DOLLARS, SENSE AND PUBLIC LIBRARIES

The landmark study of the socio-economic value of Victorian public libraries

An independent report by SGS Economics and Planning for the State Library of Victoria and Public Libraries Victoria Network

$722 million pa

$1 = $3.56
Project Team

Project management
Debra Rosenfeldt, Melanie McCarten and Beata Wacek,
State Library of Victoria

Research
Andrew McDougall, Shishir Saxena and Madeleine Tate,
SGS Economics & Planning
Gillian Savage, Environmetrics

Design and layout
Dianna Wells, Emma Hands and Lorna Hendry,
Dianna Wells Design

Copy
Sue McKerracher, The Library Agency

Project workgroup:
Leith Baggs, Frankston City Council
Peter Carter, Casey-Cardinia Library Corporation
Joseph Cullen, Eastern Regional Libraries Corporation
Jane Grace, Yarra Plenty Regional Library
Andrew Hiskens, State Library of Victoria
Chris Kelly, Brimbank City Council
Katrina Knox, City of Darebin
Patti Manolis, Geelong Regional Library Corporation
Jenny Ruffy, City of Yarra
Kerri Sidorow, Wyndham City Council
Matthew Van Hasselt, State Library of Victoria

Published March 2011 by
State Library of Victoria
328 Swanston Street
Melbourne Victoria 3000
Australia
Telephone 61 3 8664 7000
Website www.slv.vic.gov.au

Enquiries can be addressed to:
Public Libraries Division, State Library of Victoria

The full technical report is available on the State Library of Victoria website www.slv.vic.gov.au

© Copyright State Library of Victoria, March 2011
This publication is copyright. No part may be reproduced by any process except in accordance with the provisions of the Copyright Act 1968.
Dollars, Sense and Public Libraries

The landmark study of the socio-economic value of Victorian public libraries
Foreword

Dollars, Sense and Public Libraries is a major three-year project to assess the economic value of public libraries in Victoria. The results are described in this topline summary, behind which lies a full technical report running to several hundred pages. The technical report is available from the State Library of Victoria website www.slv.vic.gov.au

In this summary report, we believe you will find a clear justification for the continued support of Victorian public libraries by all levels of government.

Each year, we spend $36 per capita on public libraries in Victoria. It is less than a family of four would spend on one trip to the cinema, but for this modest sum, we can enjoy free books, films, music, newspapers and magazines all year round, as well as programs, activities, computer access, expert help and a welcoming community space.

The Dollars, Sense and Public Libraries project was initiated in 2007. It followed on from the Libraries Building Communities research published in 2005, and this latest project had three aims:

• To expand the understanding of the value of public libraries in Victoria.
• To provide public library managers with the means to calculate their specific contribution to the communities they serve.
• To give public library managers information and advocacy materials to build their case for library funding.

Libraries Building Communities provided conclusive proof that Victorian public libraries were valued. It was also implicit in the fact that nearly half of all Victorians in metropolitan, regional and remote areas are public library members.

The Libraries Building Communities study demonstrated value in four critical areas:

• Providing free public access to computer and information technology resources.
• Creating better-informed communities.
• Promoting lifelong learning and literacy.
• Building connections between individuals, groups and government.

(State Library of Victoria 2005)

The Dollars, Sense and Public Libraries study takes the research to the next level by providing a way of measuring that value.

We would like to thank the project team, Victorian public library managers, SGS Economics & Planning, Environmetrics and all those who have contributed to Dollars, Sense and Public Libraries.

The Planning Institute of Australia awarded the 2011 National Social and Community Based Planning Award to SGS Economics & Planning for the Dollars, Sense and Public Libraries project.

We believe this work will greatly assist library advocates, decision-makers and influencers to put the case for further investment in the public library network.

Hon. John Cain
President
Library Board of Victoria

John Murrell
President
Public Libraries Victoria Network
Contents

A great dividend 5
Protecting the investment 6
An excellent return 7
Impressive statistics 8
Promoting a sustainable future 9
A thorough and rigorous approach 10
Collating the evidence 11
Robust measurement frameworks 13
What Victorians said about their library services 14
Impressive, not surprising 17
Glossary of terms 18
References 19
Victorian public libraries return $3.56 for every $1 spent

Public libraries are primarily funded by local government with State Government support. For every dollar invested in public libraries, the community receives at least 3.6 times as much value in return. In 2007–08, the community benefit was $681 million against a cost of $191 million.

At the same time, public libraries made a significant contribution to state and local economies, supporting 4,430 jobs, contributing $722 million to income, and adding $120 million to the Victorian Gross State Product.

People would pay more…

Library customers said they were willing to spend an average of $72 a year to continue public library services – double the spend per capita of $36. Even people who didn’t use their library were willing to pay $55 – more than one and a half times the current expenditure.

Library customers estimated they would have to pay more than 10 times as much (an average of $419 per annum) if the same services were offered by a commercial provider.

…but don’t have the capacity to do so

More than 80% of public library customers (and people who didn’t use a public library) said they would be willing to pay more for public library services but did not have the capacity to do so. A survey carried out for Libraries Building Communities showed that only 10% of Victorian public library customers were in full-time employment. Some 41% of customers were not in the labour force (mainly retired people, parents at home with young children and students), 36% were working part-time and 13% were unemployed. (State Library of Victoria 2005)

Victorians value public libraries for many reasons

People talked about meaningful pastimes, lifelong learning, finding information and feeling part of the community through their local library. They saw it as a safe and welcoming place to meet, encouraging socially responsible behaviour and providing everyone with access to computers and the internet.

The best thing about public libraries was said to be the wide variety of resources available, including books, DVDs and CDs – all free of charge. Library customers also highlighted the importance of friendly, helpful staff.

While library customers were generally satisfied, there were suggestions for improvements, mainly around expanding and updating book collections and other materials, and extending opening hours.

The majority of Victorians are library customers

Overall, library membership is estimated to be 48% of Victorians. However, 67% of participants in the study identified themselves as members of public libraries and 63% of households had used a public library in the past 12 months.

The full technical report is available on the State Library of Victoria website www.slv.vic.gov.au
Protecting the investment

Keep investing in Victorian public libraries

It makes good social and economic sense. For every dollar that goes in, the community gets $3.56-worth of benefits back.

Where there is a difficult funding decision to be made, take note

Victorian public libraries provide a return on investment that is equal to, and in some cases better than, other government initiatives.

Outstanding value

An investment of $36 per person per annum gives Victorians access to free information and entertainment. It connects people, through library PCs and wireless hotspots, to friends and family, potential employers, government, banks and other online service providers. It provides a safe, welcoming community space – a critical entry point for people who might otherwise not connect with what's happening around them. Government must invest at an appropriate level in the future to ensure the community continues to receive this outstanding value.

For those who need it most

The vast majority of customers do not have the capacity to pay for the services they receive free of charge at their public library. People from disadvantaged backgrounds, often described as ‘hard to reach’ by other agencies, may well be library customers.

Others have recognised the value of the return on investment

The funding of Victorian public libraries lags behind most other states. Funding is 17% less than that of public libraries in New South Wales (with a similar size of population) and 24% behind Western Australia. (National and State Libraries of Australasia 2010)

Per capita expenditure on Australian public libraries

<table>
<thead>
<tr>
<th>State/territory</th>
<th>Expenditure per capita on public libraries 2008–09</th>
<th>Comparison with Victorian expenditure per capita</th>
</tr>
</thead>
<tbody>
<tr>
<td>South Australia</td>
<td>$45.97</td>
<td>+28%</td>
</tr>
<tr>
<td>Western Australia</td>
<td>$44.69</td>
<td>+24%</td>
</tr>
<tr>
<td>New South Wales</td>
<td>$41.95</td>
<td>+17%</td>
</tr>
<tr>
<td>Queensland</td>
<td>$40.86</td>
<td>+14%</td>
</tr>
<tr>
<td><strong>Victoria</strong></td>
<td><strong>$35.89</strong></td>
<td></td>
</tr>
<tr>
<td>Tasmania</td>
<td>$34.10</td>
<td></td>
</tr>
<tr>
<td>Northern Territory</td>
<td>$32.01</td>
<td></td>
</tr>
<tr>
<td>Australian Capital Territory</td>
<td>$30.50</td>
<td></td>
</tr>
</tbody>
</table>
An excellent return

Governments are regularly faced with tough funding choices. Policy makers have to weigh up the merits of investing in different projects in order to give the best return to taxpayers and still balance the budget.

Ask most people and they will tell you libraries are a good thing, but decision-makers need more. They need a solid and robust case for investment.

*Dollars, Sense and Public Libraries* provides that case. It shows that, as a conservative estimate, Victorian public libraries return benefits valued at $3.56 for every $1 spent. This level of return is the same as, or better than, the return from other government spending. (Deloitte 2009; PriceWaterhouseCoopers 2008)

Within the Australasian library sector, it is on a par with the return on investment generated by NSW public libraries, estimated to be between $2.82 and $4.24 per $1 spent (Liddle 2008) and the NZ$3.50 return from New Zealand’s public libraries (McDermott Miller 2002).

Internationally, it is consistent with the British Library’s assessment of £4.40 for every £1 invested (Spectrum Strategy Consultants & Indepen Consulting 2003) and the experience of American public libraries. The definitive 2007 Americans for Libraries Council (ALC) report on library valuation stated, ‘A benefit-to-cost ratio of 3:1 or better is common among the library valuation studies ALC reviewed. Because this type of economic analysis is commonly used across industries and businesses, it puts libraries into an evaluative framework that permits comparisons with other types of organizations. When this occurs, public libraries consistently outpace other sectors, such as transportation, health, and education, on the efficient use of tax dollars.’ (Imholz & Weil Arns 2007)

However, comparisons are in short supply because of the complexity and challenge of carrying out this kind of economic study. Victoria is only the second state in Australia to produce an economic valuation of its public libraries, and the comprehensive approach described in this report has set a new benchmark for those that may follow.

“If you have kids studying, they are a good resource for reference material; good for a quiet place to study without distractions.”

(survey respondent)
In the 2008–09 financial year, there were:

- 44 municipal public library services in Victoria;
- 256 municipal public library branches;
- 27 mobile libraries and 389 stops;
- 30 other service points e.g. general stores;
- 27.2 million visits by library customers;
- 31 million virtual visits via library websites;
- 917,000 participants in library programs; and
- more than 48% of Victorians (2.5 million) were library members.

In 2007–08, there was $191 million of expenditure on public libraries in Victoria, returning $681 million in community benefit. Applying the same multiple to 2008–09, there was $194.8 million of expenditure, returning $693.5 million in community benefits.

The popularity of public libraries

- Public library members in Victoria could fill the Melbourne Cricket Ground (MCG) more than 25 times over.
- The number of public library members in the state equates to more than 10 times the population of Victoria’s second largest city, Geelong.
- There are more public libraries than there are McDonalds restaurants in Victoria.
- For every person who attends the Melbourne Cup Carnival, there are seven who participate in Victorian public library programs.

Impressive statistics

- 31 million virtual visits via library websites
- 917,000 participants in library programs
Promoting a sustainable future

Victorian public libraries are valued by communities and provide state and local government with an exemplary return on investment – but it’s not a one-off investment. Public libraries require continued funding in line with population growth and the evolving needs of the communities they serve.

The Victorian public library network has experienced enormous change over the past decade and there is more to come.

• Libraries are natural partners for the roll out of high speed broadband across the state, and further investment in ICT will be a must.

• E-books are now outselling hardcover books through Amazon, the world’s biggest online book retailer. As more Australian content becomes available, e-books will take hold in Victoria, providing both opportunities and challenges for public libraries.

• Population growth is putting pressure on public libraries in fast-growing Victorian cities and regional centres, and the arrival of migrants from many nations increases the need for multicultural materials and resources.

• Heightened expectations mean that customers want their library to have an extensive collection of quality new and classic materials – books, films and music – and to be open at hours that suit their needs.

• As the population ages, there is greater demand for home delivery and formats for people with print disabilities as well as other disabilities.

• Poor reading, writing, numeric and digital literacy levels continue to be an issue, and libraries are increasingly concerned with addressing these areas through their role in lifelong learning.

• Staff must keep up with this shifting landscape, which means recruiting people with a range of skills and providing ongoing professional development.

Libraries need sustained investment to make sure they continue to return benefits valued at $3.56 for every $1 spent, and more than that, to ensure they continue to play a vital role in building and strengthening communities.

“Our library has just been renovated and it looks really good. I also like the storytime that they have for little kids.”

(survey respondent)

More than 48% of Victorians (2.5 million) are library members  44 municipal public
A thorough and rigorous approach

*Dollars, Sense and Public Libraries* is the result of a comprehensive three-year project, involving economists and analysts from one of Australia’s pre-eminent urban economics, strategy and policy planning groups, SGS Economics & Planning.

The strength of the study lies in the rigorous application of proven methodologies. The raw data was gathered from authoritative sources; market research was carried out with statistically representative samples of Victorians; findings were tested in seven very different locations; and were developed using three complementary valuation techniques.

SGS Economics & Planning is a multi-award-winning economics and planning consultancy operating from offices in six major cities across Australia.

SGS has built a reputation for thorough research and intelligent interpretation, and is respected by governments and businesses across the public, private and not-for-profit sectors.

SGS was named 2010 Victorian Consultant Planner of the Year by the Planning Institute of Australia (Victoria).

“You can order books from all over Victoria!”
(survey respondent)
Collating the evidence

Literature review
A study was made of reports generated by more than 30 similar studies in other parts of the world, especially America. This literature review provided the basis for the Victorian approach to the task of measuring the value of public libraries.

Victorian household survey
More than 1,000 responses were collected through the Victorian household survey. The results showed that library customers thought they would have to spend an average of $364 to access the kinds of services provided by libraries for free, from private concerns. People thought it was worth an average of $65 per annum to maintain libraries in their communities ($72 per annum for library customers, $55 per year for people who didn’t use a public library).

Library customer survey
Some 1,380 library customers, across seven library services, provided feedback about their personal experiences of library borrowing and benefits. They estimated they would have to spend an average of $419 per annum to buy the services they enjoyed for free at the library, if they were to use a commercial provider.

There was a degree of difference in the results of the Victorian household survey and the library customer survey but the outcomes were broadly similar – people place a high value on public libraries and, in response to a theoretical question, would be ‘willing to pay’ substantially more to maintain the service but in most cases would not have the capacity to do so.

Case studies

By applying the measurement frameworks to each situation, SGS was able to test the resilience of the methodologies. Each library service contributed differently to the needs of their specific community; however, the return on investment was relatively constant, between $4.21 and $4.62 in five of the seven areas.

Issues highlighted by the case study libraries included:

• Insufficient funding for libraries to cope with growing and diverse communities.
• Even greater expectations from library customers and the community.
• Increasing demand for outreach services as the population ages.
• The need to keep abreast of changing technologies and to ensure staff are trained to deliver them.
• The ability to attract and retain qualified staff.

The case study results were scaled up to provide an annual net dollar benefit for Victoria, using the supporting evidence from research data and surveys.
## Case study libraries: Benefit cost ratio and return on investment

<table>
<thead>
<tr>
<th>Description</th>
<th>Annual budget</th>
<th>Benefit cost ratio</th>
<th>Annual return on investment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small, rural community with declining population</td>
<td>$540,000</td>
<td>2.62</td>
<td>$1.4 million</td>
</tr>
<tr>
<td>Gannawarra Library Service</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Regional city, stable population</td>
<td>$1.5 million</td>
<td>5.81*</td>
<td>$8.7 million</td>
</tr>
<tr>
<td>Latrobe City Libraries</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rapidly growing multicultural population in outer Melbourne</td>
<td>$3.6 million</td>
<td>4.62</td>
<td>$16.6 million</td>
</tr>
<tr>
<td>Wyndham Library Service</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inner metropolitan, stable multicultural population with high level of disadvantage</td>
<td>$4.8 million</td>
<td>4.33</td>
<td>$20.8 million</td>
</tr>
<tr>
<td>Darebin Libraries</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Large regional city, growing population</td>
<td>$7.2 million</td>
<td>4.53</td>
<td>$32.6 million</td>
</tr>
<tr>
<td>Geelong Regional Library Corporation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rapidly growing population in outer Melbourne</td>
<td>$8.2 million</td>
<td>4.21</td>
<td>$34.5 million</td>
</tr>
<tr>
<td>Casey-Cardinia Library Corporation</td>
<td>$11.1 million</td>
<td>4.52</td>
<td>$50.2 million</td>
</tr>
<tr>
<td>Eastern Regional Libraries</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* This higher BCR reflects the fact that no capital or depreciation costs were incurred by the library service during 2009.

## Case studies: Benefit cost ratios

![Graph showing benefit cost ratios for different libraries](image)

- **Financial savings**
- **Travel cost method**
- **Contingency valuation**
- **Average**
Robust measurement frameworks

The headline figures were generated using conventions and disciplines that aligned with the requirements of the Commonwealth and Victorian Treasury guidelines for conducting cost benefit assessments.

Cost benefit assessment (CBA)

Figures for the recurrent capital and operating costs of Victorian public libraries were taken from the Annual Survey of Public Library Services in Victoria, published by the Department of Planning and Community Development.

In order to measure the benefits, such as services and programs, social interaction, sense of place, environmental savings, language and computer literacy, and improved education, career and health outcomes, SGS used a combination of three valuation techniques:

- **Financial savings** – how much people would have to pay a commercial provider for the same products and services.

- **Travel costs** – how much time, cost and effort people were willing to put into getting to and using public libraries.

- **Contingency valuation** – how much people would be willing to pay to keep public library services available for the community.

By comparing the benefit with the cost in each case and then averaging the figure, SGS was able to provide a benefit cost ratio (BCR) of 3.56.

Economic impact assessment (EIA)

SGS identified how Victorian public libraries stimulate their local economies through direct outlay on goods and services, staff wages, and spending that has been triggered by people's use of the library.

This gave three figures:

- Public libraries generate $722 million in Victorian income.
- Public libraries contribute $120 million to the Victorian Gross State Product.
- Public libraries support the full-time equivalent of 4,430 jobs.

Victorian results: Cost benefit assessment

$1 = $3.56

than 48% of Victorians (2.5 million) are library members  44 municipal public library
What Victorians said about their library services

As part of the Victorian household survey, people were asked what they thought were the benefits and characteristics of public libraries, and what the best things were about them.

Some 1,050 responded to the survey and there was strong support for a wide range of perceived benefits.

The fact that the service was free was cited by more than one-third of respondents as the best thing about public libraries, followed by the range and variety of books and the wide access to resources and information.

While there was little difference between the perceptions of customers and people who don't use libraries around the public library benefits and 'best things', there was more variation in the perceived characteristics. However, both groups supported a long list of features.

Perceived benefits of public libraries (all)

<table>
<thead>
<tr>
<th>Benefit</th>
<th>Percentage agreeing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Support children’s education</td>
<td>Large</td>
</tr>
<tr>
<td>Help people obtain information not available elsewhere</td>
<td>Moderate</td>
</tr>
<tr>
<td>Contribute to enjoyable and meaningful pastimes</td>
<td></td>
</tr>
<tr>
<td>Support children’s early (0-5yr) development</td>
<td></td>
</tr>
<tr>
<td>Help people pursue hobbies and interests</td>
<td></td>
</tr>
<tr>
<td>Facilitate pursuit of lifelong learning</td>
<td></td>
</tr>
<tr>
<td>Support people’s involvement in educational courses</td>
<td></td>
</tr>
<tr>
<td>Foster a sense of community or belonging</td>
<td></td>
</tr>
<tr>
<td>Help people accomplish tasks or achieve goals</td>
<td></td>
</tr>
<tr>
<td>Assist people to develop English-language skills</td>
<td></td>
</tr>
<tr>
<td>Help people be more productive in their job</td>
<td></td>
</tr>
<tr>
<td>Help people obtain a new job/promotion</td>
<td></td>
</tr>
<tr>
<td>Help people understand legal/medical information</td>
<td></td>
</tr>
<tr>
<td>Help people improve or start a business</td>
<td></td>
</tr>
</tbody>
</table>

“You can escape from the real world and just read a book.”

(survey respondent)
Best things about public libraries (all)

Percentage agreeing

<table>
<thead>
<tr>
<th>Service</th>
<th>Total</th>
</tr>
</thead>
</table>
| Free service/don’t need to buy books | 0%
| Range and variety of books | 5%
| Wide access to resources/information | 10%
| Can borrow DVDs/CDs/audio books | 15%
| Internet access/computers | 20%
| Staff are helpful/knowledgable/friendly | 25%
| Easy to find/access | 30%
| Children’s activities | 35%
| Place to study/educational materials | 40%

Perceived characteristics of public libraries

Percentage agreeing

<table>
<thead>
<tr>
<th>Service</th>
<th>People who don’t use public libraries (382)</th>
<th>Public library customers (668)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Libraries are safe and pleasant places to visit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Libraries facilitate lifelong learning</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Libraries ensure internet access for all</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Libraries encourage responsible social behaviour</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Libraries provide information about community events</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Libraries support local culture and the arts</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Libraries promote and encourage language and computer literacy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Libraries provide public meeting places</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Libraries recognise the demand for non-English language materials</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Libraries act as a source of government information</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Libraries support the development of English as a second language</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Libraries support existing businesses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Libraries facilitate job or career planning</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Libraries attract new businesses to the community</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

389 stops   30 other service points   27.2 million visits by library customers   31 million
Surveys of library customers in the seven case study areas gave an indication of the financial value people placed on the library service and their willingness to pay.

Respondents estimated that, on average, it would cost them $419 a year if they had to buy the kind of services they enjoy for free at the library from a commercial provider.

The average amount they were willing to pay to maintain community access to current library services was $72 a year – twice the actual cost of $36.

“Diversity of books, magazines and DVDs but mainly all the staff are delightful, chatty and very knowledgeable.”

(survey respondent)
Impressive, not surprising

For every dollar invested in Victoria’s public libraries, $3.56 is the average rate of return in community benefits.

While this figure is impressive, it will come as no surprise to library customers:

- Parents and caregivers who participate in baby rhyme time and storytime sessions in the library.
- Young people who don’t have a quiet space to study at home and who benefit from the support of a homework club.
- Book borrowers with a huge choice of reading material.
- People with disabilities whose trip to the library or home delivery provides a welcome connection with the wider community.
- Those who don’t have a computer at home and rely on internet access at their library.
- Employment seekers, who find the resources they need to look for jobs and submit their applications online.

Whatever measure is used, public libraries are assuredly a valued and valuable community asset, well worth support and funding from all levels of government.

“They’re good for the elderly. It gives them access to a lot of things they can’t afford to buy themselves. I know my father-in-law uses them, and I think they run computer classes and I know he took one of those.”

(survey respondent)
Glossary of terms

**Benefit cost ratio (BCR)**
The BCR is achieved by comparing the value of the benefits with the costs of a project in present day terms.

**Contingency valuation method (CVM)**
The CVM asks people to state their willingness to pay for a product or service and their willingness to accept a payment in order to forego it (by way of a tax saving).

**Cost benefit assessment (CBA)**
The CBA contrasts the costs and benefits associated with a project, enabling an estimate of net benefit to be derived. In this case, the economic, social and environmental benefits of libraries were considered.

**Economic impact assessment (EIA)**
EIA traces how the economic activity in a local economy (associated with library operations) accumulates through numerous rounds of transactions.

**Return on investment (ROI)**
The value of community benefits returned for each dollar invested, quantified in dollar terms.

**Travel cost method (TCM)**
The TCM assumes that customers value their time and therefore by choosing to spend time in a particular way, are making an investment. Hourly wage rates are used to put a monetary value on this.
References


via library websites  917,000 participants in library programs