What Does Mn/DOT Library Accomplish?

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We provide information to MN/DOT employees faster, better and cheaper than they can for themselves.

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.

Who staffs MN/DOT Library?

One library program director considered to be a national and international leader in the area of special libraries, especially within the field of transportation.

Three reference librarians with combined experience of more than fifty years in providing information services in special libraries.

One technical services librarian considered to be among only a handful of experts in the United States in classifying and cataloging transportation information resources, especially in the area of creating metadata describing electronic information resources for inclusion in WorldCat. WorldCat is a database providing information on nearly one billion items in nearly 10,000 libraries throughout the world.

Two library technicians with combined experience of more than fifty years in describing, identifying and acquiring information resources from anywhere in the world.

DETAILED ANALYSIS

All special libraries (libraries in corporate, government agency and other non-academic institutional settings) exist for only one reason - to provide information faster, better, and/or cheaper than customers can do so for themselves.

MN/DOT Library:

Provides information and information resources faster (more efficiently) by:

Joining (and establishing) networks of libraries that collaborate to share information about resources in each library and to expedite sharing of resources and services
Developing a well-organized collection of frequently-needed, authoritative reference sources and other publications in transportation and other subject areas of interest to the department

Attempting to ensure that copies of all important MN/DOT documents are identified, cataloged, and preserved so any document can be accessed when needed.

**Provides information and information resources better (more comprehensively) by:**

Developing and applying knowledge about the resources and services of a wide range of publishers and other information providers

Using library staff expertise to access the latest techniques and technologies available to identify, locate and acquire information and information resources

Applying library staff expertise regarding the wide range of formats and methods of distributing and displaying information and laws affecting the use of information and information resources (copyright and other intellectual property law) to provide customers the right information at the right time in the right format

**Provides information and information resources cheaper (at a lower overall cost) by:**

Developing and providing services and procedures that allow departmental units and employees to share information resources

Taking advantage of discounts available through various vendors and membership agreements in purchasing and licensing information resources

Organizing and presenting most frequently needed information resources and services on the library's Internet and Intranet pages

Borrowing needed resources from cooperating libraries in lieu of purchasing

**What Customers Have Had to Say about -**

**Providing information faster:**

"I needed current information on the latest water quality models used to predict highway impacts. Your library had the only copies of these FHWA documents that were locally available. I would have otherwise had to order the documents from the FHWA, a process that would have taken too long." (MN/DOT Employee)

"I have always received excellent service. My most recent use of the library involved a request for old (mid 1960's through mid 1970's) copies of NCHRP, AASHO and HRB reports regarding guardrail. All of the information was sent within a week of the request. This information was vital in my efforts to assist MN/DOT and the Attorney General's office prepare a defense in a tort case involving personal injury." (MN State Employee)

"I was looking for a manual and related information that was produced by the U.S. Department of Transportation. [Library] staff was very friendly and helpful. It's hard to estimate how much time your staff saved me, but I would say one to two days of searching." (Local Business Owner)

"Recently I checked out two FHWA Technical Reports from the library. I needed to research these reports in a hurry for technical guidelines. The T2 Center in Fargo did not have these reports on hand and it would have taken several weeks and several dollars to obtain these reports from the US Government Printing Offices. The library mailed the reports immediately and I was able to do the research in a timely manner." (MN County Engineer)

**Providing better information**

"[The library] provided the materials in a very timely manner. Had we done this search within our own office, we may have spent more than two weeks and not identified all of the information which you provided. Our division would have experienced a "lost opportunity" of the time which we would have had to spend on the search." (MN/DOT Employee)
"I [was investigating] the use of video camera technology to analyze traffic movements and volumes at intersections and roadway segments. [The library] search revealed that some engineers in Germany had begun work in this very area. This, hopefully, will save us much time and energy by not having to "reinvent" the wheel. Your search capabilities are very impressive and appreciated." (MN/DOT Employee)

"The [library] has been tremendously helpful to me...a lot of information would be unknown or inaccessible to me without this service. I cannot think of a situation where you were not able to provide information or services that I have requested." (MN/DOT Employee)

"Re: Research on DOT Web sites, Traffic Management Centers and Ramp Meters
Thank you very much for your assistance. None of these websites ever came up in my searches." (MN/DOT Employee)

Providing information cheaper

"Asked for a book I needed to read, which you didn't have. Obtained a copy for me from another library. Needed a report, which again you didn't carry. Found a copy for me. In both instances, all that was necessary was one phone call. Otherwise I would have had to make several calls to find the report and would have probably not found the book." (MN/DOT Employee)

"You have provided (1) Literature searches--helped me for a speech in Taiwan; (2) Publications that were not available at my agency--saving me time in ordering and enormous amounts of money (that we may not have had to spend) especially TRB, but also AASHTO, ITE and others; (3) Contacts/addresses/telephone numbers: Invaluable. Saved us lots of time. Your office/services are invaluable for those of us in transportation who don't work for a transportation agency." (MN State Employee)

"I needed new information for Sexual Harassment Training. [The library] provided me with a list of information saving me 20 to 25 hours of research. [The library] has, over the years, always met or exceeded my expectations when seeking information." (MN/DOT Employee)

"I use the library as an access point for literature that is not available in MN/DOT. Each time I receive four articles, it saves me four hours plus a trip to the University of Minnesota Library System. Each time you do a literature search you save me at least two days of library work at the University." (MN/DOT Employee)

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

<table>
<thead>
<tr>
<th>Reference Services</th>
<th>Cost Savings</th>
</tr>
</thead>
<tbody>
<tr>
<td>600 In-depth reference questions handled each year</td>
<td>$288,000.00</td>
</tr>
<tr>
<td>Times 16 Estimate of hours of customer's time saved per question</td>
<td></td>
</tr>
<tr>
<td>Times $30.00 Estimate of hourly value of customer's time</td>
<td></td>
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</tbody>
</table>

| 3,000 Quick reference questions handled each year |               |
| Times 2 Estimate of hours of customer's time saved per question |       |
| Times $30.00 Estimate of hourly value of customer's time |           |
Savings $180,000.00

Document Delivery

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 $30.00 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 $56,250.00

Routing Service

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  $180,000.00

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  $600.00  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  $600.00  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 $30.00 Estimate of hourly value of customer's time

Value Added $47,250.00

Total Value Added = $7,547,250.00

**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 $700,000.00 Library Costs (salaries, supplies, equipment, space)

Benefits to Costs Ratio = 12.1

$839,250.00 Savings and Avoided Costs

Plus $7,547,250.00 Value Added

Total Benefits $8,386,500.00

Minus $700,000.00 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.

**How is MN/DOT Library different?**

**From other Minnesota state agency libraries:**

The collections of MN/DOT Library are unique, with nearly two-thirds of the information resources in the library held by no other library within the state. The following table shows the Minnesota state agency libraries that participate in MnSCU/PALS and the percent of unique resources held by each.
<table>
<thead>
<tr>
<th>Library</th>
<th>Total Resources</th>
<th>Unique Resources</th>
<th>% Unique</th>
<th>Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fire Center</td>
<td>3,983</td>
<td>3,136</td>
<td>78.7</td>
<td></td>
</tr>
<tr>
<td>Pollution Control</td>
<td>11,179</td>
<td>7,031</td>
<td>62.9</td>
<td></td>
</tr>
<tr>
<td>Transportation</td>
<td><strong>14,985</strong></td>
<td><strong>9,369</strong></td>
<td><strong>62.5</strong></td>
<td></td>
</tr>
<tr>
<td>Economic Security</td>
<td>6,849</td>
<td>3,695</td>
<td>53.9</td>
<td></td>
</tr>
<tr>
<td>Legislative Reference</td>
<td>40,884</td>
<td>21,876</td>
<td>53.5</td>
<td></td>
</tr>
<tr>
<td>State Law Library</td>
<td>30,599</td>
<td>15,702</td>
<td>51.3</td>
<td></td>
</tr>
<tr>
<td>Health</td>
<td>9,101</td>
<td>4,390</td>
<td>48.2</td>
<td></td>
</tr>
<tr>
<td>Natural Resource</td>
<td>14,726</td>
<td>6,802</td>
<td>46.2</td>
<td></td>
</tr>
<tr>
<td>Attorney General</td>
<td>2,920</td>
<td>1,178</td>
<td>40.3</td>
<td></td>
</tr>
<tr>
<td>Centennial</td>
<td>9,558</td>
<td>3,844</td>
<td>40.2</td>
<td></td>
</tr>
<tr>
<td>Human Services</td>
<td>3,205</td>
<td>1,175</td>
<td>36.7</td>
<td></td>
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<tr>
<td>Children, Families &amp; Learning</td>
<td>22,295</td>
<td>7,600</td>
<td>34.1</td>
<td></td>
</tr>
<tr>
<td>Revenue</td>
<td>5,284</td>
<td>1,737</td>
<td>32.9</td>
<td></td>
</tr>
<tr>
<td>Trade &amp; Econ. Development</td>
<td>7,881</td>
<td>2,253</td>
<td>28.6</td>
<td></td>
</tr>
<tr>
<td>Perpich Center for Arts Educ.</td>
<td>13,213</td>
<td>2,943</td>
<td>22.3</td>
<td></td>
</tr>
</tbody>
</table>

**From other state DOT libraries:**

MN/DOT Library is unique in relation to other DOT libraries in several respects, the most obvious being the number of staff in a single library - nine - and the wider range of services provided by MN/DOT Library. In part this is due to MN/DOT's strong emphasis on research and on MN/DOT Library being the only library in the state with extensive resources in transportation. For comparison:

California has the greatest number of transportation libraries including:

University of California, Berkeley, Institute of Transportation Studies, Harmer E. Davis Library
California Dept. of Transportation Transportation Library and History Center, Sacramento
California Maritime Academy Library, Vallejo
BART Technical Resources Library - Bay Area Rapid Transit, Oakland
California State Railroad Museum Library, Sacramento
Los Angeles County Metropolitan Transit Authority Library
Mineta Transportation Institute Library, San Jose State University
Metropolitan Transportation Commission / MTC-ABAG Library, Oakland
San Francisco Municipal Railway Library
San Francisco Airport Commission Aviation Library
South Coast Area Transit Library, Oxnard

Other states with multiple transportation libraries

**Texas -**
Center for Transportation Research and Education, Austin
Texas Transportation Institute, College Station
Dallas-Fort Worth International Airport Research Center, Dallas
Metropolitan Transit Authority, Houston;

**New York -**
New York State DOT, Albany
Port Authority of NY and NJ Aviation Library, New York City
Metropolitan Transit Authority Bridges and Tunnels Technical Library, New York City

**Washington -**
Washington State DOT, Olympia (2);
Sound Transit, Seattle
Paccar, Inc., Bellevue
Boeing Company, Seattle (2)

**Massachusetts -**
MIT Aeronautics Library, Cambridge
Volpe National Transportation Systems Center, Cambridge
Massachusetts State Transportation Library, Boston
Massport Authority Legal Library, East Boston;

**Illinois -**
Illinois State DOT Library, Springfield
Northwestern University Transportation Center Library, Evanston

Several states have multiple "libraries" within their DOT. Examples include California, and Wisconsin that have, in addition to their main libraries, one or more district libraries. A recent visit to Missouri DOT included a tour of three separate "libraries" at three separate facilities within Jefferson City. Washington has at least two libraries, with the second facility at its materials laboratory.

A survey done by MN/DOT Library in June 2000 showed that 42 state DOTs had what the DOT referred to as a library. Of these, only 17 had at least one professional librarian on staff, and only 9 were accessible via the Internet. Of those with websites, only the catalogs of Arizona, Massachusetts, Minnesota and Washington are searchable via the Internet.

Each state DOT library is unique in its relationships with other libraries. These range from Washington, where the DOT contracts with the Washington State Library to provide onsite library services, to Minnesota, which has no state library. In Minnesota, each agency meets its own needs for library services. These services are coordinated through the Capitol Area Library Consortium (CALCO). CALCO is a non-profit corporation created by state agency librarians to enhance interagency collaboration, a structure unique to Minnesota. Each DOT library is also unique in the customer base served. Several states have libraries that serve a single office. MN/DOT Library serves the state's entire transportation community by acting as the information services component of the state's Local Transportation Assistance Program.

The most unique aspect of MN/DOT Library services in comparison to other DOT libraries is the library's use of the department's computer network to provide employee's throughout the state with desktop access to extensive information on CD-ROMs, in licensed databases, and in online, full-text periodicals.

**MN/DOT Library Staffing**
Jerry Baldwin, Library Program Director, 1972-2007, 50 graduate credits in Library Science; B.A., minor in Library Science
Currently serving on TRB's Committee on Library and Information Sciences in Transportation (A5017)

Achievements:
MN/DOT Employee of the Year, 1983
Founder and first president, Capitol Area Library Consortium
Founder and first chairman, Committee on State Transportation Agency Libraries, Special Libraries Association (forerunner of today's Government Transportation Research Information Services Committee)
Former president, Minnesota Chapter, Special Libraries Association
Former chairman, Transportation Division, Special Libraries Association
Former chairman, Minnesota Chapter, American Society for Information Science and Technology
Many other offices and frequent presenter at, and planner of, various library conferences

James Byerly, Library Information Resources Services Specialist (Systems Librarian), MA, Library and Information Studies, University of Wisconsin, Madison; BS, Biology, University of Minnesota, Saint Paul

Achievements:
Planned, designed, and implemented system consisting of network application server and file server to deliver CD-ROM based applications and data to users via the Intranet, Internet and dial-in connections.
Redesigned library Web site and Intranet site.
Planned and implemented the installation of Novell network file server.

Margie Grilley, Library Information Resources Services Specialist (Reference Librarian), M.A. Library & Information Studies, University of Wisconsin, Madison; BA Sociology, University of Minnesota, Minneapolis.

Professional Activities:
Member, Special Libraries Association (SLA)
Member, Transportation Division, SLA
Member, Minnesota Chapter, SLA
Former Chair, Solo Division, Minnesota Chapter, SLA
Secretary, Washington County Library Board

MN/DOT Activities:
Technology Transfer Librarian
Staff Member, Research Coordinator Committee

Shirlee Sherkow, Library Information Resources Services Specialist (Outreach Librarian) MA Library & Information Studies, University of Wisconsin, Milwaukee
Thirty years experience in providing library services and information consulting

Professional Activities:
Current president, Capitol Area Library Consortium

Qin Tang, Library Information Resources Services Specialist (Technical Services Librarian), M.L.S, Library and Information Science, University of Wisconsin; MA, German Literature, University of Heidelberg; B.A, German Literature, Beijing Foreign Studies University, China

Professional Activities:
Member, Special Libraries Association
Member, Minnesota Library Association