cannot provide goods and services at a competitive price or quality (or in a timely manner), agencies can go elsewhere to make their purchases. The Department of Personnel & Administration is responsible for making these determinations and certifying that an agency has permission to procure printing services through another vendor. We found that neither the Department nor the Division of Central Services actively ensures compliance with this statute. For example, there are no rules directing state agencies to contact the Department or the Division to obtain permission before using a private vendor instead of Correctional Industries' Print Shop, nor are there any procedures for handling such requests. By enacting this law, the General Assembly apparently intended for one state agency (i.e., the Department of Personnel & Administration) to act as a centralized coordination point for the procurement of printing services statewide. The Department is not currently fulfilling this role. Consequently, this statutory responsibility should be reviewed to determine if it still makes sense in today's governmental environment. Even if this law is modified, however, the Division should be actively referring its customers to Correctional Industries' Print Shop when appropriate (e.g., cost savings would result).

- Section 24-30-1104(1), C.R.S., establishes a four-county service region for the Division. Executive branch agencies located within this area must use Division services unless they can demonstrate that the private sector can provide services at a comparable or better price or quality. With the growth and changes in state government over the past 25 years, it may be wise to reassess the Division's statutory service region to determine if it should be modified. We found that the Division has not studied the composition of its current service region (or that of adjacent counties) to determine if such changes would be prudent.

- Section 24-30-1101(1)(a) and 1102(4), C.R.S., define the services that fall under the Division's authority. "Office supplies" and "forms management" are included in these definitions, even though the Division's involvement with these functions ceased, for the most part, years ago. The Division has no ongoing involvement with forms management and the only office supply that the Division currently procures for its user agencies is copier paper—an arrangement that we believe should be discontinued. (See Chapter 2 for further discussion of the latter issue.)

- The legislative declaration governing the Division's statutory duties (Section 24-30-1101(1), C.R.S.) has not been revised since it was originally enacted. Portions of the declaration are clearly outmoded and should be updated to reflect the General Assembly's current philosophy about the Division's role in state government. For example, Section 24-30-1101(1)(c), C.R.S., states that "it is expected that existing uses of the various services will be expanded as state government continues to grow...." This statement, along with others in the declaration, may no longer accurately represent the Division's current operating environment and, as a result, should be reviewed for its continuing relevance.

- Section 24-30-1104(1)(e), C.R.S., states that the Division should "advise the Department of Personnel & Administration on qualifications and wage standards necessary to recruit and retain personnel essential for the implementation of a sound long-range plan." This statutory provision is unnecessary and should be repealed because ensuring the competitiveness of state employee wages and benefits is the responsibility of another state agency (i.e., the Department's Division of Human Resources).

Management has not performed a comprehensive review of the statutes governing the Division's operations to identify laws that should be eliminated or revised. Once the Department performs such a review, it should work with the General Assembly to make statutory changes where they are warranted.

Recommendation No. 2:

The Department of Personnel & Administration should perform a comprehensive review of its statutory authority to identify laws that may be outdated or obsolete. The Department should then work with the General Assembly to repeal or modify mandates that are in need of revision or elimination.

Department of Personnel & Administration Response:

Agree. The Department of Personnel & Administration will review its statutory authority and recommend to the Legislative Audit Committee any appropriate changes prior to the 2004 Legislative Session.

Service Pricing

Chapter 2

Overview

The Division is statutorily required to charge its user agencies the full cost of providing services. Full cost is defined by Section 24-30-1108(2), C.R.S., as the cost of all material, labor, and overhead needed to provide a particular service. The Division is also mandated to price its services at rates competitive with or lower than the private sector and keep a "full, true, and accurate record" of the costs of providing each service. Division managers set prices on an annual basis using a variety of information (e.g., expense, revenue, and productivity data). In total, the Division establishes over 160 separate prices for the services it provides through the service units included in the scope of our audit (i.e., the Copier Management, Design Center, Imaging and Microfilm Services, Mail Services, Print Shop, and Quick Copy units).

This chapter discusses improvements that the Division needs to make in its pricing strategies for the Design Center, Imaging and Microfilm Services, Print Shop, and Copier Management units. These improvements are necessary to ensure that the Division is fully recovering its operating costs but not posting excessive profits in any of its service units. The chapter also discusses improvements that the Division needs to make in its general operating policies and private sector price comparison methodology.

Service Unit Fiscal Performance

Our audit work included procedures to determine how well the Division is complying with statutory requirements regarding full cost recovery, accurate cost accounting, and competitive pricing. As part of our review, we analyzed profit and loss statements, pricing strategies, accounting and budgeting information, and associated data for six of the Division's service units for the period Fiscal Year 1998 to present. We found that three service units (i.e., the Design Center, Imaging and Microfilm Services, and the Print Shop) have operated at a loss in most years since Fiscal Year 1998. On the other hand, the Copier Management unit experienced excessive profits over this same time period. Only two of the service units included in our audit scope (i.e., the Mail Services and Quick Copy units) kept their profits and losses within reasonable levels over the review period.

As shown in the following table, the three units that have continually operated at a loss posted a combined deficit of about $840,000 since Fiscal Year 1998. This equals an average annual loss of approximately $167,500. We further estimate that these three units will sustain a combined loss of approximately $219,700 in Fiscal Year 2003.

Cumulative Losses for Selected Units Within the Division of Central Services
Fiscal Years 1998 — 2002

Unit	Design Center	Imaging & Microfilm Services	Print Shop	Total
Cumulative Loss	$48,094	$512,577	$276,762	$837,433
Cumulative Loss Expressed as Percentage of Total Expenses	2.7%	14.8%	5.0%	7.7%

Source: OSA analysis of Division of Central Services data.

Our audit work showed that continued deficits are the result of three main problems with the Division's service pricing strategies. These are the use of:

- Inaccurate or incomplete expense data.
- Inaccurate productivity assumptions.
- Inadequate projections of customer demand.

Overall, excessive profits and ongoing losses are indicative of problems in the Division's cost allocation, pricing, and general operating policies. Further, as mentioned previously, because of the problems we found with the Division's pricing strategies, we could not determine whether the Division is complying with statutory mandates to price its services competitively. The following sections describe in greater detail our findings and recommendations related to each service unit.

Print Shop

The strategy used by the Print Shop to establish an hourly billing rate includes three primary data components: total unit expenses, cost of goods sold, and total billable hours. Cost of goods sold represents expenditures for any materials or supplies that were needed to complete a particular project. The amount of these direct costs is subtracted from total unit expenses because these costs are simply passed through to the customer. Direct costs also include billable time, which is the number of labor hours directly assignable to a specific job. The Print Shop assumes that each production employee will work 6.5 billable hours per day for 18 days a month (i.e., 1,404 hours per year, or about 68 percent of the 2,080 available work hours).

The unit could not provide documentation supporting the validity of its current productivity assumption, and further, our audit work showed that this assumption is inaccurate. Using data provided by the Division, we calculated that in Fiscal Years 2000 through 2002, the actual billable hours averaged only about 72 percent of the expected levels (i.e., employees billed only 4.7 hours per day instead of the expected 6.5 hours). This problem continues in Fiscal Year 2003 and will result in the unit's failure to generate enough revenue to cover its current year expenses. We estimate that the loss for Fiscal Year 2003 will be approximately $11,000—making this the fifth year in a row that the Print Shop has not covered its operating expenses.

The Print Shop unit also does not adequately utilize customer demand information in its pricing strategy. Levels of customer demand are closely linked to the unit's productivity assumption and should be used to establish hourly billing rates. As previously noted, demand for the Print Shop's services continues to decline. Although the Print Shop has taken some steps to address the effect of falling demand by reducing FTE and raising its hourly rate, more needs to be done to eliminate the unit's operating deficits. The unit needs to use more realistic productivity assumptions and should improve its methods for incorporating actual customer demand information in its pricing strategy. We also found that the documentation substantiating the unit's pricing calculations needs improvement. Specifically, the documentation supporting the most recent pricing calculation lacked supporting data and clear explanations of the elements used.

Recommendation No. 3:

The Department of Personnel & Administration should improve the Division of Central Services' pricing strategies for the Print Shop unit by requiring the use of accurate productivity assumptions and customer demand projections. In addition, the Division's Print Shop should improve the documentation associated with its pricing calculations.

Department of Personnel & Administration Response:

Agree. The Department of Personnel & Administration agrees that improvements are needed to its rate-setting methodologies. In fact, the Department recently implemented a "Truth in Rates" philosophy to ensure that rates for each DPA service accurately reflect the cost of providing the service. The Department is in the process of finalizing rates for Fiscal Year 2004. These new rates will reflect the changes discussed in the audit report and will be fully documented.

We also noted that the Print Shop has been running at an average loss of 3.2 percent in recent years. Although this loss ratio is relatively small, the Department agrees that our productivity assumptions and customer demand projections used to develop our rates should be improved. Therefore, the Division of Central Services has purchased software that will electronically track employee and equipment productivity. In addition, the Division is using revised customer demand estimates based on recent utilization. Finally, the Division will implement a process to survey our customers to obtain more accurate customer demand projections in the future.

Design Center

The approach used to establish an hourly billing rate for the Design Center unit is similar to the approach used for the Print Shop (i.e., total expenses minus cost of goods sold divided by total billable hours), except that the Design Center uses a slightly different productivity assumption. The Design Center's hourly billing rate calculation uses a productivity assumption that each graphic designer will work 6.75 billable hours per day for 18 days a month (i.e., 1,458 billable hours a year, or about 70 percent of the 2,080 available annual work hours per full-time employee).

Our audit work showed that the graphic designers have not attained the Design Center's assumed productivity levels since Fiscal Year 1999. In fact, in Fiscal Years 2000 thorough 2002, actual billable hours averaged only about 70 percent of expected levels (i.e., employees billed only 4.7 hours per day instead of the expected 6.75 hours). Further, staffing levels remained relatively unchanged during this period. Use of an inaccurate productivity assumption in the unit's pricing calculations causes the hourly billing rate to be too low to recover the full cost of providing services. This, in turn, is fueling the unit's ongoing deficits. The Design Center collects monthly information on the actual hours billed by each employee, but this information has not been used to modify the unit's staffing or productivity assumptions, nor was it included in recent pricing calculations. We also found that the documentation substantiating the unit's pricing calculations needs improvement. Specifically, the documentation supporting the most recent pricing calculation lacked supporting data and clear explanations of the elements used.

Recommendation No. 4:

The Department of Personnel & Administration should improve the Division of Central Services' pricing strategies for the Design Center by requiring the use of accurate productivity assumptions and customer demand projections. In addition, the Division's Design Center should improve the documentation associated with its pricing calculations.

Department of Personnel & Administration Response:

Agree. As stated above, the Department of Personnel & Administration recently implemented a "Truth in Rates" philosophy to ensure that rates for each DPA service accurately reflect the cost of providing the service. Fiscal Year 2004 rates will reflect the changes discussed in the audit report and will be fully documented.

Over the past four years, the Design Center has been running at an average loss of 2.9 percent. Although this represents a small loss ratio, the Department agrees that improvement needs to be made. In order to improve our productivity assumptions and customer demand projections, we have purchased software that will electronically track employee and equipment production and revised procedures for identifying customer demand.

Imaging and Microfilm Services

At the end of Fiscal Year 2002, the Imaging and Microfilm Services unit changed its pricing strategy from a project-costing methodology to an approach that uses hourly and production unit rates. This change, coupled with the lack of documentation regarding the prior methodology, led us to focus our analysis solely on the unit's current pricing strategy. The current strategy allocates costs to three different operational areas (i.e., scanning, microform, and the electronic data warehouse) and then divides those costs by total production hours. Hourly rates are then divided by hourly throughput assumptions producing base costs for each service. Throughput assumptions represent the amount of material that can be processed by a machine on an hourly basis.

We identified numerous problems with the unit's pricing strategy including the utilization of expense data. Specifically, we determined that the unit's pricing strategy for Fiscal Year 2003 understated the unit's expenses by about $194,200. Because these costs were not included in the most recent pricing calculations, the unit will not generate enough revenue to cover its Fiscal Year 2003 expenses. We estimate that if the unit had included the $194,200 in expenses in its pricing calculations, the unit's operating deficit would be about $7,700, instead of the $200,000 we project it will actually post. This projection was calculated using actual revenue and expenditure data through February 2003.

Unit managers are also using unsubstantiated productivity assumptions in their pricing calculations. Currently managers use the assumption that each employee will work 1,645 billable hours per year (i.e., 79 percent of the 2,080 available work hours). Management staff could not recall how or when this standard was established, nor could they provide documentation evidencing how past productivity assumptions were calculated. In an attempt to estimate actual current productivity levels, we reviewed a sample of 13 jobs completed by the Imaging and Microfilm Services unit in Fiscal Years 2002 and 2003. We found numerous errors in the information contained in the unit's productivity reporting system (e.g., inaccurate/incomplete cost data) for these sample jobs and, therefore, could not accurately estimate actual productivity levels.

Recommendation No. 5:

The Department of Personnel & Administration should improve the Division of Central Services' pricing strategies for the Imaging and Microfilm Services unit by requiring the use of accurate, complete, and well-documented expense data.

Department of Personnel & Administration Response:

Agree. As stated above, the Department of Personnel & Administration recently implemented a "Truth in Rates" philosophy to ensure that rates for each DPA service accurately reflect the cost of providing the service. Fiscal Year 2004 rates will reflect the changes discussed in the audit report and will be fully documented.

The Division of Central Services' Imaging and Microfilm Services unit has purchased software that will electronically track employee production, production by project, and production by type of service (e.g., microfilming, scanning).

Profitability

Developing sound pricing strategies is an ongoing challenge for the Division. As mentioned previously, statutes require the Division to establish prices that are high enough to cover the full cost of providing services. On the other hand, statutes also require the Division's prices to be competitive with other vendors. Further, federal guidelines direct the Division to keep its cash fund balances within reasonable levels, which means that the Division cannot earn excessive revenue from the services it provides. As noted previously, several of the Division's service units had to take large planned losses in Fiscal Year 2000 to address excess fund balance issues. The Division needs to achieve a balance among these competing requirements in order to ensure its rates are reasonable and predictable.

The ongoing deficits in the Division's Print Shop, Design Center, and Imaging and Microfilm Services units constitute a violation of statutes that require the Division's services to be priced at full-cost recovery levels. Statutes also state that the Division's prime goal is "meeting the service needs of state departments, institutions, and agencies in efficient and economical ways within the resource capabilities of the State" (Section 24-30-1101(1)(d), C.R.S.). If the Division cannot provide a particular service in a cost-effective manner, that service should be discontinued and customers should be redirected to other vendors. Continuing to provide certain services at a loss means that customers in other service areas will subsidize the costs of providing those services. This is possible because one fund is used to account for the revenues and expenditures associated with all of the service units included in the scope of our audit, thereby allowing the Division to offset losses in one service unit with profits in another. This practice is not consistent with statutory intent, which indicates that the Division's services should be considered individually when it comes to fiscal matters. Several statutory provisions support this position, including Section 24-30-1108(2)&(4), C.R.S., which state that users of department services shall be charged the full cost of each *particular* service and that the Executive Director shall keep a full, true, and accurate record of the costs of providing each *particular* service.

In addition, as mentioned previously, because of the problems we found with the Division's pricing strategies, it is difficult to determine whether the Division is complying with another law that requires it to set competitive prices. The Division should improve its pricing strategies so that it can assess whether these changes will have the desired effect on profitability while still allowing prices to remain competitive. If these goals cannot be simultaneously achieved within a reasonable time period, the Department should consider eliminating unprofitable service units and directing its customers to alternative vendors.

Recommendation No. 6:

The Department of Personnel & Administration should develop a strategy and reasonable time frame to return the Division of Central Services' Design Center, Imaging and Microfilm Services, and Print Shop units to profitability while remaining competitive with the private sector. If these goals cannot be simultaneously achieved within a reasonable time frame, the Department should consider eliminating service units and directing users to alternative vendors.

Department of Personnel & Administration Response:

Agree. This recommendation is consistent with the recently implemented "Truth in Rates" philosophy. The Department is in the process of finalizing rates for Fiscal Year 2004. The Department will monitor the profit and loss for each service unit throughout the year to ensure that the rates have been properly set.

As noted by the audit, the Division performs a review of its rates every two years to determine if they are competitive with the private sector. The next review, when compared against our new rates, will determine if any service delivery changes are necessary. These changes, including the potential elimination of a service, will be included in the Department's annual strategic plan created in response to Recommendation No. 1.

Copier Program

In addition to operating the service units discussed previously, the Division administers an office copier program that is used by state agencies, institutions of higher education, and local governments throughout the State. The key element of the program is a price agreement that the State has negotiated with two vendors—Minolta and Ikon—for rental copiers. Participation in the price agreement is mandatory for executive branch agencies located within the Division's four-county service region. In these counties the Division approves the acquisition of copiers and then places the units and administers a billing and payment system for them. The State selected Minolta as the sole vendor for the four-county region, resulting in the placement of 265 copiers in 14 departments, the Governor's Office, and the General Assembly. State agencies, higher education institutions, and local government entities outside the four-county area may also participate in the price agreement, but it is not mandatory. Minolta and Ikon are the vendors for the permissive price agreement and have placed more than 2,900 copiers throughout the State accordingly.

The current price agreement went into effect on July 1, 2001, for a duration of one year with the possibility for three one-year extensions at the State's discretion. The agreement includes a cost-per-copy pricing structure that accounts for all expenses related to the copier rental, including service and supply costs (e.g., toner, staples) excluding paper. The agreement provides users with eight different categories of copiers, ranging from small- to large-capacity units. The actual cost to operate a particular copier is dependent on several factors, including the base unit chosen, options and accessories, and minimum monthly usage expectations.

The Division currently assigns 0.5 FTE to manage the copier program, plus 1 FTE for administrative support. In Fiscal Year 2002 state agencies, higher education institutions, and local government entities spent a total of over $10.5 million on copiers acquired through the price agreement. Of this amount, state agencies spent just under $3 million, higher education institutions spent about $6 million, and local government entities spent the remaining $1.5 million.

Overall, we found that the Division's copier management program needs significant improvement. Because all state agencies have copier needs and, therefore, have copier-related expenditures, this issue affects the whole of state government operations. Better management of the State's copier needs will result in cost savings. We estimate that implementing the recommendations found in the following section will result in about $134,000 in savings per year, or $268,000 over the remaining term of the price agreement. The following sections describe our findings in more detail.

Active Copier Management

The current price agreement provides users with eight copier options, ranging from small-to large-capacity units. Each copier category has a different cost per copy and minimum monthly usage expectations. Larger-capacity copiers have lower cost-per-copy charges but have higher minimum usage expectations. For example, a base unit Category 2 copier costs \$0.03503 per copy to operate with a minimum monthly usage expectation of 2,000 copies. A base unit Category 6 copier costs \$0.00991 per copy to operate with a minimum monthly usage expectation of 35,000 copies. Further, if a copier has a minimum monthly usage expectation of 5,000 copies and only 3,000 copies are actually made on that unit, the vendor charges the State for 5,000 copies. As a result, it is important to monitor the expected and actual usage of each copier to ensure it is not under- or overutilized. If the Division identifies situations in which a copier's capacity does not match actual usage, the price agreement allows it to request an upgrade or downgrade.

Due to the increased costs of under- or overutilizing copiers, we analyzed usage and cost information for all 265 copiers within the Division's service region. We applied an optimal utilization standard of 75 to 125 percent of the minimum monthly usage expectation set forth for each copier category. For example, we judged a Category 3 copier as well-utilized if it had monthly usage within the range of 3,750 to 6,250 copies. This is because a Category 3 copier has a minimum monthly usage expectation of 5,000 copies. Using data through January 2003, we found that 105 of the 265 copiers are currently underutilized (40 percent) and 62 copiers are overutilized (23 percent). Some of these copiers are severely under- or overutilized. For example, we identified a Category 6 copier with a 35,000 copy monthly minimum costing \$440 per month that is actually operating at 57 percent of its capacity (i.e., 19,950 copies per month). Underutilization to this degree unnecessarily increases the monthly operating cost for this unit by about \$165 because the State has to pay for 35,000 copies, even though far fewer copies are actually made in a typical month. If a more appropriate copier were placed in this agency (e.g., a Category 5), these excess costs could be avoided. Extreme overutilization has a similar effect. We found some copiers that are consistently operating at more than 200 percent their capacity, with one unit operating at almost 325 percent of capacity. If these copiers were replaced with units with higher minimum usage expectations, cost savings would result. For example, the unit which is operating at about 325 percent of its capacity (a Category 4 copier) should be replaced with a Category 6 copier, saving the State about \$160 per month.

Overall, we found that 63 percent of the copiers the Division manages (i.e., 167 of 265 units) are mismatched in terms of actual usage compared with copier capacity and usage expectations. This results in approximately \$101,000 per year in unnecessary expenditures by state agencies. If these problems are left unaddressed, state agencies will spend about \$202,000 more than they should to operate their copiers over the remaining life of the price agreement (i.e., Fiscal Years 2004 and 2005).

Overall, the Division has not proactively managed the copiers located within its service region, even though the price agreement and statutes clearly give it this responsibility. An effective management system would continually monitor each copier to identify cases of under- and overutilization so that staff could contact the vendor to replace these copiers with more appropriate units. The price agreement contains specific language regarding this issue. Specifically, the State may change a copier if it has been in place for 12 months and there is at least three months' worth of verifiable evidence of an increase or decrease in average monthly copy volume. The price agreement further stipulates that the vendor will not charge a relocation or moving fee if the State requests an equipment downgrade or upgrade as the result of a volume shift. Therefore, the State would save money but incur no additional costs from more actively managing the copiers located within the Division's service region.

Recommendation No. 7:

The Department of Personnel & Administration should reduce the cost of operating office copiers overseen by the Division of Central Services by instituting an active copier management system. This should include the development of procedures for continually monitoring individual copiers for under- and overutilization and protocols for working with the vendor to replace units as necessary.

Department of Personnel & Administration Response:

Agree. The Department of Personnel & Administration has already begun monitoring of copier utilization. The Division of Central Services will formalize its process to monitor usage of machines and replace with a higher or lower usage band as appropriate. This will be completed by December 31, 2003.

Copier Pricing Strategy

As discussed previously, the Copier Management unit has consistently operated at a profit, in part because of its pricing strategy. The copier pricing strategy estimates annual program expenses and then divides that amount by an estimate of the number of copies that will be made. Since Fiscal Year 1999, the Division has charged $0.03 per copy in every year except Fiscal Year 2002, when it charged $0.04 per copy. This price is charged to user agencies within the Division's four-county service region regardless of the actual cost per copy that the vendor charges the Division for a particular copier. As noted above, the actual cost per copy to operate a copier varies by unit, with smaller-capacity units having a higher cost per copy and larger-capacity units having a lower cost per copy. Overall, the base per copy cost for the eight copier categories included in the price agreement varies by about 310 percent, from \$0.03866 for a Category 1 copier to \$0.00941 for a Category 8 copier.

We found several problems with the Division's copier pricing strategy. First, the Division's flat rate pricing approach results in the users of larger-capacity copiers subsidizing the users of smaller-capacity copiers. For example, the Department of Regulatory Agencies currently rents a Category 7 copier. Minolta charges the Division of Central Services \$0.01068 per copy for this unit (about \$534 a month given the Department's current usage), but the Division bills the Department of Regulatory Agencies \$0.03 per copy (\$1,500 a month). This results in the Department of Regulatory Agencies' paying about \$11,600 per year in additional charges (\$23,200 over the remaining life of the price agreement).

This problem is also apparent with underutilized copiers. As stated previously, if a copier is underutilized, Minolta will charge the Division for the minimum monthly usage expectation, regardless of how many copies were actually made. However, this is not the amount billed to the agency; instead, the Division charges the agency for the actual number of copies made. To illustrate, if a copier has a minimum monthly usage expectation of 5,000 copies and runs at 25 percent capacity, the vendor will bill the Division \$136.50 but the Division will bill the agency \$38. The difference between the actual cost of operating this copier and what the agency pays will be subsidized by other users.

We could find no compelling reason for the Division to charge its users a flat price per copy. The Division receives monthly reports from its vendor that can be used to charge user agencies the actual cost of operating their copiers, thereby eliminating any subsidies. A small fee could be added to the cost-per-copy charge to cover the Division's centralized management expenses. Using Fiscal Year 2003 expense data through February, we estimate an additional fee of about \$0.0025 per copy would be necessary to cover the Division's operating costs.

Billing Information

Through our review of the Division's copier pricing strategy, we found additional problems with vendor billing information and related areas. For instance, our review of the billing information associated with the 265 copiers within the Division's service region revealed numerous errors and inconsistencies. As a result of the problems we found, we requested that the Division and Minolta review past bills to identify and correct any errors. Minolta subsequently reported that the bills contained erroneous information on 170 of the 265 copiers (64 percent), including the following:

- 130 copiers had base charges that did not include the cost for the State's account code reading system.

- 22 copiers had incorrect base charges.

- 9 copiers had incorrect base charges and cost-per-copy rates.

- 4 copiers had incorrect category codes and monthly minimum usage figures.

In terms of fiscal impact, some of these errors favored the State, while others favored the vendor. Overall, the vendor estimates that they have undercharged the State by approximately $24,000 through April 2003. As of May 30, 2003, the Department had not verified whether this estimated amount was correct. The Division needs to improve its methods for reviewing billing information. In addition, the Division should work with the vendors to establish and enforce clear performance standards for providing accurate billing data.

Usage Meters

Another problem that became apparent during the course of our audit is related to usage meters. The price agreement establishes a monthly billing system that requires the collection of actual copier usage data. As such, each copier's usage meter must be read on a monthly basis to provide the vendor with the information it needs to prepare a bill. The price agreement allows the vendor to obtain meter readings via phone call, fax, email, and/or electronic means at no charge to the State. The agreement also allows the vendor to offer the State a usage meter reading service whereby an authorized representative reads each copier's usage meter on a monthly basis for a fee. The Division reports it has used the latter arrangement to obtain usage meter readings since Fiscal Year 2002 for a fee of $6 per copier per month.

We found there is no documentation of the current meter reading agreement. Further, even though Division managers report they agreed to this arrangement, the vendor has yet to charge the State for it. Regardless, we believe that this arrangement should be discontinued because it does not provide for an independent verification of copier usage data. In addition, the cost for reading usage meters on all 265 copiers would be $19,100 per year or about $38,200 over the remaining term of the price agreement. Instead of relying on the vendor to provide this information, the Division should institute a low-cost usage meter reading system that relies on self-reporting by user agencies via email or other electronic means as identified in the price agreement.

Customer Identification System

Some copiers on the price agreement are used by more than one agency. To facilitate the billing process for these copiers, the vendor fits the units with an account number reading system that allows users to enter a unique account number each time they make copies. The vendor charges a fee for this system that is included in each copier's base cost-per-copy charge. In Fiscal Year 2003 a total of 1,276 unique account numbers were assigned to state agencies for copier billing purposes. Of these 1,276 accounts, only about 725 (57 percent) are regularly used during an average month.

The Division reports that it agreed to a higher-capacity account number reading system for 130 of the 265 copiers it manages. This higher-capacity system uses a five-digit coding system instead of the standard four-digit system and costs $7.30 more per month per copier. The five-digit coding system allows for 100,000 variations, while the four-digit system allows for 10,000 variations. We are unsure why the Division requested and agreed to the implementation of this higher-capacity system, which is substantially beyond the needs of the State. Currently less than 13 percent of the four-digit coding system's capacity is being utilized and only 7 percent of its capacity is used on a regular basis. Adding the higher-capacity account number reading system could potentially result in increased costs of about $13,900 per year or about $27,800 over the remainder of the price agreement. As with the meter reading cost discussed above, however, the vendor reports that it has not consistently charged the State the increased cost of the higher-capacity account number reading system. According to Minolta representatives, the charge for the system has been applied to the cost-per-copy rate but not to the monthly minimum base rate. As such, the State is paying for the cost of this system only when a copier exceeds its minimum monthly usage expectation. Regardless, the Division should discontinue this arrangement because it is unnecessary.

Paper Ordering System

As mentioned previously, the vendor's per-copy charge includes the cost of all maintenance, parts, and supplies (except paper) for copiers acquired under the price agreement. The Division includes the price of paper in the flat fee discussed earlier ($0.0043 of the $0.03 cost per copy charge). The State Purchasing Office has developed several price agreements with paper vendors to address the needs of state agencies. However, the Division requires its customers to order office copier paper through its staff.

We estimate that in Fiscal Year 2003 the Division will order about $172,400 worth of paper for the copiers it manages.

The Division was unable to provide a satisfactory explanation for its policy of requiring agencies to obtain their copier paper through the Copier Management unit. Agencies already use the price agreements and directly contact the State's paper vendors to obtain paper for their other office needs. Therefore, requiring them to go through the Division to obtain copier paper means that agency staff must make two calls when one would suffice. As a result, the Division should eliminate this requirement, tell its customers to contact the paper vendors directly, and adjust its pricing strategy accordingly.

Recommendation No. 8:

The Department of Personnel & Administration should reduce the cost of operating office copiers overseen by the Division of Central Services by:

a. Eliminating the existing flat rate billing policy and replacing it with a policy that charges agencies the actual cost of operating their individual copiers.

b. Establishing and enforcing clear performance standards for accurate and complete billing information.

c. Discontinuing the practice of paying vendors to collect meter information and replacing this system with one that relies on agency self-reporting.

d. Eliminating the five-digit account number reading system.

e. Discontinuing the practice of requiring state agencies to order copier paper through the Division and removing the paper charge from the copier pricing strategy.

Department of Personnel & Administration Response:

a. Partially agree. The Department of Personnel & Administration agrees that rates for individual services should be established to cover the costs of those services. However, there must be a balance between defining individual services too broadly or too narrowly. Although a more narrow definition is more accurate, it can lead to diminishing returns and can be inefficient. The

Department will evaluate the administrative costs of implementing a separate rate for each individual copier rather than a flat rate for all copiers. In addition, the Department would like to include this recommendation for discussion with the focus group.

b. Agree. The Department of Personnel & Administration will develop policies and procedures to ensure accurate and completeness of billing information. The Division of Central Services will work with the vendor and review monthly reports to ensure complete billing information is provided.

c. Partially agree. The Department of Personnel & Administration believes that it is more cost-effective for the vendor to collect meter information. However, the Department agrees that there is a need to confirm the accuracy of this information.

   Until recently, the Division of Central Services relied on agency self-reporting. Many times the agency failed to report, did not report on time, or reported an incorrect count. This caused the Division to bill in arrears. In addition, those agencies that reported incorrectly or did not report at all were assessed with a default billing. The default billing would then be adjusted once the agency reported an accurate reading. We find that the $6.00 per month per copier charge is worth the efficiency of electronic reporting given the numerous administrative problems caused by reliance on self-reporting.

   In order to confirm the accuracy of the vendor reported data, the Division will develop compensating controls such as testing the accuracy of the electronic reporting, through audits of selected readings on a monthly basis.

d. Agree. The Division of Central Services will calculate the cost to remove the five-digit codes and replace with four-digit codes to determine if this is a cost-effective strategy.

e. Partially agree. The Department has included paper costs in the copier pricing strategy as a convenience to the customers and to avoid administrative issues associated with copiers used by multiple state agencies. In these cases, it may be difficult to track the cost of paper purchases to individual agencies. However, this practice does necessitate customers placing two orders for paper instead of one. The Department will work with its customers, through the focus group created in response to Recommendation No. 1 to determine the most efficient process for ordering copier paper. It is important to note that a change in process will not result in any cost savings to the State.

Unnecessary User Fee

As mentioned previously, state agencies, higher education institutions, and local government entities may elect to participate in the State's copier price agreement. Participating entities pay the Division a user fee of $0.001 per copy. The vendors collect the user fee when an agency pays its monthly copier bill. The vendors then remit the money collected from the fee to the Division on a monthly basis.

We believe that the Division should eliminate the fee charged to users of the permissive price agreement. The Division provides no management or oversight services in return for this fee and does not need the revenue it generates to help cover its operational costs. Further, in May 2002 the Division returned about $240,000 to the state agencies and higher education institutions that paid the fee in an attempt to reduce excess profits. Abolishing the fee would eliminate the administrative process that the vendor currently undertakes to collect the fee and remit it to the Division on a monthly basis.

Recommendation No. 9:

The Department of Personnel & Administration should reduce office copier operation costs and eliminate excess profits by abolishing the user fee imposed by the Division of Central Services on copiers acquired through the permissive price agreement.

Department of Personnel & Administration Response:

Agree. The Department of Personnel & Administration will evaluate the appropriateness of the user fee received from agencies using the permissive price agreement. If this fee is discontinued, the Division may need to request offsetting spending authority. The Department anticipates this request would be submitted to the Joint Budget Committee on November 1, 2003.

Profit and Loss Targets

Throughout our audit of the Division's pricing strategies, we observed that the Division cannot always control all of the factors that may result in a profit or loss for one of its service units. Changes in user agency operations, for example, may affect demand for a particular service. For instance, as a cost savings measure, a state agency may change the format for publishing its reports from the traditional hard copy format to an electronic one. If the agency had been using the Division's Print Shop to produce reports, its decision to move to an electronic format will negatively affect the Print Shop's revenue stream, which may ultimately affect the unit's overall profitability. Proactively surveying customers to identify these types of changes would help the Division better gauge demand for services.

Further, because the Division cannot exercise complete control over all of the factors that may affect its profitability, we believe that the Division should establish a target range for each unit's annual profits and losses to allow for unexpected conditions while, over time, still ensuring compliance with statutes that require full cost recovery. A formal policy stipulating appropriate profit and loss targets does not currently exist. We believe that federal spending reserve guidelines can be helpful in establishing reasonable profit and loss targets for the Division's service units. Specifically, federal officials recently recommended that the Division maintain no more than a 30-day spending reserve in its internal service funds (i.e., 8.3 percent of total annual operating expenses). Maintaining unit-level profits and losses within a range of +/-8.3 percent will help ensure that units do not post excessive profits or losses from year to year and will also help keep the Division's revolving fund within federal spending reserve guidelines. Further, because effective fiscal management at the unit level is an essential component of the Division's overall success, unit managers should be held accountable for meeting these targets through the annual performance planning and evaluation process.

Recommendation No. 10:

The Department of Personnel & Administration should develop a formal policy that establishes reasonable profit and loss targets for all service units within the Division of Central Services that includes accurate demand information. All unit managers should be held accountable to these targets as part of the annual performance planning and evaluation process.

Department of Personnel & Administration Response:

Agree. The Department of Personnel & Administration, as part of the "Truth in Rates" initiative, has identified numerous changes to the fee-setting methodologies used throughout the Department. These changes include development of profit and loss targets and cash fund balance targets. The Department believes that both of these factors are critical to evaluating financial management.

The Department will formalize its new policies and ensure they are incorporated into managers' performance plans by October 2003.

Management Review and Approval of Pricing Recommendations

Prior to the start of a new fiscal year, unit managers provide Division managers with their pricing recommendations for approval. This process is not standardized and staff do not always maintain documentation showing Division-level approvals of pricing decisions. Furthermore, our audit work indicates that the unit-level pricing recommendations are sometimes overridden because of management concerns about raising prices beyond a competitive level, even if a deficit may result. This occurred recently in the Mail Services unit. In Fiscal Years 2001 and 2002, unit managers calculated a rate for processing certain types of first-class mail that was higher than the rate eventually approved by the Division. Overriding these pricing recommendations resulted in operating losses for this service of $30,500 and $40,200, respectively, in Fiscal Years 2001 and 2002. These problems, as well as the other issues outlined in this chapter, demonstrate the need for increased management involvement with the pricing recommendation process. A more formalized review and approval process is needed to ensure that the Division's pricing decisions are in compliance with statutory requirements or, if they are not, that upper management is aware of the ramifications.

Recommendation No. 11:

The Department of Personnel & Administration should improve the Division of Central Services' price-setting methodologies by establishing a formal policy for management review and approval of pricing recommendations.

Department of Personnel & Administration Response:

Agree. As indicated above, the Department of Personnel & Administration has identified numerous changes to the fee-setting methodologies used throughout the Department. All established rates now require review and approval by our Chief Financial Officer within the Department of Personnel & Administration Executive Office prior to implementation. The Department will formalize its new policies by August 2003.

Private Sector Price Comparisons

Section 24-30-1108(3), C.R.S., requires the Division to price its services at rates competitive with or lower than the private sector. To comply with this statute, the Division hires an outside firm every other year to conduct a private sector price comparison study. The last study was completed in 2001 and included a telephone survey to solicit price quotes from a sample of printing, design, imaging and microfilm, copy, and mail services companies.

In addition to first making the pricing strategy improvements noted throughout this chapter, the Division needs to make two changes in its procedures before it conducts any future private sector price comparisons. Specifically, we found that recent price comparisons sometimes used data from only one private vendor and, in other cases, utilized inconsistent or questionable data. Further, the Division should obtain a minimum of three quotes from private vendors when it conducts price comparisons to ensure a fair and thorough result. In addition, we found that recent comparisons did not always use a consistent data point (e.g., hourly rate, price per copy) throughout each pricing scenario and others included data that were obvious outliers (e.g., private sector prices were more than 30 times higher than the Division's prices). The Division should use a consistent comparison basis across each price scenario and remove outliers to ensure a credible and useful product.

Recommendation No. 12:

The Department of Personnel & Administration should modify the Division of Central Services' process for conducting private sector price comparisons to ensure a more balanced, accurate, and thorough review. This should include developing at least three scenarios for each price comparison, using a consistent basis for comparison in each scenario (e.g., hourly rate, price per copy), and removing obvious outliers from data collected.

Department of Personnel & Administration Response:

Agree. Every two years the Division of Central Services has contracted with private firms to perform price comparisons. Because much of the Division's work is done on a project-by-project basis, it has been very difficult to get meaningful price comparisons. The Division of Central Services has recently learned that the Department of Labor and Employment's Labor Market Information unit does this type of work on a large scale. The Division is currently working with the Department of Labor and Employment to perform all future price comparisons.

The electronic version of this report is available on the Web site of the
Office of the State Auditor
www.state.co.us/auditor

A bound report may be obtained by calling the
Office of the State Auditor
303-869-2800

Please refer to the Report Control Number below when requesting this report.

Report Control Number 1554