

LIBRARIES WORK!

The socio-economic
value of public libraries
to Victorians



**STATE LIBRARY
VICTORIA**



**Public Libraries
Victoria Network**

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



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ISBN: 978-0-9808754-7-8



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FOREWORD

Every dollar invested in public libraries generates \$4.30 of benefits to the local community.

Libraries Work!: The socio-economic value of public libraries to Victorians updates and expands on the landmark work of the 2011 *Dollars, Sense and Public Libraries* report, and highlights the need for the continued support of Victorian public libraries by all levels of government.

Victorian public libraries are well patronised, with over 30 million visitors in 2016–17. This is an average of five visits for every Victorian. Those who visit the library appreciate the free access to physical and digital resources, information technology, literacy programs and other activities, and to a safe and welcoming space that encourages social inclusion and community engagement.

Even those Victorians who don't use the library appreciate that it will be there for them in the future and that it is there right now for those who do need it.

While visits to libraries are increasing, library funding is not keeping up with population growth. In light of financial challenges, such as rate capping, local governments must make tough decisions about where they spend their budgets. The research in this report demonstrates that investment in libraries has positive results. Every dollar invested in Victorian public libraries generates \$4.30 of benefits to the local community, so it's a high return on investment proposition.

The data and information in this report will enable library managers and other library advocates, to demonstrate to government, partners and the community the value of public libraries for all Victorians. Public libraries are worth investing in and the investment yields impressive results.

This report is the latest in an important suite of reports commissioned by State Library Victoria and Public Libraries Victoria Network that highlight the vital role played by public libraries in the lives of Victorians. Earlier reports include *Libraries Building Communities* (2005), *Victorian Public Libraries 2030* (2013) and *Creative Communities* (2014), as well as *Dollars, Sense and Public Libraries*.

We'd like to thank the project workgroup, Victorian public library managers, SGS Economics and Planning, and all those who have contributed to *Libraries Work!: The Socio-economic Value of Public Libraries to Victorians*.

Public libraries are creative and community spaces that allow Victorians to meet, read and study. We believe that continuing to build an evidence base to demonstrate the value of public libraries in Victoria is vitally important.



John Wylie, AM
President
Library Board of Victoria



Jenny Ruffly
President
Public Libraries Victoria Network

EXECUTIVE SUMMARY

In 2016–17, public libraries in Victoria welcomed over 30 million visitors, the equivalent of five visits for each and every Victorian resident. Visitation growth continues to outpace population growth, a trend that has been evident over the past 15 years.

Victorian public libraries offer vital services to their local communities. They are safe, non-judgemental places that provide free access to services, programs and information technology, as well as opportunities for social interaction and inclusion. The indirect benefits of library services include:

- improved language and digital literacy, community health and career development outcomes
- complementarity with the services of education institutions, and
- enhanced local area amenity and environmental sustainability.

Those who do not use libraries still place a value on public library services, knowing they can use these services in the future and that public libraries are available for other members of the community.

It makes good economic sense to continue to invest in public libraries. In 2016–17, public libraries in Victoria generated \$1.1 billion of benefits. After accounting for operational costs, the net community welfare contribution is estimated at \$848 million. This equates to \$140 per capita per year in net community benefits. For every dollar invested in public libraries in Victoria, \$4.30 of benefits was generated for the local community.

Economic activity generated by public libraries in 2016–17 equated to \$328 million in gross regional product. Almost 80% of this economic activity is generated in Greater Melbourne (\$255 million per year). Public libraries currently employ over 1800 full time equivalent staff. The additional spending and economic activity resulting from this employment means that public libraries support a further 500 jobs in the Victorian economy.

There is a strong positive relationship between total library funding and library visitation. More importantly, there is also a positive relationship between recurrent library funding per capita and the net benefits generated per capita. This indicates that if funding per capita increases, the net benefits per capita generated will also increase. Consequently, investment in public library services across Victoria can be lifted without any fears of diminishing returns on investment.

Public libraries are primarily funded by local government with Victorian government support. For the impressive benefits of public library services to continue, ongoing and significant government funding is vital.

This study has used cost benefit analysis (CBA) to assess the net benefit of public libraries. CBA is the preferred tool of Australian Governments for assessing whether service provision is worthwhile, taking into account economic, social and environmental considerations.

The economic benefits numbers have been generated using conventions and disciplines that align with the requirements of the Commonwealth and Victorian Treasury guidelines for conducting cost benefit assessments and economic impact assessments. The data used to populate the quantitative frameworks were derived from representative market samples. As a result, the results are both robust and defensible.

Public libraries
generate \$328 million
in economic activity per
year across Victoria.





1. INTRODUCTION

Victorian public libraries are operated and mainly funded by local government, with 15% of funding from state government in 2016–17. Each of the 79 municipalities offers a library service. Of the 46 public library services in Victoria, 36 are run by individual councils and 10 are delivered in partnerships between two or more municipalities.

Governments are regularly faced with tough funding choices, and local governments often feel pressure as they negotiate and balance competing community funding demands.

Much work has been done to articulate the contribution of public libraries to community life. *Libraries Building Communities*, a joint initiative of State Library Victoria (SLV) and Public Libraries Victoria Network (PLVN), extensively describes the social benefits that public libraries provide.¹ The *Creative Communities* report, another joint initiative of SLV and PLVN, is a comprehensive overview of the wide-ranging cultural benefits provided by public libraries.²

To support this body of work, PLVN and SLV sought quantitative estimates of how public library services generate local community and economic benefits. SGS Economics and Planning were commissioned to update the 2011 landmark report *Dollars, Sense and Public Libraries*.³

Research objectives

The objectives of this research are to update data on the welfare contributions of Victorian public libraries developed in 2011 by independently:

- estimating the costs, benefits and net benefits (or community welfare gains) generated by Victorian public libraries in 2016–17
- assessing the economic value added and employment generated by public library services in their local economies, and
- examining existing funding levels and the case for increased funding.

1 www2.slv.vic.gov.au/about/information/publications/policies_reports/plu_lbc.html

2 www.slv.vic.gov.au/sites/default/files/Creative-communities-summary-report.pdf

3 www.libraries.vic.gov.au/downloads/Dollars_Sense_and_Public_Libraries/20110322_sl_techrep_full_final.pdf

2. PUBLIC LIBRARY SERVICES

Library visitations have increased, usage patterns have changed, and funding has been outpaced by population growth.

More people are visiting public libraries

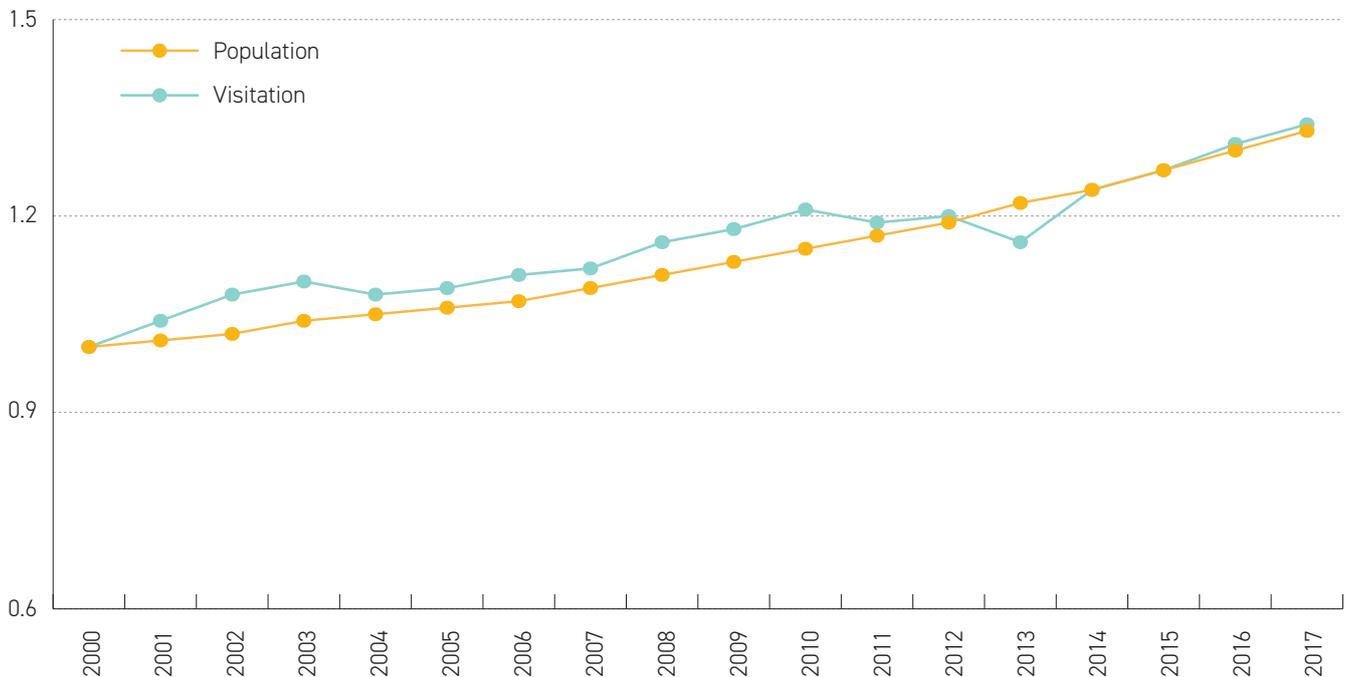
In 2016–17, public libraries in Victoria welcomed over 30 million visitors, the equivalent of five visits per Victorian resident each year.

Public library visitations have grown strongly over the past 15 years, outpacing population growth.

Figure 1 shows the year on year growth, from 2000, of:

- public library visitation, and
- total resident population.

Figure 1: Public library visitation and population year on year growth



Source: PLVN Annual Statistical Survey

Note: The figures on the Y axis of this graph are an index used to represent cumulative year on year growth.

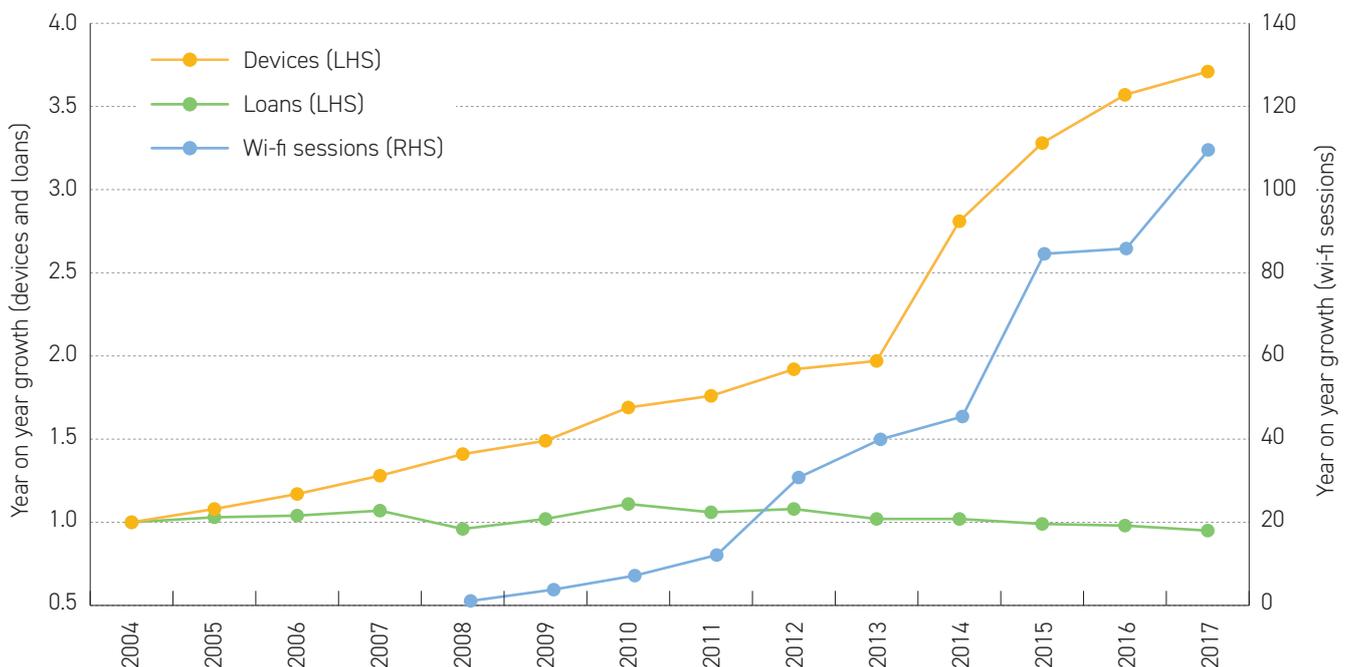
People use public libraries for many reasons

The reasons people use public libraries have changed. This is reflected in data on technology and visitor preferences. Figure 2 shows the year on year growth, from 2004, of the number of:

- devices provided by and used in public libraries (PCs, laptops, iPads)
- total loans (of both physical and digital items), and
- wi-fi sessions.

While loans have remained relatively unchanged over the past decade, there has been a sharp rise in the number of devices and wi-fi sessions at public libraries. This suggests that while loans of books and other physical and digital material have remained core services of public libraries, visitors are using public libraries for many reasons, including the use of electronic devices and free wi-fi.

Figure 2: Public library loans, devices and wi-fi sessions year on year growth



Source: PLVN Annual Statistical Survey

Note: LHS means refer to the axis on the left hand side. RHS means refer to the axis on the right hand side. Wi-fi sessions year on year growth is shown on a separate axis as the magnitude of growth in wi-fi sessions is significantly larger than for devices and loans. The figures on each of the LHS and RHS axes of this graph are an index used to represent cumulative year on year growth.

Funding for libraries

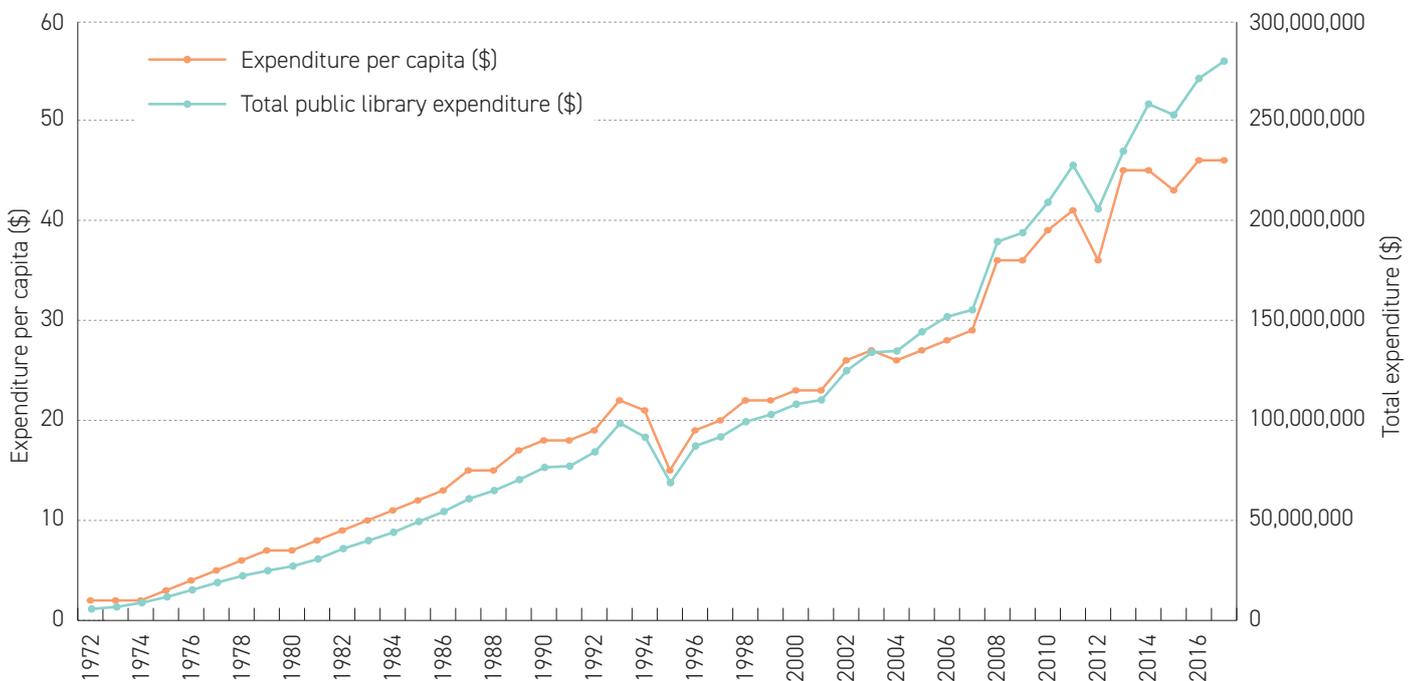
Public libraries are primarily funded by local government with state government support. In 2016–17, expenditure on public libraries in Victoria totalled \$281 million. Most of this expenditure was on recurrent operating costs, which included:

- employee costs (\$161 million or 57%)
- operating and corporate expenses (\$40 million or 14%), and
- library materials (\$33 million or 12%).

Expenditure by public libraries on capital works and depreciation was lower in comparison, at \$26 million and \$19 million respectively.

While there has been a steady increase in both total and per capita expenditure, expenditure per capita has grown at a slower rate than total expenditure in recent years. This highlights that public library expenditure has not kept pace with population growth.

Figure 3: Public library expenditure – total and per capita year on year growth



Source: PLVN Annual Statistical Survey

3. THE VALUE OF PUBLIC LIBRARIES

Why people value public libraries

The direct and indirect benefits generated by public libraries are enjoyed by both those who use libraries and those who don't.

The net value of public libraries is most commonly assessed using cost benefit analysis (CBA). CBA is the preferred tool of Australian governments for assessing whether a proposed investment is worthwhile, or if an earlier investment has been worthwhile, taking into account economic, social and environmental considerations.

The strength of CBA lies in its attempt to quantify and monetise, wherever possible, relevant costs and benefits. It then contrasts monetised costs with monetised benefits over the life of the investment using discounted cash flow analysis to ensure that future costs and benefits are directly comparable in today's dollar terms.

The table below outlines the costs and benefits of public library services and the measurement technique used for each.

Table 1: Identified costs and benefits of public library services ¹

TYPE	DESCRIPTION	MEASUREMENT TECHNIQUE	
COSTS			
Recurrent operating costs	Expenditure on library materials, staff salaries and other administrative costs	Actual costs from PLVN Annual Statistical Survey	
Recurrent capital costs	Capital maintenance to library buildings		
BENEFITS			
USE	Direct	Direct benefits to library users: <ul style="list-style-type: none"> • Access to services and programs • Access to information technology • Access to safe public space • Social interaction 	
	Indirect	Indirect benefits to library users: <ul style="list-style-type: none"> • Contribution to language and digital literacy • Complement to education services • Facilitation of career development • Contribution to community health • Improved local area amenity • Environmental savings 	User survey (travel cost method) assessing user willingness to pay ⁴
NON-USE	Option	Preservation of option for future use	Household survey (contingent valuation) assessing non-user willingness to pay ⁵
	Existence	Perceived value and significance to the community	
	Legacy	Value of preservation for future generations	

⁴ Parameters derived from the *Dollars, Sense and Public Libraries* (2011) survey of 1380 users have been updated and applied to current user populations.

⁵ Parameters derived from the *Dollars, Sense and Public Libraries* (2011) survey of 1050 non-user households have been updated and applied to current non-user populations.

The benefits of public libraries outweigh their costs four times over.

Direct user benefits

Investment in public libraries provides direct benefits to the people who use and value these services.

At their local library, people are able to access free or low-cost programs and services, including information technology, that they might not be able to afford if they had to pay retail prices. They are able to do this in a space that is safe, welcoming and non-judgemental.

Public libraries are neighbourhood and community hubs that welcome all community members and enable people to meet and exchange ideas and information.

Indirect user benefits

Library programs and services also generate a range of indirect benefits. The emphasis of library programs on life-long learning supports and contributes to language and digital literacy, and complements other educational opportunities available to community members. Access to information technology, literacy-based programs and job search activities contributes to employment opportunities, while access to health information contributes to positive community health outcomes.

It has long been acknowledged that public libraries can strengthen communities by improving the physical attractiveness of an area while also creating a sense of place within the local community. This can contribute to the overall social cohesion and wellbeing of a community.

Library materials, unlike items that are privately owned, can be borrowed and used multiple times, making libraries less resource-intensive and more environmentally friendly and sustainable than private ownership.

Non-user benefits

People who do not use libraries value public library services even though they do not experience direct and indirect user benefits. They value the services because they know that while they do not currently use the library, they can in the future, and if library services were discontinued, they would feel a quantifiable loss.

Those who do not use public libraries appreciate that other community members benefit from library services and programs and, in essence, are willing to pay for this. Individuals and communities value maintaining public libraries so that future generations might benefit from their existence. This cultural and historical legacy stems from a feeling of obligation and responsibility towards future generations, particularly in relation to places that have perceived community value and meet community needs.

Costing public libraries

The costs of public library services include recurrent operating and capital costs involved in the delivery of library services. These include:

- **recurrent operating costs**, including expenditure on library materials, staff salaries and other administrative costs
- **recurrent capital costs**, including ongoing capital maintenance to library buildings, acknowledging that capital development works sunk in previous years cannot be recaptured, and are excluded.

Measuring the benefits of public libraries

Measuring the benefits of public libraries is not as straightforward as measuring the costs, because they are not traded in the market place as they are public goods, largely provided free of charge. Consequently, market prices do not exist for these benefits.

Non-market valuation techniques can be used to measure the benefits of public libraries, and these provide a range for the likely magnitude of benefits. These techniques include:

- **travel costs** – this method estimates the value of time, cost and effort that library users incur using public library services. In essence this method assumes that the value derived by users must outweigh the costs incurred, otherwise users wouldn't make the visit.
- **financial savings** – this method values the services offered by public libraries by asking users to estimate the costs they would incur if similar services were provided by substitute private-sector providers.
- **contingent valuation** – this method asks library non-users how much they would be willing to pay to keep public library services on offer in their respective communities.

Significant primary research was conducted for the previous study *Dollars, Sense and Public Libraries*⁶, including a survey of Victorian non-using households (1050 households) and surveys at seven case-study library services across Victoria (1380 users). Site visits and interviews were also undertaken to help interpret the case-study findings.

The 2011 report used all three valuation techniques to measure the value of public libraries. The results generated were within a reasonable range, and in each case-study location the travel cost method produced the midpoint result for user benefits.

This update uses only the travel cost method to quantify the user benefits of public libraries in Victoria and continues the contingent valuation method for non-user benefits.

In employing the travel cost method, each public library service was aligned with a representative case-study. Principal Component Analysis was used to identify variables that were most significant in explaining the differences in public library services and their communities. These were:

- public library size (operating expenditure)
- age profile, and
- household structures and relationships.

Consequently, these variables were used to select the most representative case-study for each public library service.

Further details of the travel cost methodology are shown in Appendix 1.

⁶ *Dollars, Sense and Public Libraries* (2011) – *The landmark study of the socio-economic value of Victorian public libraries*, Technical Report.

An excellent return on public library investment

Table 2 presents the results of the cost benefit analysis at a state-wide level, and for Greater Melbourne and regional Victoria. Public libraries in Victoria generated \$1.1 billion of benefits in 2016–17. After accounting for the costs of operating public libraries, the net community welfare contribution is estimated at \$847 million. This equates to \$140 per capita per year in net community benefits from public libraries.

A benefit cost ratio (BCR) compares the estimated benefits to the costs to determine the level of return. If the ratio is above 1, the benefits outweigh the costs. The BCR for all of Victoria was 4.3, which says that for every dollar invested in public libraries in Victoria, \$4.30 of benefits were generated for the community.

The costs and benefits vary across each public library service, as does the benefit cost ratio. The BCR for each public library service ranges between 2.7 and 6.5. The results for each library service can be explored through the online tool, as described in Chapter 6.

Table 2: Cost benefit analysis results (2016–17)

	GREATER MELBOURNE	REGIONAL VICTORIA	VICTORIA
Costs	\$188.5 million	\$65.8 million	\$254.3 million
Benefits			
User benefits	\$588.6 million	\$175.8 million	\$764.4 million
Non-user benefits	\$254.5 million	\$83.4 million	\$337.9 million
Total benefits	\$843.1 million	\$259.2 million	\$1102 million
Benefit cost ratio (BCR)	4.5	3.9	4.3
Net benefits (benefits minus costs)	\$654.6 million	\$193.4 million	\$848.0 million
Net Benefits per capita	\$143	\$129	\$140

Source: SGS Economics and Planning based on PLVN Annual Statistical Survey

4. ECONOMIC IMPACT OF PUBLIC LIBRARIES

Public libraries generate economic activity through their operating expenditures and through triggering spending by library users.

Public libraries generate economic activity both from their own expenditure, and from the expenditures that library users make as a result of their library use. The economic activity generated is measured in terms of the local value generated in the economy (gross regional product) and the local employment supported (full time equivalent jobs).

Economic impact assessment (EIA) is a tool used to trace how public library service expenditures trigger other transactions in the local economy, and accumulate through multiple rounds of buyer-supplier transactions. EIA is distinct from cost benefit analysis (CBA) because it only looks at the economic impacts, rather than assessing whether public libraries provide a net benefit to the community. The independent results of EIA and CBA should not be added together.

How the economic impact is calculated

For the economic impact analysis, SGS used the Cadence Economics computable general equilibrium (CGE) model. CGE modelling is superior to input-output modelling, which was used in the 2011 study, because CGE modelling accounts for:

- underutilised capacity in the regional economy
- price, competition and crowding out effects, and
- dynamic relationships between and within industries (for example productivity).

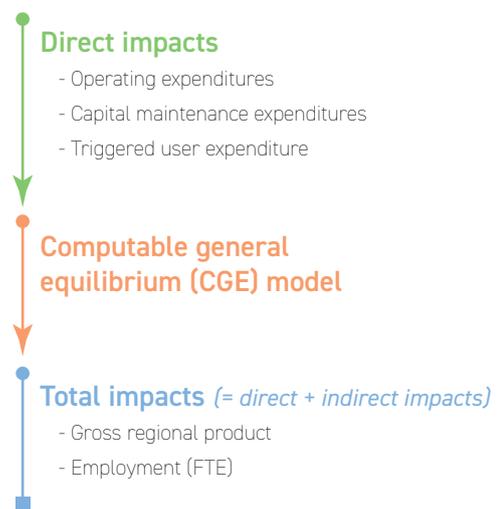
The direct impact of public libraries, as measured by the economic stimulus generated, is used to 'shock' the CGE model, which then estimates the indirect impacts on the economy. The economic stimulus includes:

- public library services' operating and capital maintenance expenditures
- spending triggered by public library users (\$ per user sourced from 2011 study and inflated to 2017 dollars).

The diagram in Figure 4 provides an overview of how the model works. The two key outputs from the modelling are the impacts on employment and gross regional product (GRP). GRP is a commonly used measure of the value created in an economy (that is, the total income minus the input supplies of goods and services).

The economic activity generated by public libraries in Victoria generates or supports employment beyond libraries. In other words, libraries not only create jobs directly by employing staff, but also generate economic activity that leads to further employment. This employment is articulated via fulltime equivalent (FTE) job estimates in the results. Further details of the EIA method can be found in Appendix 2.

Figure 4: Economic impact assessment method



Source: SGS Economics and Planning

What the results of the economic impact assessment say

Table 3 presents the results of the economic impact assessment for Victoria, Greater Melbourne and regional Victoria. Economic activity generated by public libraries equates to \$328 million in gross regional product per year. Almost 80% of this economic activity is generated in Greater Melbourne (\$255 million per year).

Public libraries directly employ approximately 1800 FTE staff. The economic activity generated by this employment supports an additional 500 jobs in the Victorian economy. The total impact on employment is 2300 jobs across Victoria.

The economic impacts vary across each public library service. Library services that have low operating expenditures and lower visitation levels, and are situated in less developed or expansive local economies have a smaller impact on the economy than larger library services with high visitation in well developed and expansive local economies.

The results for each library service can be explored through the online tool, as described in Chapter 6.

Table 3: Economic impacts of public libraries (2016–17)

SOURCE OF STIMULUS	GREATER MELBOURNE	REGIONAL VICTORIA	VICTORIA
Gross Regional Product	\$255 million	\$73 million	\$328 million
Employment (FTE)			
Direct	1300	500	1800
Indirect	400	100	500
Total Employment	1700	600	2300

Source: SGS Economics and Planning, Cadence Economics, 2018.

5. MORE FUNDING FOR LIBRARIES

Funding versus visitation

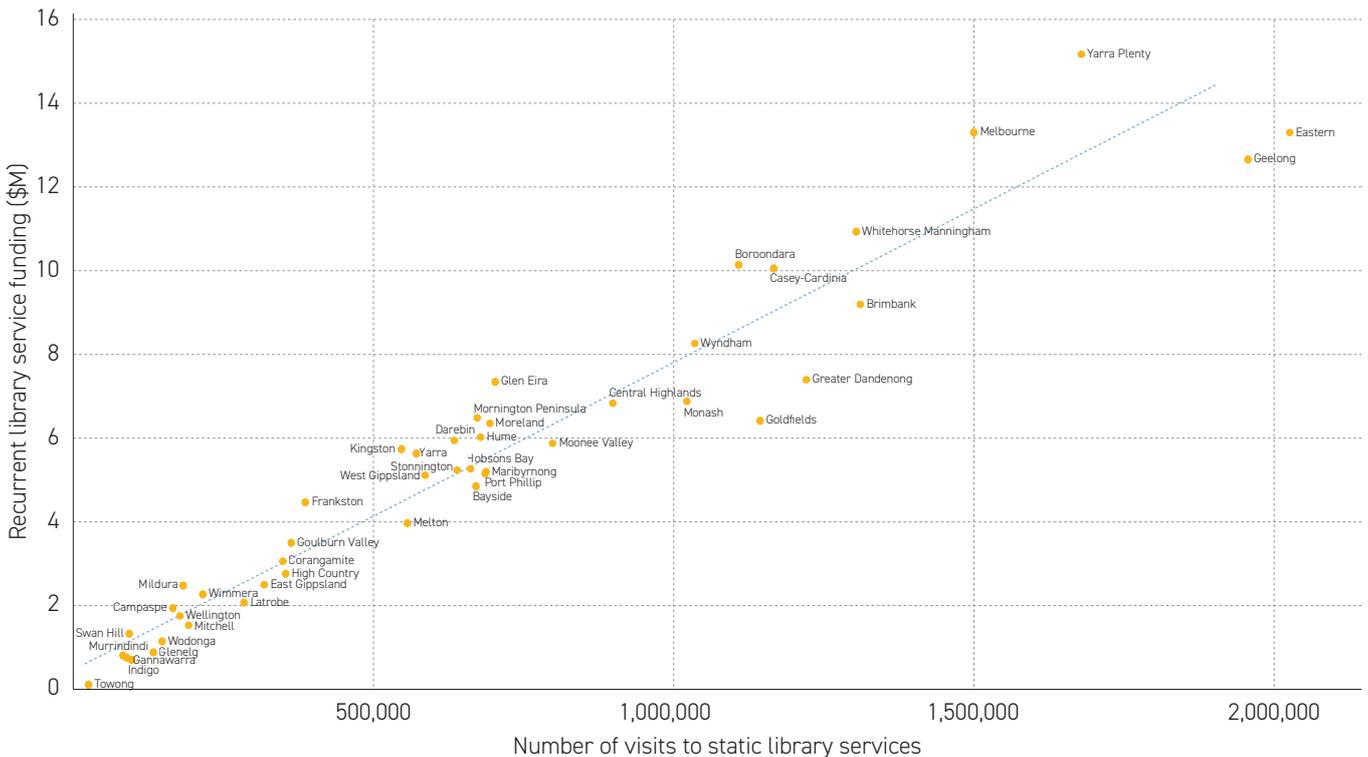
There is a strong positive relationship between recurrent library funding and library visitation, as illustrated in Figure 5. This suggests that the more funding a public library receives, the more likely people are to visit.

It is difficult to determine whether more funding causes more visits or whether a library with more visits attracts more funding. Additionally, greater recurrent funding may also reflect a broader population catchment, as is the case for some regional library corporations.

Nonetheless, greater funding allows library services to expand their service levels (collections, programs and staff assistance) and upgrade facilities, enabling them to attract and accommodate a greater number of visitors.

Additional funding for public libraries has close to zero risk of generating diminishing returns for the Victorian community.

Figure 5: Recurrent library service funding versus library visitation (2016–17)



Source: PLVN Annual Statistical Survey



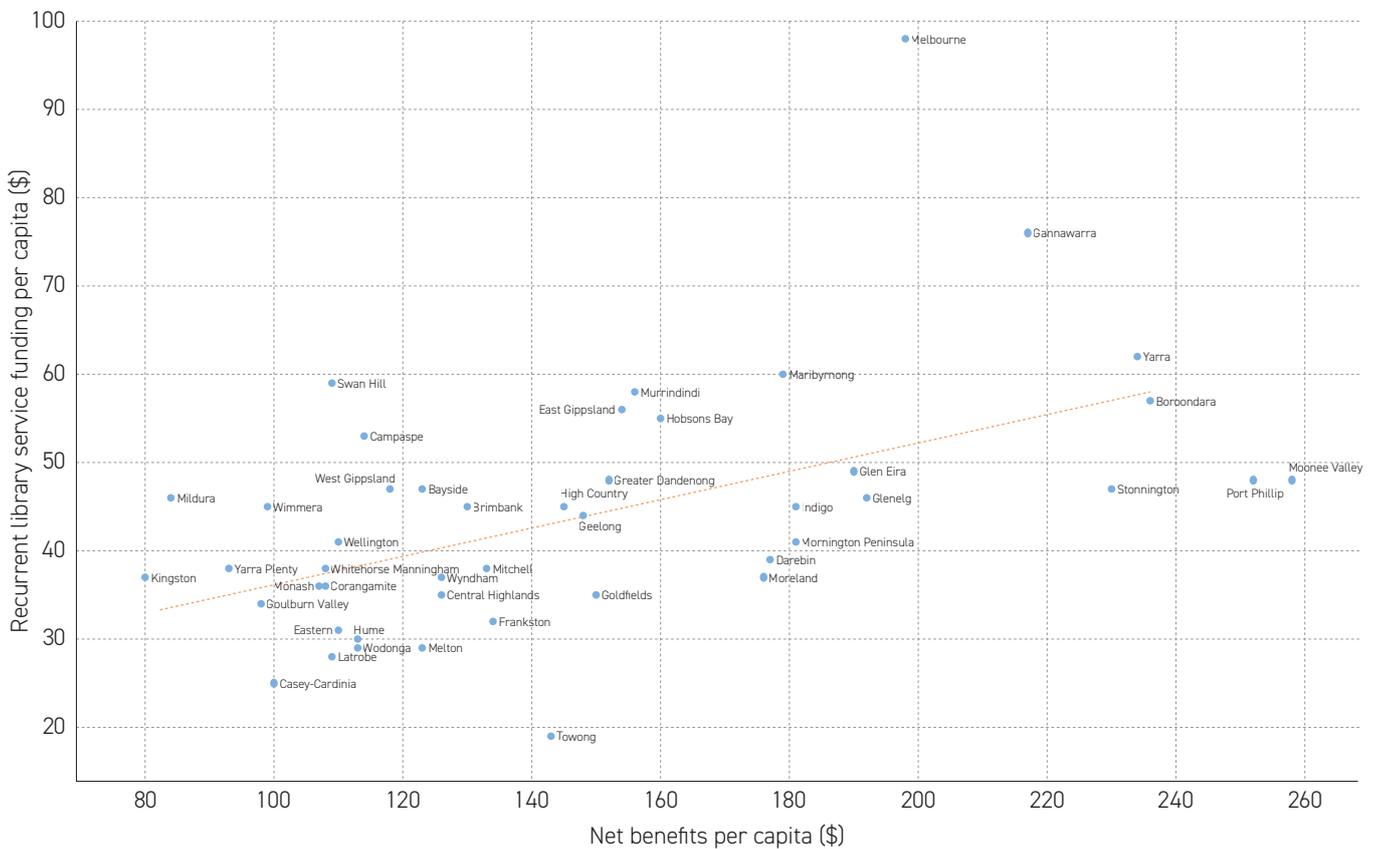
Funding versus net benefits

Figure 6 shows the relationship between total library funding per capita and the estimated net benefits per capita for each public library service in Victoria (in 2016–17). There is a positive relationship between recurrent library funding per capita and the net benefits per capita. This indicates that if funding per capita increases, the net benefits per capita generated by the library service in question will also increase. While there is significant variation across the public library services, the pattern of increasing returns is clear.

Additional funding per capita allows libraries to generate greater net benefits, without diminishing returns. Every dollar invested in public libraries generates benefits, and these do not appear to have a cap or begin to decrease after a threshold is reached.

For the significant social and economic benefits of public library services to continue, government funding is vital, and strong arguments for increasing the rates of funding clearly exist.

Figure 6: Recurrent library service funding per capita versus net benefits per capita (2016–17)



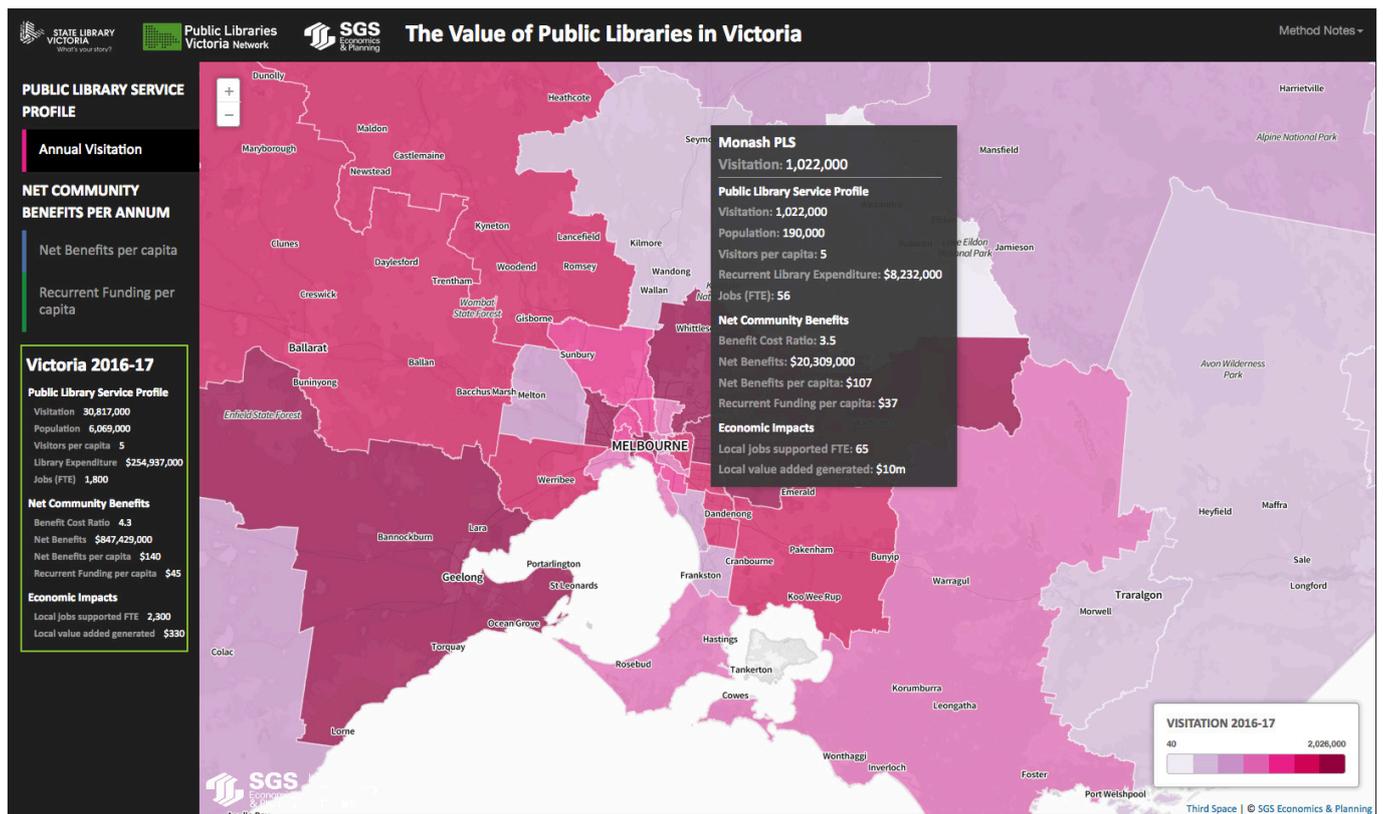
Source: PLVN Annual Statistical Survey and SGS Economics and Planning

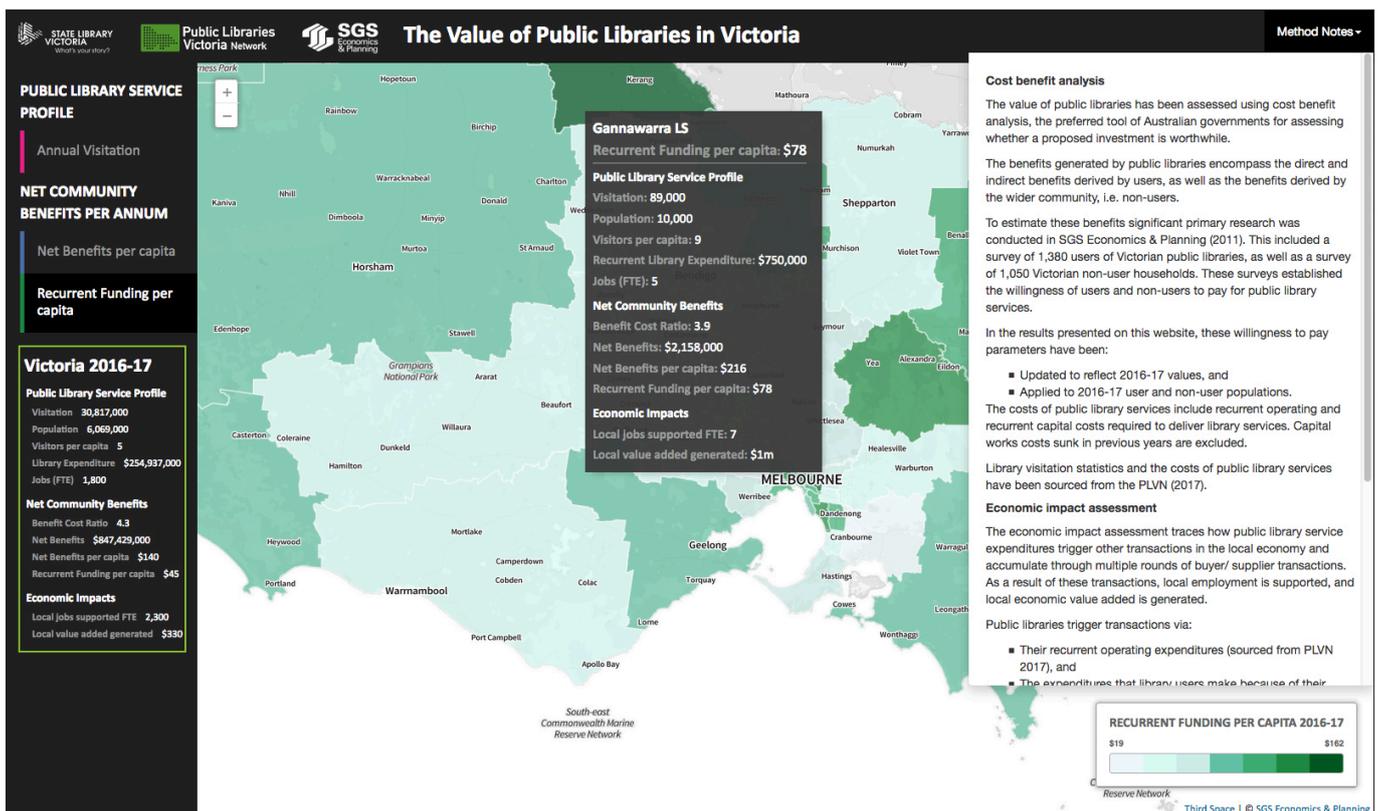
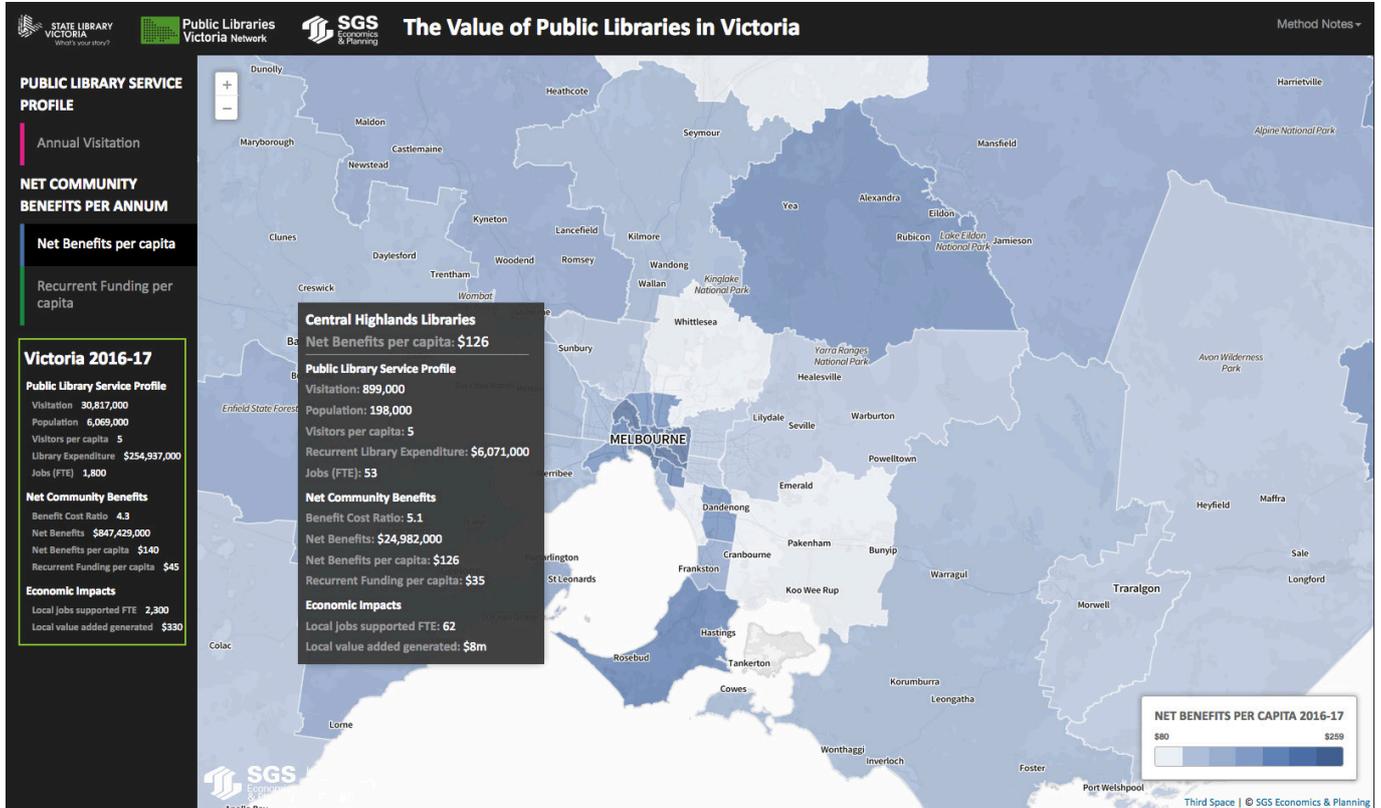


6. ONLINE INTERFACE

This section provides an overview of the online interface developed for public libraries across Victoria, and a guide for users.

The online tool is widely accessible and allows users to examine the levels of visitation and funding for each public library service across Victoria, in addition to the results of the cost benefit analysis and economic impact assessment. Screenshots of the tool are provided below. The tool can be accessed at sgsep.com.au/maps/2018/victoria-value-of-public-libraries/





APPENDICES

Appendix 1: Cost benefit analysis – travel cost method

Figure 7 presents an overview of the travel cost method used to estimate the user benefits in the cost benefit analysis, and highlights its key inputs and underlying assumptions.

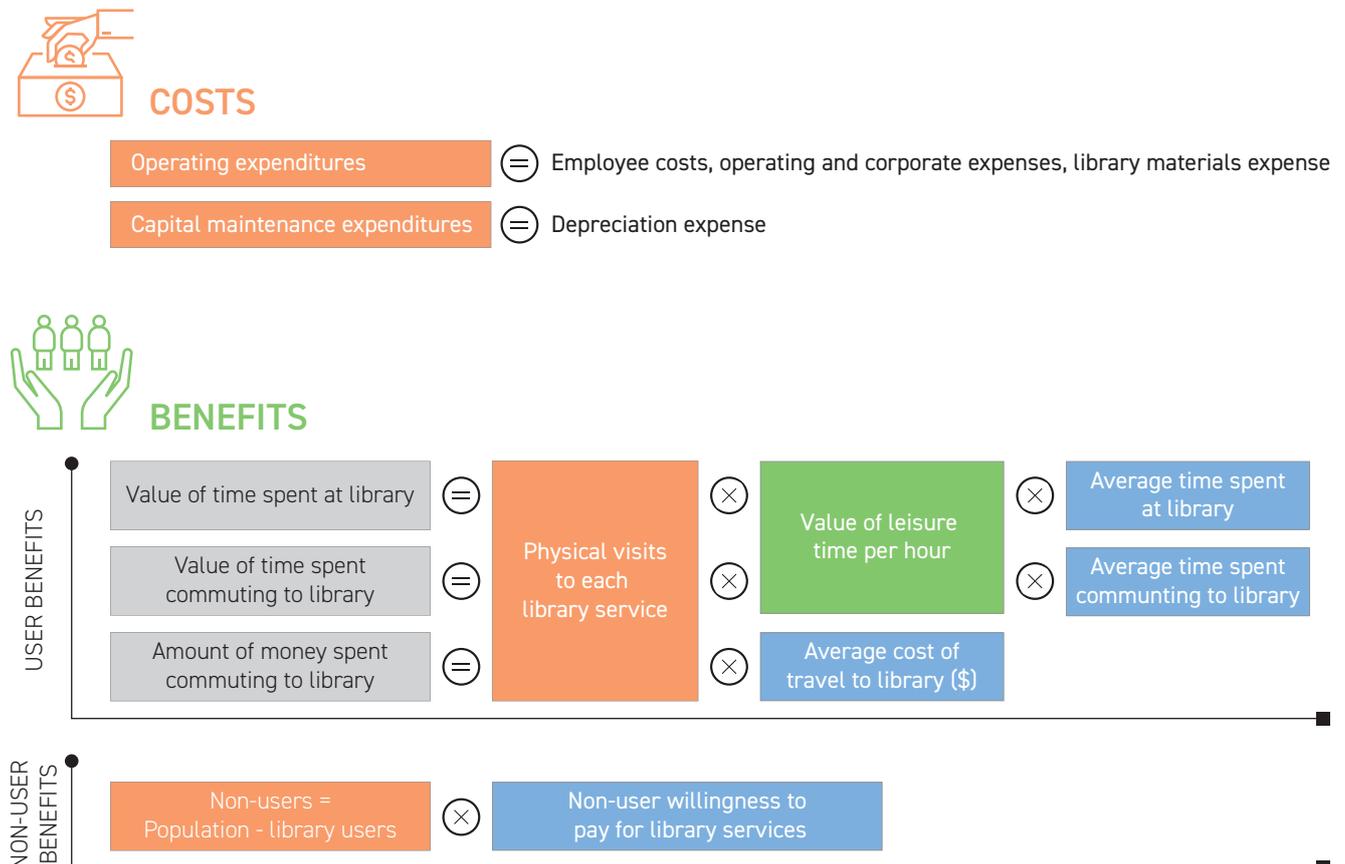
From the previous user survey conducted for the seven case-study libraries, we have adopted:

- Travel distance (between 4.3 km and 10.7 km)
- Mode of travel (percentage by car, bus, train, tram, walk, other)
- Average time spent at the library (between 28 and 61 minutes per visit)
- Average cost of travel to the library (between \$0.50 and \$1.30 per visit), once multiple destinations are accounted for.

Assumptions from the 2011 study that have been updated include these:

- Value of leisure time of library users (\$15 per hour in 2017 dollars – sourced from ATAP guidelines)
- Non-user willingness to pay for library services (\$66 per user in 2017 dollars – sourced from 2011 household survey)
- Average speeds to estimate time spent travelling to libraries (car 50 km/h, bus and train 30 km/h, tram 20 km/h, walking 4 km/h).

Figure 7: Travel cost method



Appendix 2: Economic impact assessment method

The modelling framework

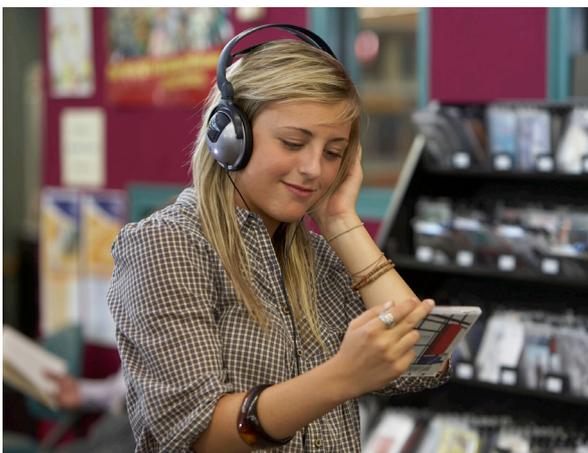
Computable general equilibrium (CGE) models are the framework of choice for measuring the economic impact of major investments and development projects.

The model used to assess the economic impacts of public libraries is Cadence Economics' in-house CGE model, CEGEM (Cadence Economics General Equilibrium Model), which is a multi-region, multi-sector representation of both the Greater Melbourne and Regional Victorian economies.

The model allows analysis of large-scale investments in a single, robust, integrated economic framework. This model projects changes in macroeconomic aggregates such as gross regional product (GRP), gross regional income (GRI), investment, employment, and real wages increases as the result of public libraries' operations.

Like all economic models, CEGEM is based on a range of assumptions, parameters and data that constitute an approximation of the working structure of an economy. Its construction draws on the key features of other economic models, including GTAP (the Global Trade Analysis Project), GTEM (the Global Trade and Environmental Model), MMRF (Monash Multi-Regional Forecasting) and TERM-Australia.

CEGEM is a dynamic model that solves year-on-year over a specified timeframe. The model is then used to project the relationship between variables under different scenarios, or states, over this period. The modelling task therefore involves undertaking a business-as-usual scenario (no policy change), and comparing this with the policy change scenarios.



Appendix 3: Cost benefit analysis results per library service

Table 4: Public library service cost benefit analysis results

LIBRARY SERVICE	COSTS \$M	USER BENEFITS \$M	NON-USER BENEFITS \$M	TOTAL BENEFITS \$M	NET BENEFITS \$M	NET BENEFITS PER CAPITA \$	BENEFIT COST RATIO (BCR)
Bayside	4.7	5.3	12.0	17.3	12.6	\$123	3.7
Boroondara	10.1	9.2	42.7	51.9	41.7	\$236	5.1
Brimbank	8.3	11.3	23.4	34.7	26.4	\$130	4.2
Campaspe	2.2	2.0	4.4	6.4	4.2	\$113	2.9
Casey-Cardinia*	9.8	23.8	25.8	49.7	39.8	\$100	5.0
Central Highlands	6.1	11.4	19.6	31.1	25.0	\$126	5.1
Corangamite	3.3	4.9	7.7	12.6	9.3	\$108	3.8
Darebin*	6.0	8.7	24.5	33.1	27.2	\$176	5.6
Eastern*	14.2	24.5	36.1	60.7	46.4	\$110	4.3
East Gippsland	2.5	2.3	7.0	9.4	6.9	\$153	3.8
Frankston	4.5	7.9	14.9	22.8	18.3	\$134	5.1
Gannawarra*	0.8	0.5	2.4	2.9	2.2	\$216	3.9
Geelong*	15.5	15.6	42.7	58.2	42.7	\$147	3.8
Glen Eira	7.1	8.3	27.1	35.4	28.2	\$189	4.9
Glenelg	0.9	1.0	3.5	4.5	3.6	\$192	5.1
Goldfields	7.8	10.2	25.0	35.2	27.4	\$150	4.5
Goulburn Valley	3.8	5.9	8.0	13.9	10.1	\$99	3.6
Greater Dandenong	7.2	9.0	21.8	30.8	23.6	\$151	4.3
High Country	2.2	3.3	7.8	11.1	8.9	\$146	5.0
Hobsons Bay	5.1	5.1	15.2	20.3	15.2	\$160	4.0
Hume	4.8	12.0	15.6	27.5	22.7	\$113	5.8
Indigo	0.6	0.9	2.6	3.4	2.8	\$176	5.6
Kingston	5.7	8.6	9.8	18.3	12.6	\$80	3.2
Latrobe*	2.6	4.3	6.3	10.6	8.0	\$109	4.1
Maribyrnong	5.2	4.7	15.7	20.4	15.3	\$179	4.0

LIBRARY SERVICE	COSTS \$M	USER BENEFITS \$M	NON-USER BENEFITS \$M	TOTAL BENEFITS \$M	NET BENEFITS \$M	NET BENEFITS PER CAPITA \$	BENEFIT COST RATIO (BCR)
Melbourne	13.3	6.0	34.4	40.3	27.0	\$199	3.0
Melton	4.0	8.2	12.8	21.0	17.0	\$123	5.3
Mildura	2.7	3.1	4.0	7.1	4.5	\$84	2.7
Mitchell	1.4	2.4	4.4	6.8	5.4	\$132	4.9
Monash	8.2	10.3	18.2	28.5	20.3	\$107	3.5
Moonee Valley	5.9	6.5	30.8	37.3	31.4	\$258	6.4
Moreland	6.4	9.6	26.7	36.3	30.0	\$175	5.7
Mornington Peninsula	5.9	8.4	25.9	34.3	28.4	\$181	5.8
Murrindindi	0.8	0.7	2.2	2.9	2.2	\$154	3.8
Port Phillip	5.0	5.8	26.5	32.3	27.4	\$253	6.5
Stonnington	5.2	6.1	24.6	30.7	25.5	\$229	5.9
Swan Hill	1.3	1.3	2.5	3.8	2.5	\$108	2.9
Towong	0.2	0.3	0.7	1.0	0.8	\$139	5.5
Wellington	1.7	2.4	3.9	6.3	4.6	\$110	3.7
West Gippsland	5.6	5.6	13.0	18.5	12.9	\$118	3.3
Whitehorse Manningham	13.5	16.3	28.4	44.7	31.2	\$108	3.3
Wimmera	2.7	3.0	4.8	7.7	5.0	\$99	2.9
Wodonga	1.1	2.3	3.3	5.6	4.5	\$114	5.0
Wyndham*	8.3	12.6	23.7	36.4	28.1	\$126	4.4
Yarra	5.7	5.0	22.0	27.0	21.3	\$234	4.8
Yarra Plenty	14.6	21.4	30.0	51.4	36.7	\$93	3.5
Greater Melbourne	188.5	254.5	588.6	843.1	654.6	\$143	4.5
Rest of Victoria	65.8	83.5	175.8	259.2	193.4	\$129	3.9
Victoria	254.3	338.0	764.4	1102.4	848.0	\$140	4.3

Source: SGS Economics and Planning using PLVN Annual Statistical Survey 2016-17

* Case-study library services on which the travel cost methodology is tested.

Appendix 4: Economic impact analysis results per library service

Table 5: Public library service economic impacts

LIBRARY SERVICE	GROSS REGIONAL PRODUCT (\$ MILLION)	DIRECT EMPLOYMENT*	INDIRECT EMPLOYMENT	TOTAL EMPLOYMENT
Bayside	6.0	36	3	39
Boroondara	13.7	85	5	90
Brimbank	12.0	62	16	78
Campaspe	2.4	12	8	20
Casey-Cardinia**	14.2	80	13	93
Central Highlands	7.5	53	9	62
Corangamite	3.8	27	5	32
Darebin**	8.6	48	8	56
Eastern**	17.8	92	24	116
East Gippsland	2.7	14	9	23
Frankston	6.4	34	9	42
Gannawarra**	0.8	5	2	7
Geelong**	16.3	97	38	135
Glen Eira	10.3	39	29	68
Glenelg	1.1	5	4	9
Goldfields	7.9	52	14	65
Goulburn Valley	4.3	27	9	35
Greater Dandenong	10.4	54	14	68
High Country	2.8	15	8	23
Hobsons Bay	7.3	42	6	48
Hume	6.9	42	3	45
Indigo	0.7	6	0	6
Kingston	8.3	48	6	54
Latrobe**	2.9	17	7	24
Maribyrnong	6.6	33	10	43

LIBRARY SERVICE	GROSS REGIONAL PRODUCT (\$ MILLION)	DIRECT EMPLOYMENT*	INDIRECT EMPLOYMENT	TOTAL EMPLOYMENT
Melbourne	16.2	77	30	106
Melton	5.7	29	9	38
Mildura	3.1	24	1	25
Mitchell	1.4	15	0	15
Monash	9.9	56	9	65
Moonee Valley	8.5	44	12	56
Moreland	9.2	50	10	60
Mornington Peninsula	6.8	38	6	45
Murrindindi	1.0	5	3	8
Port Phillip	7.2	43	4	47
Stonnington	7.6	39	11	50
Swan Hill	1.5	8	4	13
Towong	0.2	2	0	2
Wellington	1.9	14	1	15
West Gippsland	6.3	40	11	52
Whitehorse Manningham	17.0	70	41	111
Wimmera	3.1	14	11	26
Wodonga	1.4	8	3	12
Wyndham**	11.9	62	16	78
Yarra	8.2	47	7	54
Yarra Plenty	18.3	92	27	120
Greater Melbourne	255.0	1300	400	1700
Rest of Victoria	73.1	500	100	600
Victoria	328.1	1800	500	2300

Source: SGS Economics and Planning using PLVN Annual Statistical Survey 2016-17

Note: Totals have been rounded.

* All employment numbers refer to full time equivalent jobs.

** Case-study library services on which the travel cost methodology is tested.

