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MINNESOTA DEPARTMENT of ADMINISTRATION

Financial impacts of placing publications on the Internet

FINAL REPORT

JANUARY 2000

A Management Analysis Division Legislative Report

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MANAGEMENT ANALYSIS DIVISION

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FINAL REPORT

JANUARY 2000

A Management Analysis Division Legislative Report



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MANAGEMENT ANALYSIS DIVISION

The Management Analysis Division is Minnesota government's in-house fee-for-service management consulting group. We are in our second decade of helping public managers increase their organization's effectiveness and efficiency. Our highly skilled professional management consultants provide quality management consultation services to local, regional, state, and federal government agencies.

(651) 297-3904 ■ e-mail: judy.plante@mn.state.us ■ fax: (651) 297-1117

203 Administration Building ■ 50 Sherburne Avenue ■ St. Paul, Minnesota 55155

To obtain these materials in Braille, audiotape, large print or other forms, call Beth Gross

Voice (651) 297-1148 or TDD (800) 627-3529

For more information or copies of this report, contact the Management Analysis Division



Admin
MINNESOTA

Department of Administration

Office of the Commissioner
200 Administration Building
50 Sherburne Avenue
St. Paul, MN 55155
VOICE: 651.296.1424
FAX: 651.297.7909
TTY: 651.297.4357

January 14, 2000

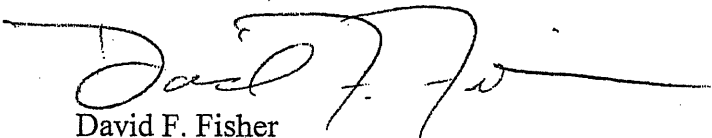
Senator Leonard Price, Chair
Governmental Operations Budget Division
Minnesota Senate
235 State Capitol

Representative Philip Krinkie, Chair
State Government Finance Committee
Minnesota House of Representatives
365 State Office Building

Gentlemen:

The Management Analysis Division of the Department of Administration was directed to "analyze the financial impacts of making the *State Register* and the *Guidebook to State Agency Services* available on the Internet on the department's bookstore operation" (1998 Laws, Chapter 366, section 6). A report of preliminary findings was delivered to you January 15, 1999. The enclosed report responds to the second part of the legislative directive, "a complete analysis of fiscal impacts," incorporating an additional year's data beyond what was available for the earlier report.

Very truly yours,


David F. Fisher
Commissioner

Enclosure

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EXECUTIVE SUMMARY

The 1998 Minnesota Legislature decided that the State Register and the Guidebook to State Agency Services should be placed on the Internet and available to everyone, free of charge. The legislature requested that the Management Analysis Division analyze the fiscal impacts of this decision and make a preliminary report in 1999 and a final report in 2000. This is the final report to the legislature.

Project director
Mark Scipioni

Project team
Connie Reeves

Division director
Judy Plante

Assistant division director
William Clausen

Editor
Mary M. Williams

The 1998 Minnesota Legislature directed the Management Analysis Division to analyze the fiscal impacts on the Communications Media Division's bookstore operation of making the *State Register* and the *Guidebook to State Agency Services* available free of charge on the Internet [1998 Laws, Chap. 366, Section 6]. A report of preliminary findings was submitted Jan. 15, 1999; this final report includes "a complete analysis of fiscal impacts."

The *State Register* revolving account, which receives revenues from two sources — page sales to state agencies and subscriptions to the paper version — has seen subscriptions and subscription revenues decline substantially since the introduction of the free-of-charge online version. In anticipation of the revenue loss from subscriptions, the Minnesota's Bookstore management decided at the start of Fiscal Year 99 to increase the page rate charged to state agencies from \$84 to \$115 (about 37 percent), a decision that, in combination with substantial page sales, has resulted in greater revenues from this source. As a result, the revenue loss from fewer paid subscriptions has been offset to a significant extent but not completely by increased page sale revenues. The practical effect has been to shift a substantial portion of the costs of the *State Register* from subscribers to state agencies submitting information for publication. The state agencies have not indicated concern about the rate increases, generally noting that this cost represents a very small portion of costs associated with their rulemaking or their other reasons for using the *State Register* for publication.

The current *Guidebook to State Agency Services* is the 1996-1999 edition. The historical sales pattern of the quadrennial publication shows that the largest sales occur in the first and second years following publication. The free-of-charge online version of the *Guidebook* was put in place on the Communications Media Division Website in the last half of 1998, the third year following publication. Availability of the free online version did not appear to affect sales revenue when compared with recent past editions. Consistent with the proposition that the online version has not notably influenced sales of the paper version, the Website statistics show minimal access to the *Guidebook* information. It seems that the *Guidebook* information first published about four years ago is perceived by potential users to be out of date to such an extent that neither the online edition nor the paper version receives much attention. The bookstore has prepared for sale a supplement that updates information about staff and telephone numbers, e-mail addresses, agency Website addresses, and other information of the types that change frequently. This *Guidebook* supplement will go on sale soon.

For the purpose of this fiscal analysis, it is assumed that there has been no demonstrable impact on the sale of the current edition of the *Guidebook* from the availability of the free-of-charge online version. Importantly, however, an impact should occur in the early sales period of the upcoming edition. If the pattern shown with the *State Register* sales holds for the *Guidebook* (which is speculation), then the next-edition *Guidebook* sales in the first and second years after release may be half what they would be without the free-of-charge online version. The bookstore can plan to some extent to reduce the potential impacts of being left with an excess of unsold copies. More difficult is the loss of revenues from sales of the paper version of the *Guidebook*.

However, the *Guidebook* is one of many publications, services, and products providing revenue for the bookstore revolving fund, so it does not have the singular importance for its account that the *State Register* has for its revolving fund account. According to historical data and the analysis provided in this report, several options may be available to the bookstore operation to anticipate and reduce the impacts from likely revenue loss and further the legislative goal of providing this government information to the broadest possible audience.

The direct costs of providing online versions of these publications include development, maintenance, and upgrading of the Website. The bookstore is completing a major upgrade to its Website that will enable electronic commerce. This is expected to benefit the bookstore revolving fund and may even enhance sales of *State Register* subscriptions and copies of the *Guidebook* for readers who continue to prefer, at least for the near future, the paper versions of these publications.

INTRODUCTION

The Department of Administration's Communications Media Division operates a number of central services to state agencies including printing, mailing, and records management. The division's retail location, "Minnesota's Bookstore," was established in 1955 to provide state agencies with a centralized service for public sale and distribution of state agency-produced publications. Products and services at the retail site located at 117 University Ave. include:

- The *State Register* (including the Contracts Supplement)
- The *Guidebook to State Agency Services*
- Publications of state agencies
- Minnesota statutes, session laws, and rules
- Books including topics such as Minnesota government resources and Minnesota history
- State agency forms
- Maps for such areas as aeronautical, bikeway, lakes, wetlands, travel, parks, and public recreation
- Mailing list services

DIRECTIVE to PROVIDE FREE-of-CHARGE ACCESS to INFORMATION

The 1998 Legislature declared that access to certain government information is essential to promote citizen participation in government and directed that certain documents important to public understanding of government activities be provided to citizens free of charge.¹ The commissioner of Administration was directed to place on the Internet electronic versions of the *State Register* and the *Guidebook to State Agency Services* through the North Star information service.² The legislature appropriated \$44,000 for costs associated with making the documents available online.³ On July 1, 1998, the Department of Administration's Communications Media Division began providing free Internet editions of the *State Register* and the *Guidebook to State Agency Services*.

¹ M.S. §16E.07.

² 1998 Laws, Chapter 366, Section 6 (*State Register*) and Section 17 (*Guidebook*); M.S. §14.46, Subd. 4, and M.S. §14.04, respectively. North Star is the state's comprehensive government online information service.

³ *Ibid.*

REVOLVING FUNDS and GENERAL FUND APPROPRIATION

The *Guidebook* and *State Register* are edited, produced, and sold or distributed by the Communications Media Division. The *State Register* and bookstore are operated as government internal service, or revolving, funds, where revenues are intended to cover costs. Revenues and costs associated with the *Guidebook* are accounted for in the general services revolving fund bookstore account.⁴ The *Guidebook* is one of many products for sale at retail that make up the bookstore account. The revenues and costs associated with the *State Register* are accounted for in the *State Register* publication account.⁵ The \$44,000 general fund appropriation was divided between the *State Register* (approximately \$25,000) and the bookstore (approximately \$19,000) accounts.

STATE REGISTER

The *State Register* is the authoritative publication for many official state government communications.⁶ The publication includes a Monday Edition and a Contracts Supplement. The Monday Edition provides weekly statutorily specified communications from state government to the public. A subscription to the Monday Edition is available in paper format for \$160 annually. An online (Internet) version became available in April 1997, also through paid subscriptions, for \$185 annually (it became a free-of-charge service July 1, 1998). The three-times-weekly Contracts Supplement describes state commodity contracts open to bid. The Contracts Supplement is available to the public on an annual subscription basis in paper format with U.S. mail delivery for \$135, by fax for \$150, and via the Internet (since April 1997) for \$150 (the Internet version became a free-of-charge service July 1, 1998). Additionally, a Trial Subscription package of the Monday Edition and Contracts Supplement in paper format is available for \$65 for three months.

⁴ M.S. §16B.48, Subd. 2. The section also provides that "the cost of publications or other materials produced by the commissioner and financed from the general services revolving fund must include reasonable overhead costs" (Subd. 4).

⁵ M.S. §14.46, Subd. 5.

⁶ M.S. §14.46, Subd. 1, directs the commissioner of Administration to publish a state register containing all notices for hearings concerning rules; all rules and amendments, including their suspensions and repeals; executive orders issued by the governor; and other official notices a state agency requests to be published. The notices include revenue notices; commissioner's orders; state loans and grants; professional, technical, and consulting contracts; and non-state public bids, contracts, and grants.

GUIDEBOOK to STATE AGENCY SERVICES

The *Guidebook* is described as “a ‘one-stop’ resource . . . and guide to anyone working with the agencies of Minnesota state government.”⁷ It is published to assist interested persons in dealing with each state agency by describing each agency’s organization, services, locations, and other information and the process for obtaining information or submitting requests to the agency. The current *Guidebook* is dated 1996-1999. The paperback version of this edition sold for \$29.95. In the last two years of its four-year cycle, the *Guidebook*’s price was reduced to \$14.95. Additionally, a supplement to the 1996-1999 *Guidebook* that provides updates reflecting information for the Ventura administration prior to publication of the next *Guidebook* edition, will be available soon at \$7.95.

⁷ *Minnesota Guidebook to State Agency Services 1996 - 1999*, State of Minnesota, Department of Administration, Communications Media, St. Paul, 1996, Page *iii*.

FINANCIAL ANALYSIS

This section has two parts: description of the general cost structure of books and periodicals (such as the *Guidebook* and *State Register*) and online publications; analysis of fiscal impacts on the revolving funds — including historical information and analysis as well as estimates of future impact — of providing free-of-charge online editions of the *State Register* and *Guidebook*, including discussion of the direct technology costs of providing the online publications. This section is followed by a summary discussion of fiscal impacts.

GENERAL COST STRUCTURE

Printed publications Fixed costs of printed publications include developing and preparing a document for publication. Data gathering, editing, and design occur regardless of the quantity or the media (paper or online).

A key consideration when fixed costs are high is economies of scale, where allocating fixed costs across a smaller number of units results in a higher per-copy cost. Fixed costs per unit drop for larger numbers, resulting in lower per-unit costs and price.

Allocation of overhead charges can be another key fiscal concern. Overhead is a fixed cost allocated to products and services being sold. Again, a greater volume of items sold translates to lower per-unit overhead charges. Additionally, in an internal service fund (revolving fund) that encompasses multiple publications and other products and services, some products may not break even in their direct costs and revenues. In this case, not every publication's revenues must cover its costs, but if some don't, others must contribute more to make up for costs, including overhead.

Many publication costs are characterized by economies of scale of the entire operation. That is, the publication of these documents contributes to the printing operation's economics. The more items that are produced, the lower the fixed costs are per unit. Some overhead costs can be controlled or influenced to an extent (those of the division) and some are beyond control of the operating unit (those of the department and statewide indirect costs). All overhead costs are characterized by economies of scale.

For various components of actual production — paper, printing, and binding — costs increase with document length, but at a declining rate. These costs are a function of the product's page count, format, and number of copies printed. Other variable costs of paper publication include most production and distribution expenses. A smaller print production does not usually translate into a proportional savings. In general, a substantially smaller volume has notably higher per-unit production costs. Distribution costs are generally proportional to the volume. Variable costs include document-specific marketing and direct sales expenses. Warehousing and order fulfillment also add to the variable costs.

Online publications Online publications incur the same types of costs as paper publications for data gathering, editing, and publication, although many software tools used in conjunction with online publishing can streamline the processes and lower costs. Most fixed and variable publication costs apply to online publications. Overhead would also be part of online publication costs.

The publisher of online information must establish, maintain, and periodically upgrade its Website. Costs include hardware and software; staff time and training; consultant time; Website maintenance; newer versions of software and hardware; staff skills development; and adaptations to the Web design, including improved “search” and “navigation” features.

In general, the key cost difference once the publisher places the publication online, and as long as the documents and Website are maintained in working order, is that there is essentially no cost to the publisher for consumer access. The tools for consumer access and costs associated with them (computer, Internet access, downloading, and printing) — are the user’s responsibility.

Revenue contribution by online users to cover direct, indirect, and overhead costs is a critical issue. The most direct technique of cost recovery from online use is subscription charges. Access is provided by password following payment of subscription fees. However, most online Internet access to documents, notably including government documents, is provided without user charge. Private-sector free-of-charge online access to information is usually revenue-generating through advertising (the on-screen banners, for example) or resale of consumer information, but the public sector is less likely to use these means. For government information, often, no revenue can be generated when “free” online access is provided.

For government entities that operate with general funding, the challenge is to find resources to fund the costs of providing online information. For government units that operate as revolving funds, the questions include how to cover not only direct costs but also loss of revenues that contribute to overhead from providing a free service that competes directly with revenue-generating products and services. Another consideration is the extent to which resources can be used to train staff or pay consultant and other costs to provide online services if the expenditures may not contribute to both the short- and longer-term financial well-being of the revolving fund.

When publications are produced in a revolving fund operation, both in paper and online versions, the fair or reasonable allocation of costs is an important consideration. Further, the question of appropriate allocation of costs arises when both paid subscription versions and a free-of-charge online version of the same publications are produced (and the costs attributable to the online service cannot be recovered from user revenues). Allocation involves determining all relevant costs, interpreting costs to be charged to each medium, and considering the short- and longer-term implications for the revolving fund.

Costs to readers of the publications Since the free-of-charge online versions of the publications have been available, consumers have had a choice between paid and free-of-charge versions. Subscription fees for the *State Register* and the per-volume cost of the *Guidebook* can be avoided by those who have access to the Internet and select the online versions. Online readers who want a paper copy of online documents can print them with their computer printers at their cost. Readers who want paper versions of the *Guidebook* or *State Register* can obtain them through the bookstore at the subscription or per-copy prices.

FISCAL IMPACTS

State Register subscription sales revenues have been adversely affected by free online access to the same information. The *Guidebook*'s fiscal impacts are negligible for the current edition; the significant impacts will occur with the next edition.

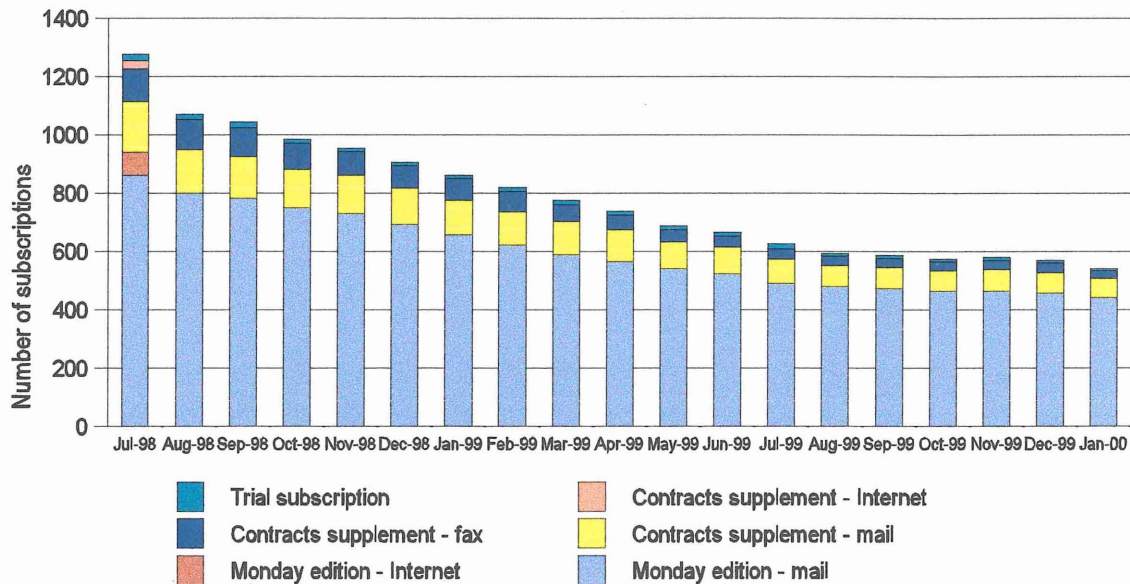
STATE REGISTER

The *State Register* was created by the legislature in the 1970s. From July 1998 to the present, it has been available both on a subscription basis and free of charge online. Revenue impacts to the revolving fund have been significant.

Revenues

The *State Register* has two sources of sales: paid subscriptions and "page" sales — the charge to state agencies to publish their information in the *State Register*.

TABLE 1. *State Register* subscription sales, July 1998 - January 2000



NOTE: The number of subscriptions refers to the total on the first day of each month.

Subscription sales Table 1 shows the number of paid subscriptions at the start of each month from July 1998 through January 2000. The number of paid subscriptions declined dramatically during the first year of the free-of-charge online service, then appears to have leveled off at approximately half the number, compared with the start of the period. Continuation of this trend would be a further but more gradual decline in the number of paid subscriptions. It can also be speculated that there may exist a number of subscribers who would continue to prefer the paper or fax versions of the *State Register* and Contracts Supplement despite free-of-charge online availability of the same information.

Table 2 compares the number of paid subscriptions at the July 1, 1998, start of free-of-charge online availability and the number on Jan. 1, 2000. The overall decline in the number of paid subscriptions was about 58 percent.

TABLE 2. Comparison of number of paid *State Register* subscriptions on July 1, 1998, and Jan. 1, 2000

	PAID SUBSCRIPTIONS		Percent decline
	7/1/98	1/1/00	
Monday edition — mail \$160/year	860	441	49
Monday edition — online \$135/year	80	0	100
Contacts supplement — mail \$135/year	173	66	62
Contracts supplement — fax \$135/year	112	26	77
Contracts supplement — online \$150/year	29	0	100
Trial subscription \$65/three months	21	8	62
Totals and overall percent	1,275	541	58

TABLE 3. Estimated *State Register* revenues from subscription sales — July 1998 through December 1999

	MONDAY EDITION		CONTRACTS SUPPLEMENT			Trial subscription	Total revenues
	mail	online	mail	fax	online		
Baseline	\$11,467	\$1,233	\$1,946	\$1,400	\$363	\$455	\$16,864
Jul 98	11,060	0	1,817	1,338	0	423	14,638
Aug 98	10,547	0	1,637	1,263	0	401	13,848
Sep 98	10,213	0	1,536	1,181	0	368	13,298
Oct 98	9,853	0	1,479	1,075	0	271	12,678
Nov 98	9,473	0	1,434	1,006	0	239	12,152
Dec 98	8,993	0	1,361	956	0	238	11,548
Jan 99	8,533	0	1,305	906	0	249	10,993
Feb 99	8,073	0	1,288	794	0	303	10,458
Mar 99	7,687	0	1,260	669	0	314	9,930
Apr 99	7,367	0	1,136	575	0	293	9,371
May 99	7,093	0	1,035	500	0	271	8,899
Jun 99	6,760	0	979	463	0	314	8,516
Jul 99	6,460	0	872	431	0	293	8,056
Aug 99	6,347	0	810	400	0	217	7,774
Sep 99	6,240	0	810	375	0	217	7,642
Oct 99	6,180	0	821	375	0	228	7,604
Nov 99	6,147	0	810	394	0	217	7,568
Dec 99	5,993	0	765	363	0	184	7,305
Totals (exclud- ing base- line)	\$143,019	\$0	\$21,155	\$13,064	\$0	\$5,040	\$182,278

Estimated revenues from paid subscriptions since availability of the free online service are summarized in Table 3. The figures shown for July 1998 through December 1999 are calculated as one-twelfth the annual subscription rate multiplied by the average number of subscriptions during the month. The baseline has the same monthly calculation but is based on the assumption that the number of paid subscriptions remained at the June 30, 1998, level. If the number of paid subscriptions on June 30, 1998, had not changed when the free online service became available, the monthly revenues would have been \$16,864.

The estimated monthly revenues from paid subscriptions declined during the period to \$7,305 for December 1999, about 57 percent from the baseline. If the decline continues at the moderated rate of the most recent four months (averaging about 1.5 percent per month), then the monthly revenues from paid subscriptions would be in the range of about \$6,600 to \$6,700 at the end of the current fiscal year.

If the number of subscriptions had remained at the July 1, 1998, level, subscription revenues would have continued at \$16,860 per month. The difference between that figure and each of the actual monthly figures since then totals about \$121,270 in "lost" revenues during the 18-month period of the availability of the free online version of the *State Register*.

Number of recent renewals and new subscribers Paid subscriptions for the *State Register* and Contracts Supplement are for a one-year term (except the three-month Trial Subscription). Table 4 shows the pattern for new subscriptions and recent and upcoming renewals, using information from a recent subscription list.

TABLE 4. *State Register* renewals, new subscriptions, and subscriptions coming due

	PAID SUBSCRIPTIONS		
	New in past six months	Renewed in past six months	Due for renewal in next six months
<i>State Register</i> — mail	36	225	201
Contracts Supplement — mail	7	23	36
Contracts Supplement — fax	4	9	16
Trial Subscriptions	—	—	9
Totals	47	257	262
Percent	8.3	45.4	46.3

SOURCE: Communications Media Division, report dated Dec. 10, 1999.

These statistics show that the number of new subscribers is comparatively small. The *State Register* relies on renewals for more than 90 percent of subscription revenues. Renewals are spread out evenly over the year, so that monthly monitoring of renewals will provide a leading indicator for subscription revenues. The pace of decline in subscription revenues will be evident first in subscriptions not renewed.

Use of the free-of-charge online service Measurement began in mid-September 1999 of the actual use of the free-of-charge online *State Register* and Contracts Supplement. The *State Register* (Monday edition) had about 11,000 unique visits to the Website from Sept. 20 to Dec. 31, an average of about 110 a day. Forty-one percent of the visits were made on Mondays, and 24 percent on Tuesdays. The Contracts Supplement had 4,570 unique visits from Oct. 4 to Dec. 31, an average of about 53 a day.

General impact of online availability on subscription revenues The Website use statistics show heavy usage, indicating interest in the Website version and, in conjunction with the decline in paid subscriptions, demonstrate what probably is a strong substitution effect (a significant number of former paid subscribers are now using the free-of-charge online service). The number of subscriptions sold, and therefore subscription sales revenues, has been adversely affected by the availability of free online access to the same information.

Page sales Each agency requesting publication of information in the *State Register* must "pay its proportionate cost of the *State Register* unless other funds are provided and are sufficient to cover the cost of the *State Register*."⁸ Agencies pay to publish their information on the basis of a "page rate," a cost per page or fraction of a page of space. For Fiscal Year 1998, the page cost for agencies was \$84. For the start of Fiscal Year 1999, in anticipation of reduced subscription revenues because of the *Register's* online version, the page rate was increased to \$115. At that time, the division projected that 2,000 pages would be billed for Fiscal Year 1999, creating \$230,000 in anticipated revenues. Without the \$31, or 36.9 percent, increase, anticipated revenues would have been reduced by \$62,000.

The actual number of billable pages for Fiscal Year 1999's *State Register* Monday edition was about 1,900, for revenues of \$218,500 (Table 5). The number of billable pages from the first half-year of Fiscal Year 2000 was 775, for revenues of \$89,125. In total, since introduction of the online free-of-charge *State Register*, the division has sold 2,675 pages for revenues of \$307,625. Billable page volume reached an all-time high of nearly 2,600 in Fiscal Year 93 and a recent low of about 1,430 in Fiscal Year 97. The Fiscal Year 2000 projection is 2,000 billable pages; at the half-year point, the actual number if annualized would be 78 percent of that projection.

⁸ M.S. §14.46, Subd. 4.

TABLE 5. *State Register* page sales and revenues for recent years

	FISCAL YEAR							
	93	94	95	96	97	98	99	00 (½)
No. bill-able pages	2,600	2,270	2,350	2,200	1,430	2,100	1,900	775
Page rate	\$78	\$80	\$80	\$80	\$80	\$84	\$115	\$115
Est. page revenues	\$202,800	\$181,600	\$188,000	\$176,000	\$114,400	\$176,400	\$218,500	\$89,125

Page sales, unlike subscription sales, are difficult to influence with division marketing efforts. State agencies' purchase of page space is at their discretion within legal requirements for publication. Therefore, greater reliance on revenues from page sales and less from subscription revenues may place the revolving fund in greater risk of wide variations in revenues, as illustrated by the range of page sales and revenues in recent years shown in Table 5. This indicates a need to improve predictions and to maintain sufficient carryover to cover possible dramatic drops from year to year.

Net *State Register* subscription sales and page sales revenues While the *State Register* has been available online free of charge, subscription revenues have been reduced approximately \$121,270. Revenues from sale of pages to state agencies have increased, through a combination of a good estimate of the number of pages that would be sold and a page rate increase of about 37 percent. The page rate increase resulted in a Fiscal Year 1999 revenue increase of about \$58,900 and about \$24,025 more during the first half of Fiscal Year 2000, a total of \$82,925. The subscription revenue "loss" exceeded the increased page sales revenues by about \$38,345 during the period.

Costs

The direct costs to produce the *State Register* can be examined using data from the publication of the 52 issues of Fiscal Year 1999's Monday edition, from July 6, 1998, to June 28, 1999. Table 6 on the next page shows basic summary information from the publication during that period.

In addition to what is shown in the table, the historical data showed that the typesetting cost per page averaged \$38.78. These page costs were substantially the same (varied within a quite narrow range) from the lowest to highest number of pages per issue and did not vary in any discernable way with the quantity of issues produced. Printing costs averaged 2.4 cents per impression (that is, the number of pages in the issues multiplied by the number of issues

TABLE 6. Summary of FY 99 statistics and costs

STATISTICS		COSTS	
Number of pages – total	2,451	Typesetting	\$95,059
Number of pages per issue – average	47	Printing	46,441
Number of pages per issue – range	18 - 260	Postage	7,053
Quantity printed – total	41,027	Miscellaneous	830
Quantity printed – average per issue	789	Total of direct publication costs	\$149,383
Non-billable pages	547	Allocation of division administrative costs	\$49,800
Billable pages	1,904	Legislative appropriation	(\$25,000)

printed) over the entire year's production. The total printing cost varied with the quantity produced. Although the reported costs of postage do not correlate with other reported statistics, it can be assumed that this cost varies with the quantity produced that is distributed by mail. At the lower printed volumes, the fixed costs will result in notably higher per-unit costs.

The allocation of division administrative costs includes the Monday edition portion of state and department indirect costs and division administrative costs. The *State Register* is allocated 20 percent of both indirect and division administrative costs (with 80 percent to the bookstore and the mailing list service). These costs are covered through revenues derived from sales, so that a lower volume of sales results in a higher per-unit cost.

The quantity printed for the issues in this series declined steadily from 1,089 for Issue 1 to 630 for Issue 52. This 42 percent decline would affect costs. As noted above, typesetting costs do not vary with the quantity produced, so that the \$38.78 average cost per page per issue would apply to any quantity. Total printing cost varies with the quantity produced, so smaller quantities would reduce printing costs. On the other hand, the decreased printing also can mean less use of printing facilities for publications such as the *State Register* that are produced in-house. Allocation of indirect and administrative costs over a permanently lower volume of sales results in a higher per-unit cost.

Because of the great number of variables that go into the cost per impression of each issue, generalizations or averages can be misleading. With that caveat, it was calculated for roughly equal-size issues (50 to 70 pages per issue) that, at greater than 1,000 copies, the average cost per impression was 6.3 cents; at the smaller quantities of 630 to 650 per issue, the average cost per impression was 8 cents. Total direct costs to produce the two lower-volume issues

TABLE 7. *State Register* revenues, expenses, and retained earnings, July 1, 1998, to Sept. 30, 1999

	7/1/98 - 6/30/99	7/1/99 - 9/30/99	Combined
Sales and appropriation			
Subscriptions	\$151,511	\$23,832	\$175,343
Pages	221,950	41,990	263,940
Legislative appropriation	<u>25,000</u>	<u>6,250</u>	<u>31,250</u>
Total	\$398,461	\$72,072	\$470,533
Expenses			
Cost of goods published	\$154,544	\$25,406	\$179,950
Operating costs ^a	<u>148,834</u>	<u>45,366</u>	<u>194,200</u>
Total	<u>\$303,378</u>	<u>\$70,772</u>	<u>\$374,150</u>
Net income	\$95,083	\$1,300	\$96,383
Retained earnings	\$249,857		\$251,157

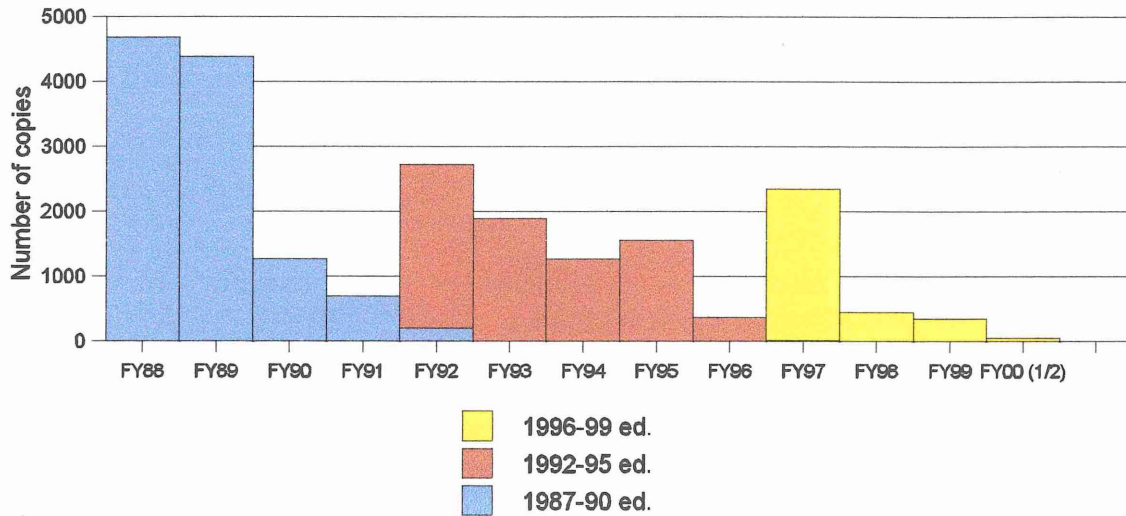
^a Operating costs include 20 percent division overhead allocation.

were 18 percent lower than those for the two higher-volume issues. This is based on a small sample but may indicate roughly the magnitude of increased unit production costs at the lower volumes that are being experienced. However, as noted earlier, there are many variables. The calculations about show costs before allocation of overhead.

Table 7 is a summary statement of revenues, expenses, and retained earnings in the *State Register* revolving fund for Fiscal Year 1999 and the first quarter of Fiscal Year 2000.

The financial results show that the *State Register* had positive net income during the 15-month period. Results of the last three months (first quarter FY 00), however, were close to breakeven and would have been negative except for the General Fund contribution. However, this one quarter is not necessarily representative of the full fiscal year's results.

Prospectively, responsibility for production of the Contracts Supplement may be transferred to the Materials Management Division. Discussion of this potential change of responsibilities and its financial implications were occurring in January, not in time for inclusion in this report.

TABLE 8. *Guidebook* sales for 1987-1990 through 1996-1999 editions**TABLE 9. Price and volume information for three most recent *Guidebook* editions**

	EDITION		
	1987 - 90	1992 - 95	1996 - 99
Number copies produced	12,500	12,000	5,000
First-year price	\$15.00	\$18.00	\$29.95
Second-year price	\$15.00	\$18.00	\$29.95
Third-year price	\$15.00	\$18.00	\$14.95
Fourth-year price	\$9.95	\$9.95	\$14.95
Fifth-year price	\$9.95	\$9.95	NA
Percent of total sales in first two years	81%	58%	87%
Unsold remainder	1,264	4,389	est. 1,500*

* The 1996-1999 edition is still being sold. This estimate is the current quantity on hand.

GUIDEBOOK to STATE AGENCY SERVICES

The *Guidebook to State Agency Services* has been edited, published, and distributed since 1981 by the Communications Media Division.⁹

The division began publishing the 1996-99 edition of the *Guidebook* on the Internet free of charge July 1, 1998. The contents and format of the Internet edition are the same as that of the paper edition.

Revenues

Almost all revenues from the sale of the *Guidebook* at the bookstore are from the paper version of the publication (another medium, CD-ROM, was tried but did not sell well). Sales revenues for the 1996-99 edition through December 1999 were about \$89,600. Revenues from shipping and handling charges attributable to *Guidebook* sales were estimated at \$12,000. As shown in Table 8, total *Guidebook* sales have declined over the past three editions. Substantial quantities of the publications have remained for each of these editions after the first two years of availability. Sales in the third and fourth years are lower because prospective purchasers perceive that the *Guidebook* information is by then quite outdated.

Additional information about the most recent three *Guidebook* editions is provided in Table 9. The unit price has increased with each new edition. Despite reductions in the total volume produced from one edition to the next, a substantial number of books have remained unsold. The bookstore has employed a strategy of sharply reducing the unit price in the third or fourth years in order to sell the unsold copies. The bookstore's revolving account received \$19,000 from the general fund for Fiscal Year 99 for the costs of providing free-of-charge online access (the other part of the \$44,000 appropriation was distributed to the *State Register* revolving fund account).

Costs

Costs to provide the *Guidebook* include gathering the information from agencies, which is a major effort; preparing or revising the manuscript; editing; designing the cover and page layouts; and producing and disseminating the books in multiple formats.

⁹ M.S. §14.04 provides, "To assist interested persons dealing with it, each agency must, in a manner prescribed by the commissioner of administration, prepare a description of its organization, stating the general course and method of its operations and where and how the public may obtain information or make submissions or requests." The commissioner "must publish these descriptions at least once every four years . . . in a guidebook of state agencies."

Once every four years, one staff member is diverted from most regular duties for approximately nine months to prepare a new edition. This includes working with agencies to update their information; preparing, editing, and indexing the information received; overseeing design of the pages and cover; and working with internal sources or contract vendors to have the editions printed. Salary and benefits of the staff member for preparation of the 1996 - 1999 edition were about \$55,000. Direct costs to publish the latest edition of the *Guidebook* totaled about \$180,000, which also included \$58,000 for printing and binding, \$25,000 for marketing and distribution, and \$42,000 as an estimate of the proportion of the bookstore indirect and administrative costs assigned to the *Guidebook*. As described earlier for the *State Register* and for publications generally, the costs of this publication favor economies of scale. At larger volumes, the per-unit costs are less for fixed-cost components of production and indirect and administrative costs. Also as noted earlier, the *Guidebook*, as one of many products and services for sale through the bookstore, can cover more or less than its actual costs through sales revenues because other product or service sales may compensate for the difference. As a rule, however, the publication would be expected to cover costs through sales revenues and perhaps contribute toward the longer-term capital improvements and other investments needed for the bookstore operation.

Impacts of the online free-of-charge *Guidebook* Because the current edition of the *Guidebook* is in the final year of its life cycle, sales revenues are at their lowest. The edition's information is more than four years old. Availability of the free-of-charge online *Guidebook* edition has coincided with the final 18 months of the paper edition's life cycle. During this period, sales have been very low compared with the first two years following introduction.

Usage statistics for the *Guidebook* Website confirm that interest in the online edition is low. From Sept. 20 through Dec. 31, 1999, the *Guidebook* site had fewer than 500 unique visits, or an average of five a day. It seems reasonable to conclude that the cost and revenue impacts on the *Guidebook* from the availability of the online edition have been so small that they may not exist at all.

On the other hand, the prospective impacts of an online version of the *next* edition are likely to be substantial. In the first years following publication, interest in a new edition will be at its peak. There is certain to be a much greater interest in use of an online version. Although pure speculation at this time, it could be hypothesized that the impacts may be similar to those recently experienced for the *State Register*. If that becomes true, then the *Guidebook* in its next edition could sell about half of what it otherwise would sell. In addition, because the overall level of *Guidebook* sales for the most recent several editions has declined substantially for each new edition, there is reason to be cautious about the number of paper copies produced for the next edition.

This situation offers the bookstore staff a timely opportunity to reconsider many fundamental aspects of the *Guidebook* publication to optimize production of paper copies. A noteworthy consideration is that, to the extent the Website for the *Guidebook*'s online version becomes well known and often used, it will likely reduce paper copy sales overall. Thus, making the

Website more accessible, easier to search and navigate, more completely linked to other relevant and appropriate state information and agency Websites, and generally more user-friendly for obtaining *Guidebook*-type information would in effect subtract from sales that contribute to the bookstore revolving account. A further plan could be prepared that anticipates an optimal mix of the paper and online versions of the upcoming edition and a realistic estimate of the costs and "lost" revenues that would be appropriately covered by a general fund contribution to the bookstore revolving fund. Reconsideration of the four-year interval between editions would be appropriate, notably because reducing the interval would maintain the information updated at a known useful level and because current statutory language permits this interval change.

DIRECT TECHNOLOGY COSTS of ONLINE PUBLICATIONS

Costs attributable to providing the Website that supports the online versions of the *State Register* issues and the current edition of the *Guidebook to State Agency Services* include expenditures made prior to availability of free-of-charge online services. Before then, the division had been providing Internet-based issues of the *State Register* on a paid-subscription basis. This required expenditures for computer hardware and software to support the Website, staff time to format and load the information, and other support and related overhead costs. Initially the online services were provided via the Internet with the expectation that they would provide a continuing stream of revenues based on paid subscriptions.

Costs associated with online access to the *State Register* prior to the effective date of the legislative directive to provide free-of-charge online access to the *State Register* and the *Guidebook* (July 1, 1998) are not available. For this review, they can be considered "sunk costs," or costs for which some recovery was made in revenues from subscription sales.

From roughly July 1998 to the end of that fiscal year, the Website hardware and software were already in place. One information systems staff person devoted most of his time to the continued development, maintenance, and enhancement of the Website for online access to the *State Register* and *Guidebook*. The staff person's salary was about \$40,000. No other substantial costs were noted during this period.

In the current fiscal year, the duties of developing, maintaining, and enhancing the Website have been taken over by a successor to the person who developed the Website. Duties have been divided between a staff member and an information systems consultant. The staff member devoted about 75 percent time to the Website for the first half of the fiscal year, at a salary cost of about \$16,000. The consultant provided two hours per month for three months at a total cost to date of \$900. Costs of both people are expected to continue through the fiscal year at about the same level of effort.

Both hardware and software for the Website are being upgraded. A new server is estimated to cost \$4,000 and new software is estimated at \$2,000. Current staffing and the Website upgrades are estimated at \$21,000 through December 1999.

The Communications Media Division (including the bookstore) Website is being upgraded to provide new functions in addition to being the vehicle for the online *State Register* and *Guidebook*. The entire Website is undergoing redesign. The upgrade will incorporate online ordering (electronic commerce). This will benefit the bookstore by allowing customers to order any of its products and services online. It is also intended to facilitate electronic commerce for the division's printing operations. The electronic-commerce-enabled Website could also facilitate sales of *State Register* subscriptions and copies of the paper version of the *Guidebook* for people who note their availability on the site, even if they may have initially visited the site to view the free-of-charge online versions.

Once the upgraded Website is functioning, the level of staff effort is expected to drop off, and no large additional costs are expected to be incurred for maintaining or upgrading the Website during Fiscal Year 2001.

SUMMARY of FISCAL IMPACTS

The financial impacts from July 1, 1998, when the free-of-charge online services became available on the Internet, to the end of December 1999 are summarized below.

STATE REGISTER

1. Revenues from subscription sales declined about 57 percent from the June 30, 1998, baseline. The "loss" of revenues from the baseline was estimated at \$121,270. Revenues from page sales during this period were greater by \$82,925 than what they would otherwise have been, due to a rate increase of 37 percent. The net of the two revenue sources during this period was a decrease of \$38,345.
2. Total costs of production declined, but unit costs increased, with lower volumes. From Monday Edition *State Register* direct-cost data, and based on a small sample of issues at the start of the period when the average was about 1,000 copies produced per issue and at the end of the period when about 630 copies per issue were produced, the average cost per impression increased from 6.3 cents to 8 cents. This does not include the allocation of overhead.
3. The *State Register* revolving fund account had net income for FY 99 of \$95,083, which reflected a \$25,000 contribution from the General Fund. For the first quarter of FY 00, preliminary results show net income of \$1,300, which reflects a General Fund contribution of \$6,250. However, first-quarter results are not necessarily indicative of the full-year performance, because page sales and revenues can vary widely from quarter to quarter.

GUIDEBOOK to STATE AGENCY SERVICES

4. Revenues from *Guidebook* sales during the period were largely unaffected by availability of the online service, because sales in the final period of the four-year cycle are comparatively small. Additionally, use of the online edition was very small. Revenues for the next edition of the *Guidebook* are likely to be substantially reduced by availability of the online edition. If the first two years' sales of the upcoming edition are equal to those of the current edition (about 2,800 copies with revenues of approximately \$83,600), and if sales decline to the same extent as those of the *State Register* (57 percent in the first year and a half), the decrease in sales revenues would be greater than \$47,600.
 5. Total direct costs to produce the current edition, estimated at \$180,000 (including direct staff support, production of the paper and CD-ROM versions, equipment, promotion, and
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marketing), greatly exceed sales revenues to date. Revenues to date do exceed the direct publication costs of the paper edition, which is one component of the total direct costs, that were estimated at \$57,400 or \$11.48 per paper copy. Fixed costs to produce the upcoming edition would be higher per copy with a lower volume of production. The cost structure can be changed for the next edition through, for example, changes in the types and volume of information included, reconsideration of how often the editions are produced, and use of new technologies to streamline and coordinate the online and paper edition processes.

DIRECT COSTS to PLACE and MAINTAIN ONLINE EDITIONS

6. The costs to originally place the *State Register* online were offset through revenues derived from online subscription sales. From July 1998 the additional costs are considered to be an information systems staff member's the salary and benefits, estimated at \$40,000.
 7. Current fiscal year costs are estimated at \$40,700 including salaries (\$32,000), consultant (\$2,700), and upgrades to hardware and software (\$6,000). Costs are expected to drop off substantially with the completion of an upgrade to the Communications Media Division Website by the end of the current fiscal year.
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