

In FY01 Mn/DOT Library services provided an estimated total of \$8,386,500.00 in reduced costs and added value for a benefits to cost ratio of 12:1.

Mn/DOT Library Reduced Costs

- 4,500 information resources were provided in response to specific requests for an estimated savings of \$191,250. NOTE: Library networks were used to borrow about 500 of these resources for use by Mn/DOT employees from 175 other organizations in 45 states and 3 foreign countries.
- 3,600 requests for information on specific topics were responded to for an estimated savings of \$468,000.
- Reduction in duplicate subscriptions provided by the library's centralized magazine subscription and routing service saved an estimated \$180,000.

Mn/DOT Library Added Value

- Mn/DOT employees' reading of the 4,500 requested information resources provided by the library provided an estimated value of \$5,100,000.
- Mn/DOT employees' reading of the 40,000 information resources provided through the library's routing services provided an estimated value of \$2,400,000.
- Viewing and use of Mn/DOT Library's web pages provided an estimated value of \$47,250.

Estimates of Annual Mn/DOT Cost Savings and Cost Avoidance Attributable to Mn/DOT Library Services

Reference Services (Savings of Customer's Time)

	600	In-depth reference questions handled each year
Times	16	Estimate of hours of customer's time saved per
	question	
Times	<u>\$30.00</u>	Estimate of hourly value of customer's time
Savings	\$288,000.00	
	3,000	Quick reference questions handled each year
Times	2	Estimate of hours of customer's time saved per
	question	
Times	<u>\$30.00</u>	Estimate of hourly value of customer's time
Savings	\$180,000.00	

Document Delivery (Savings of Customer's Time and Avoidance of Purchase Costs)

	1,500	Articles downloaded or photocopied
Plus	1,000	Interlibrary loans
Plus	2,000	Publications checked out from collections
Times	1	Estimate of hours of customer's time saved per article
Times	<u>\$30.00</u>	Estimate of hourly value of customer's time
Savings	\$135,000.00	
	1,500	Articles downloaded or photocopied
Plus	1,000	Interlibrary loans
Plus	2,000	Publications checked out from collections
Times	\$50.00	Estimate of costs per item of acquiring through other channels if library did not exist (price+purchase order processing, payment, etc.)

Times	0.25	Estimate of percent of materials that would be acquired if not available from the library
Savings	<u>\$56,250.00</u>	

Routing Service (Avoidance of Purchase Costs)

	400	Periodicals subscriptions
Times	\$150.00	Average cost per subscription through other channels if library did not exist (price+purchase order processing, payment, etc.)
Times	3	Average multiple subscriptions if sharing through routing service did not exist
Savings	<u>\$180,000.00</u>	

Total Savings and Avoided Costs \$839,250.00

NOTE: These are measures of only the time and dollars saved in acquiring information. They do not measure the actual value of the information itself or the benefits derived from application of the information acquired.

Estimate of Annual Added Value Attributable to Mn/DOT Library Services

	1,500	Articles downloaded or photocopied
Plus	1,000	Interlibrary loans
Plus	2,000	Publications checked out from collections
Plus	4,000	Publications from collections used in the library
Times	0.75	Percent of items that would not be read if library did not exist
Times	<u>\$600.00</u>	Average value per reading (Griffith & King, 1993)*
Value Added	\$5,100,000.00	
	40,000	Resources distributed through routing service
Times	0.1	Estimate of number of routed items that add value
Times	<u>\$600.00</u>	Average value per reading (Griffith & King, 1993)*
Value Added	\$2,400,000.00	
	27,000	Annual visitors to Mn/DOT Library websites
Times	3.5	Average minutes spent viewing pages per visitor
Divided by	60	Minutes per hour
Times	<u>\$30.00</u>	Estimate of hourly value of customer's time
Value Added	\$47,250.00	

*"Professionals report substantial savings as a result of reading; average savings are nearly \$600 per reading of journals, books and internal reports. These savings, relative to the cost of acquiring and using information, yield a return-on-investment ratio of about 10.2 to 1. (Special Libraries: Increasing the Information Edge, Jose-Marie Griffiths and Donald W. King, 1993)

Benefits and Return on Investment

	\$839,250.00	Savings and Avoided Costs
Plus	\$7,547,250.00	Value Added
Divided by	<u>\$700,000.00</u>	Library Costs (salaries, supplies, equipment, space)
Benefits to Cost Ratio	12:1	
	\$839,250.00	Savings and Avoided Costs
Plus	\$7,547,250.00	Value Added
Total Benefits	\$8,386,500.00	

Minus	<u>\$700,000.00</u>	Library Costs (salaries, supplies, equipment, space)
Annual ROI	\$7,686,500.00	

Note: This analysis does not include additional benefits derived from the library. No value estimates can be readily calculated for many potential measures. These include the value of creating metadata describing Mn/DOT publications. This metadata is added to WorldCat, which makes information created by Mn/DOT more accessible to transportation practitioners around the world. Also, it is difficult to estimate the "good will" value created by the loan of information resources to at least 179 organizations in 46 states, 5 Canadian provinces and 5 other countries in FY01, alone.

Numbers Used in the ROI Analysis

Citable Source

Average value per reading – Special Libraries: Increasing the Information Edge. Jose-Marie Griffiths and Donald W. King, 1993.

Mn/DOT Library Customer Surveys

Estimate of hours of customer's time saved

Mn/DOT Library Statistics

Reference questions handled
Articles downloaded or photocopied
Interlibrary loans
Publications checked out from collections
Periodicals subscriptions
Resources distributed through routing service
Annual visitors to Mn/DOT Library websites
Average minutes spent viewing pages per visitor

Professional Judgment or Informed Estimates

Estimate of hourly value of customer's time
Estimate of percent of materials that would be acquired if not available from the library
Average multiple subscriptions if sharing through routing service did not exist
Percent of items that would not be read if library did not exist
Estimate of number of routed items that add value
Publications from collections used in the library

Professional Knowledge and Experience

Estimate of costs per item of acquiring through other channels if library did not exist (price plus cost of purchase order processing and payment)
Average cost per subscription through other channels if library did not exist (price plus cost of purchase order processing and payment)