



# **Review of Regional Library Agreement**

**October 2015**



**I & J Management Services**

# Yarra Plenty Regional Library Review of Regional Library Agreement

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## EXECUTIVE SUMMARY

Yarra Plenty Regional Library (YPRL) is one of Victoria's best performed public libraries – delivering high quality contemporary library services to Banyule, Nillumbik and Whittlesea residents at a cost per capita level close to the statewide average.

The Regional Library Agreement between Banyule, Nillumbik and Whittlesea Councils is required to be reviewed every five years. The 2015 review of the Regional Library Agreement took a principles-based approach, with the aim of ensuring that the cost apportionment model that determines the annual financial contribution of each Council to the library is **transparent, fair and equitable**.

### A user pays model

The model comprises five steps, each of which has varying levels of complexity.

- Step 1 Calculate the cost of each library branch (using cost drivers such as collection size, number of staff and number of PCs)
- Step 2 Apportion branch costs to member Councils by their residents' share of use of each branch
- Step 3 Sum usage costs across all branches for each Council
- Step 4 Add in Mobile, Outreach and other costs
- Step 5 Allocate and deduct the State Government Grant and direct income as a proportion of overall usage.

The YPRL cost apportionment methodology is a user pays model. In apportioning costs and revenues at branch and Council level, **the model explicitly charges each Council for their residents' use of the library** (not the cost of each Council providing library services to its residents). YPRL's cost apportionment model is perhaps the most sophisticated model currently in use among Victoria's regional library corporations.

### Review findings

The 2015 review of the YPRL Regional Library Agreement addressed a number of issues which have emerged with the application of the cost apportionment model over the last five years. Among the review findings and consequent recommendations there are four key points.

1. The population-based **State Government Grant** to support Councils in providing library services should be **credited back to each Council** to offset their cost of using library services. This recommendation would return the model to its pre-2010 state and is consistent with the recommendations of the independent review of the Regional Library Agreement in 2010. The current model pools the total amount received by the three member Councils and reallocates this on the basis of usage (i.e. library loans).
2. The model should adopt a **wider definition of library usage** in allocating costs and income. The current model uses loans of physical collection items as the sole measure of library usage. This ignores the broader range of services offered by a modern library (including literacy programs and cultural activities, technology access, a place to study and relax, digital collections) – services that are highly valued and regularly used by different cohorts of the population.
3. Calculating usage over a three year period would **smooth out year on year variations** that affect member Councils' ability to budget for a predictable cost of using library services.

4. The allocation of \$3.2 million in **library management, support and administration** (22% of total regional library costs is currently split equally between branches) can be improved by:
- reallocating \$1.3 million to cost centres that already exist within the model (i.e. collections, technology, community engagement and organisational development)
  - evenly sharing the \$0.6 million cost of regionally focused executive and strategic management functions that benefit the member Councils equally
  - allocating the remaining \$1.3 million equally between the nine library branches.

### Financial impact

The net effect of adopting all of the recommendations from the 2015 review in the 2015-16 cost apportionment model would have been to:

- increase Banyule's contribution by \$104k (an increase of 2.4%)
- increase Nillumbik's contribution by \$254k (+ 10.2%)
- decrease Whittlesea's contribution by \$358k (- 7.3%).

Item	\$000	Banyule	Nillumbik	Whittlesea	Total
Current 2015-16 contribution		\$4,395	\$2,499	\$4,934	\$11,828
Adoption of all recommendations		\$4,499	\$2,753	\$4,576	\$11,828
<b>Change in total contribution</b>		<b>\$104</b>	<b>\$254</b>	<b>(\$358)</b>	<b>\$0</b>
% impact on total contribution		+ 2.4%	+ 10.2%	- 7.3%	

By far the major recommendation (in financial terms) is the revised treatment of the State Government Grant, which accounts for \$304k of the total \$358k movement in contributions. The recommended approach addresses what is seen to be an inequity that has existed in the cost apportionment model for the past five years, whereby more than \$1 million of the State Government Grant money allocated to Whittlesea on the basis of its population characteristics (including equity weightings) has been reallocated through the cost apportionment model to Banyule and Nillumbik due to their relatively higher levels of library loans (although they do not have higher levels of use of other library services). The simplest and fairest method of allocating the State Government Grant is to return to each Council the amount calculated by the State Government.

The adoption of the remaining recommendations related to the definition and calculation of library use, and the allocation of administration and related regional costs will improve the integrity of the model (albeit also adding some additional complexity). These will have an additional net financial impact of \$54k across the three member Councils.

## 1. INTRODUCTION

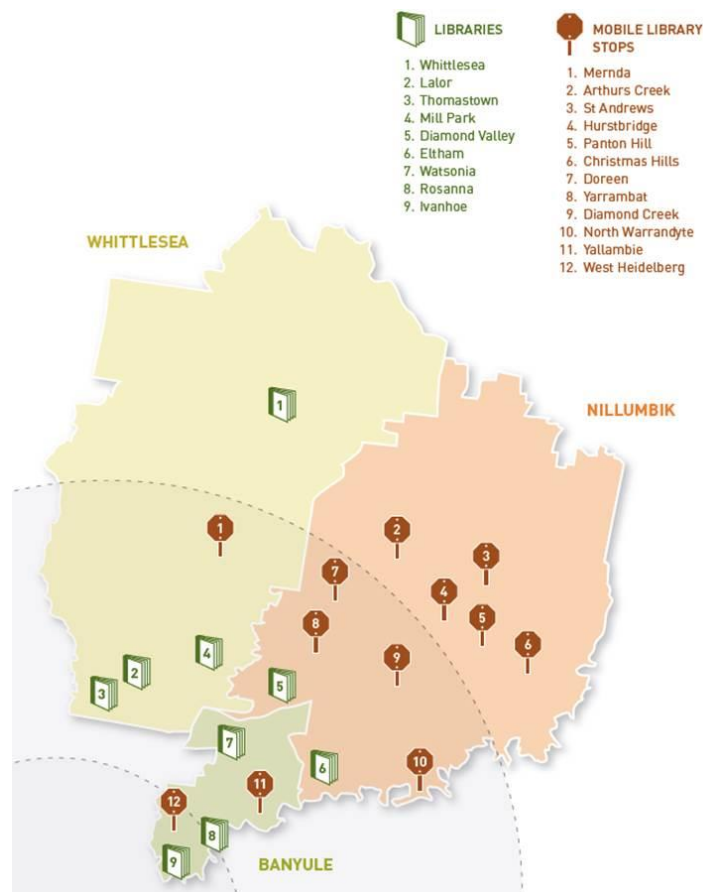
### 1.1. Yarra Plenty Regional Library

One of Australia's largest and most progressive library systems, Yarra Plenty Regional Library (YPRL) was founded in the mid-1960s, when the former City of Heidelberg agreed to provide library services to the former Shire of Eltham. Later the former Shire of Diamond Valley and the Shire of Whittlesea joined the regional group.

In 1995, following changes in local government boundaries, the new municipalities of Banyule, Nillumbik and Whittlesea continued their support for the regional library service and YPRL was one of the first regions incorporated under Section 196 of the Victorian Local Government Act 1989.

YPRL provides library services through:

- nine branch libraries located in three Local Government Areas (LGAs)
- three mobile libraries (a Mobile Library, Outreach Vehicle and Reading Rover)
- a home library service.



YPRL is coordinated from Library Support Services (LSS) located at the Civic Centre in South Morang, and also provides selected services to Murrindindi Library Service.

The library service covers an area of 983 square kilometres and includes metropolitan, urban fringe and rural areas. It services a population of 366,460 of whom 141,444 are members. The library has around 160 staff (92 EFT) and a 2015-16 budget of \$14.8 million.

## 1.2. Regional Library Agreement

Banyule, Nillumbik and Whittlesea Councils are parties to An Agreement To Form Yarra Plenty Regional Library Service, made on 14 December, 1995 (the Primary Agreement). Clause 14.1 of the Primary Agreement requires that the parties and the Board of the Yarra Plenty Regional Library review the operation of the Primary Agreement at least once in every five years. The Primary Agreement was last reviewed in 2010.

It is critical to YPRL's ongoing operations that revenues and costs are apportioned between the three member Councils in a fair and equitable manner. Such apportionment is guided by the Regional Library Agreement. The application of the agreed guidelines is administered by YPRL in a transparent manner through a series of cost apportionment tables to determine the annual financial contribution payable by each member Council.

The comprehensive 2010 review of the Regional Library Agreement included three reports by two consultants and a mediation process conducted as per the Agreement. The result of this review was a much more detailed methodology to assign library costs, and the reapportionment of the State Government operating grant according to usage.

In concluding the 2010 review the parties determined to amend the Primary Agreement with a Supplemental Agreement, the main item of which referred to the revised method of apportioning income and expenditure to member Councils.

## 1.3. Issues with the current apportionment methodology

Over the past five years a number of issues with YPRL's income and expenditure apportionment methodology have emerged. These include:

1. The methodology is complicated and difficult to understand.
2. The allocation of the State Government operating grant (as per the usage formula defined in the Supplemental Agreement) has been previously disputed by the City of Whittlesea.
3. The usage measure (circulation) is becoming a less important part of modern library services and does not take into account other use of library branches (e.g. visiting the library, attendance at library programs and activities, using PCs and wifi in the library).
4. When the current measures were introduced, there was more uniformity of branch size. There is now a small library (Whittlesea) which assumes the apportioned cost of administration and community engagement equally with the largest branches.
5. Small changes to usage can impact significantly on the annual cost to a member Council as it affects both expenditure and income.

With the anticipated introduction of local government rate capping in 2016-17 the expectation is that Regional Library expenditure will be contained to the nominated figure being used by Local Government Victoria. While this may be achieved, individual Council contributions could have a large variation. For example in the draft 2015-16 budget overall costs increased by 3.44%. Total contributions from member Councils increased 4.11% (to offset a reduced proportion of income via State Government funding). However, due to volatility in usage the amounts allocated to each member Council included:

- an increase for Banyule of 4.77% (vs 2.98% in the previous year)
- an increase for Nillumbik of 9.75% (vs -0.20% in the previous year)
- an increase for Whittlesea of 0.92% (vs 12.74% in the previous year).

## **1.4. Review of the Regional Library Agreement**

In line with its periodic review obligations, YPRL sought to review the Regional Library Agreement. Analysis of the current Agreement ensures:

- that it fairly captures the actual costs of each component of the library service (i.e. collections, IT, community engagement, mobile libraries, HR, administration)
- that it fairly captures direct (e.g. staff, utilities, other direct costs) and indirect costs (e.g. administration) for each branch
- that costs are transparently and fairly apportioned according to usage (ensuring that if one member Council has heavy usage of a branch they are sharing the cost).

The review involved consultation with relevant stakeholders including Library Board members, member Council CEOs and Directors, YPRL EMT members. A written report, providing any recommendations for improvement to the apportionment methodology identified through the review, will assist Board members to decide whether there should be changes to the content of the Regional Library Agreement 2015-2020.

I & J Management Services was engaged to undertake the 2015 review of the YPRL Regional Library Agreement.

## 2. THE COST APPORTIONMENT METHODOLOGY

### 2.1. Supplemental Agreement 2010

The Regional Library Agreement Supplemental Agreement 2010, Annexure A sets out the following methodology for assigning expenditure and income to each member Council.

#### A. Expenditures

*Each Council's annual financial contribution will be established:*

- *First, by forecasting the expenditures to be made in respect of each Branch Library on the basis defined below, and*
- *Second, by allocating to Councils the forecast expenditures of each Branch Library on the basis defined below:*

*(1) The following expenditures will be attributed to each Branch Library.*

*a) Direct expenditures made in respect of each Branch Library.*

*b) Indirect expenditures will be apportioned to Branch Libraries on the following basis:*

- i) Collection costs (excluding salaries of Library Support Staff ("LSS") staff) are allocated in the proportion which the Collection Size of each Branch Library bears to the total Collection size of all Branch Libraries in the region collectively comprising the municipal districts of Banyule, Nillumbik and Whittlesea ("the region").*
- ii) Computer expenditure (including all capital and operational expense related to the provision of IT services but excluding salaries of LSS staff) is allocated by the number of pcs per location*
- iii) Organisational Development expenditure (including all training, WorkCover and OH&S but excluding salaries of LSS staff) is allocated by the number of Equivalent Full Time positions per location*
- iv) Community Engagement expenditure and Branch-run courier costs (including costs of programs, activities and promotions at each branch and delivery of items across the region but excluding salaries of LSS staff) are allocated by the number of branches in each municipality*
- v) Mobile Library expenditure is allocated by the number of hours of service in each municipality*
- vi) Capital expenditure is allocated back to the relevant department and allocated accordingly*
- vii) Salaries expenditure (including all on costs) is allocated directly to the relevant location*
- viii) Administrative costs (including advertising, legal, stationery, phones and the like) which are regional expenses and salaries of LSS staff are allocated by the number of branches in the municipality.*

*(2) Forecast expenditures of each Branch Library will then be allocated to Councils in the proportion which the Loan Destination of each Branch Library bears to the total Loan Destination of all Branch Libraries in the region. For the purpose of this calculation loans to users who reside outside the region will be ignored.*



## B. Income

*Each Council's annual financial contribution will be reduced by the amount of income it receives by way of State Government library subsidies and grants; and by the amount of income forecast to be earned by Branch Libraries and the Regional Library.*

*All income from State Government library subsidies and grants received by the Regional Library with reference to a Council will be credited by reference to the proportion which the usage of each Branch Library in that Council's municipal district bears to the total usage of all Branch Libraries in the region.*

*Each Council's share of other income will reflect the extent to which the Council contributes to the cost of earning that income, and:*

*(1) If the cost of earning the income is a Direct Expenditure, then the income earned from that expenditure will be apportioned to the Branch Library in accordance with (A)(1)(a) above and will reduce the forecast expenditures of the Branch Library (income in this category includes photocopy charges, public telephone charges and merchandise sales).*

*(2) If the cost of earning the income is an Indirect Expenditure, then the income earned from that expenditure will be apportioned to Councils in the proportion which each Council contributes to that expenditure (income in this category includes overdue charges and damaged book charges).*

*(3) Interest income earned by the Regional Library will be apportioned to Councils in proportion to the forecast cash contribution to be made by each Council to the Regional Library.*

## 2.2. The cost apportionment methodology in practice

The YPRL cost apportionment model comprises five steps, within each of which are varying levels of complexity (depending on the step, the cost drivers and the usage calculations).

- |        |   |
|--------|---|
| Step 1 | Calculate branch costs  |
| Step 2 | Apportion branch costs by branch usage                        |
| Step 3 | Sum usage costs across all branches for each Council          |
| Step 4 | Add in Mobile, Outreach and other costs                       |
| Step 5 | Allocate and deduct State Government Grant and direct income. |

The calculation of the 2015-16 cost allocations by Council is shown on the following pages.

### Step 1 Calculate branch costs

Step 1 calculates branch costs based on the drivers of direct and indirect costs described in the Supplemental Agreement.

For example, the estimated **direct salary** cost at Diamond Valley (Greensborough) for 2015-16 is \$578k. This includes base salaries, superannuation, annual leave and overtime loadings, WorkCover premiums and other provisions. Diamond Valley has 6.0 EFT. The larger branch at Eltham (11.1 EFT) has total estimated direct salaries costs of \$986k. In total, YPRL branch salary costs for 2015-16 are estimated at \$6,035k.

**Other direct** costs at Diamond Valley (including utilities charges and furniture and fittings) total \$95k. Across all nine branches other direct costs total \$850k.

Therefore, the total amount of direct branch costs for 2015-16 is estimated at \$6,885k. Each Council is responsible for maintenance and physical upkeep of the branches in their municipality.

Item	\$000	Diamond Valley	Eltham	Ivanhoe	...	Whittlesea	Total
<i>Direct Branch Costs</i>							
Salaries		\$578	\$986	\$758		\$385	\$6,035
Other		\$95	\$126	\$84		\$3	\$850
<b>Sub-total</b>		<b>\$673</b>	<b>\$1,112</b>	<b>\$842</b>		<b>\$388</b>	<b>\$6,885</b>
<i>Indirect Branch Costs</i>							
Collections		\$306	\$357	\$351		\$111	\$2,671
Computers		\$78	\$176	\$143		\$33	\$1,057
Org. Development		\$13	\$24	\$18		\$9	\$144
Community engagement		\$23	\$23	\$23		\$23	\$211
Administration		\$360	\$360	\$360		\$360	\$3,237
<b>Sub-total</b>		<b>\$780</b>	<b>\$940</b>	<b>\$896</b>		<b>\$536</b>	<b>\$7,320</b>
<b>Total Branch costs</b>		<b>\$1,453</b>	<b>\$2,052</b>	<b>\$1,738</b>		<b>\$924</b>	<b>\$14,205</b>
<i>Cost drivers</i>							
Staff EFT		6.0	11.1	8.4		4.3	66.8
Collection items '000		45.6	53.2	52.3		16.6	398.2
Computers		26	59	48		11	354
Branches		1	1	1		1	9
Staff EFT		8.9%	16.6%	12.6%		6.5%	100%*
Collection items '000		11.1%	13.0%	12.8%		4.0%	100%*
Computers		6.6%	15.1%	12.2%		2.8%	100%*
Branches		11.1%	11.1%	11.1%		11.1%	100%

\* Other staff, collections and computers costs are allocated separately to the mobile and outreach services.

Allocation of indirect costs to each branch starts by determining the total cost of each item across YPRL.

For example, replenishment and maintenance of the total Regional Library **collection** of 398,000 items is estimated to cost \$2,747k in 2015-16 – \$2,671k for the collections in the branches and \$76k to cover the cost of the mobile and outreach collections. The 45,600 collection items at Diamond Valley (reflecting the size of the library and available display space) represent 11.1% of the total collection. Therefore, Diamond Valley is allocated 11.1% of the total \$2,747k collections cost, or \$306k. Similarly, Eltham's collection of 53,200 items bears 13.0% of the total collections cost.

Using the same approach, YPRL estimates that it will cost \$1,170k to provide 392 **computers**, of which 354 will be in the nine branches at a cost of \$1,057k. Diamond Valley has 26 computers or 6.6% of the total, so its bears 6.6% of the total computer cost, or \$78k.

Total **organisational development** costs in branches of \$144k are spread across the branches on the basis of share of EFT, so Diamond Valley has \$13k of these costs. Total **community engagement** costs of \$211k (e.g. publications and printing, regional events, branch activities, library user survey) are spread equally across all branches. Diamond Valley is one of nine branches so it bears one-ninth (11.1%) of this cost – a total of \$23k.

Finally, total YPRL **administration** costs of \$3,237k are also spread equally across the branches. This includes costs for LSS salaries, office rent at YPRL headquarters, central IT costs, supplies, equipment, finance and banking, and other administration costs. Each of the nine libraries is allocated a one-ninth share of this cost, or \$360k.

In total, indirect costs at Diamond Valley are \$780k. Added to the \$673k direct costs the total cost of providing library services at Diamond Valley is calculated at \$1,453k.

Similarly, the cost of providing library services at Eltham is \$2,052k, at Ivanhoe \$1,738k and so on across all nine branches. The total cost of providing services through the nine library branches in 2015-16 is determined to be \$14,205k.

At this point in the model, which is determining cost allocations for the 2015-16 year ahead, it should be noted that the total cost of providing the library service for the year becomes FIXED (subject to any later agreed additions and deductions). That is, the 'size of the pie' is set. Thereafter, everything else in the model is focused on a fair and equitable allocation of this cost.

## Step 2 Apportion branch costs by branch usage

Step 2 in the cost methodology apportions the calculated cost of providing services at each branch (from Step 1) on the basis of usage at each branch. Usage is defined in the cost model as the number of loans of physical collection items (e.g. books, DVDs, magazines).

Branch		Cost \$000	Loans*			Cost \$000			
			Total	B	N	W	B	N	W
D. Valley	N	\$1,453	205,731	32%	60%	8%	\$470	\$868	\$115
Eltham	N	\$2,052	407,771	19%	78%	3%	\$397	\$1,591	\$64
Ivanhoe	B	\$1,738	278,628	94%	2%	4%	\$1,634	\$42	\$62
Lalor	W	\$1,691	191,492	3%	1%	96%	\$53	\$16	\$1,621
Mill Park	W	\$2,091	394,388	8%	4%	88%	\$169	\$92	\$1,830
Rosanna	B	\$1,405	226,338	93%	4%	3%	\$1,303	\$56	\$45
Thomastown	W	\$1,334	103,165	3%	2%	95%	\$48	\$22	\$1,264
Watsonia	B	\$1,519	231,985	83%	9%	8%	\$1,258	\$142	\$119
Whittlesea	W	\$924	37,058	11%	8%	81%	\$101	\$70	\$753
<b>Total</b>		<b>\$14,205</b>	<b>2,076,556</b>	40.6%	24.3%	35.1%	<b>\$5,433</b>	<b>\$2,899</b>	<b>\$5,873</b>

\* Excludes Mobile, Outreach and Out of Area loans.

As calculated in Step 1, provision of library services at Diamond Valley for 2015-16 is \$1,453k. Based on the profile of loans from Diamond Valley in 2014-15, 60% of these loans were made by library members who live in Nillumbik, 32% by Banyule residents and 8% by Whittlesea residents. Therefore, Nillumbik Council is required to pay \$868k for the use of library services at Diamond Valley (60% of \$1,453k). Banyule Council pays \$470k and Whittlesea Council \$115k.

Similarly, the cost of all other branches is allocated to each of the three member Councils as the proportion of loans at that branch made by library members from each LGA. For example, with 96% of loans at Lalor being made by Whittlesea residents, Whittlesea Council pays for 96% of the cost of that branch (96% of \$1,691k = \$1,621k). Banyule Council pays \$53k to use Lalor library and Nillumbik Council pays \$16k to use the library.

Step 2 is where the model moves from determining the **cost of providing services** (Step 1) to a **user pays model** where each Council contributes to the cost of using the library. For example, the total cost of providing services at the two Nillumbik libraries is \$3,505. However, Nillumbik pays only \$2,899 for its use of library services across the region, significantly influenced by the relatively high 'cross-border' use of the Diamond Valley and Eltham libraries by Banyule residents.

### Step 3 Sum usage costs across all branches for each Council

Step 3 is a simple summation of the costs to each member Council of using each of the nine branches. That is, after the branch-usage filter is applied in Step 2 the total calculated cost of \$14,205k is now split between Whittlesea (\$5,873k), Banyule (\$5,433k) and Nillumbik (\$2,899k).

It should be noted that the distribution of costs on a branch by branch basis does not match the overall distribution of loans. For example, Banyule has 40.6% of all loans but pays only 38.2% of the total cost.

### Step 4 Add in Mobile, Outreach and other costs

Step 4 in the cost apportionment model adds in costs for the provision of non-branch related library services.

The overall cost of providing the **Mobile Library** in 2015-16 is calculated as \$395k, including salaries, asset replacement, shares of the collections/computer/organisational development budgets and maintenance and fittings. As described in the Supplemental Agreement, this amount is allocated to the member Councils by the number of hours of service in each municipality (Nillumbik 69%, Whittlesea 21%, Banyule 10%).

Similarly, total costs for the **Outreach vehicle** are calculated as \$126k, which is split between the three Councils on the basis of the number of sites visited in each LGA (Banyule 56%, Whittlesea 34%, Nillumbik 10%).

Finally, in 2015-16 the direct capital cost of providing CCTV cameras at branches in each municipality was added to the total. Any other cost items that could be directly attributed to the member Councils would be included here.

The total cost of running YPRL in 2015-16 is \$14,798k.

Item	\$000	Banyule	Nillumbik	Whittlesea	Total
<b>Branch costs</b>		<b>\$5,433</b>	<b>\$2,899</b>	<b>\$5,873</b>	<b>\$14,205</b>
+ Mobile		\$39	\$274	\$82	\$395
+ Outreach		\$71	\$12	\$43	\$126
+ CCTV cameras		\$33	\$18	\$19	\$70
<b>Total cost</b>		<b>\$5,576</b>	<b>\$3,205</b>	<b>\$6,017</b>	<b>\$14,798</b>
- State Government Grant		\$897	\$536	\$776	\$2,209
- Direct income		\$283	\$169	\$245	\$697
- Community rooms		\$1	-	\$62	\$64
<b>Total contribution</b>		<b>\$4,395</b>	<b>\$2,499</b>	<b>\$4,934</b>	<b>\$11,828</b>
Overall usage (% loans) for State Government Grant and Direct Income		40.6%	24.3%	35.1%	100%

### Step 5 Allocate and deduct State Government Grant and direct income

The final step in the calculation of Council charges for using the Regional Library is the deduction of income elements.

The State Government provides a grant to every Victorian Council to support provision of public library services. From a total pool of money allocated in the State Budget for this purpose, the amount given to each LGA is determined on the basis of population characteristics (including total population and Grants Commission weightings for remoteness, population dispersion, English proficiency, socio-

economic disadvantage and ageing). The total amount for Banyule, Nillumbik and Whittlesea Councils is then provided as a single grant to YPRL. For 2015-16 the **State Government Grant** to the three member Councils totaled \$2,209k.

As defined in the Supplemental Agreement 2010, this amount is split on the basis of overall library usage (defined as loans of physical items – 40.6% from Banyule residents, 35.1% from Whittlesea residents, 24.3% from Nillumbik residents) and deducted from each Council's contribution.

YPRL's **direct income** (including overdue fines, library fees and charges, photocopying, fund raising, interest on investments and income for provision of services to Murrindindi Library Service) is also returned to the three Councils using the same 'usage' split as the State Government Grant.

Finally, any income directly attributable to a Council is deducted from the total. In 2015-16 this included payments for use of community rooms at Thomastown, Lalor and Watsonia libraries.

### **Final contribution**

After all income was distributed the total contributions for each member Council in 2015-16 were calculated through the cost apportionment model as:

- \$4.395 million from Banyule Council
- \$2.499 million from Nillumbik Council
- \$4.934 million from Whittlesea Council.

### 3. A 'PRINCIPLES-BASED' REVIEW

In addressing the issues identified in relation to the YPRL Regional Library Agreement it should first be noted that this is NOT a review of the library service itself. Consultation with Board members and senior managers of the three member Councils found universal agreement that the residents of Banyule, Nillumbik and Whittlesea receive well-managed high quality library services. The Executive management and administration of the Regional Library, and the scope and quality of the services it provides are held in very high regard.

Therefore, the review is focused primarily on the five issues identified in the 2015 review brief (see Section 1.3.). These issues are examined in the following sections of this report in a sequence that is consistent with the structure of the cost apportionment methodology. That is:

Issue 1	Understanding the model
Issue 4	Administration costs
Issue 5	Sensitivity to shifts in usage
Issue 3	Loans as the sole measure of usage
Issue 2	State Government Grant.

#### Guiding principles

Analysis of each of these issues and subsequent framing of options and recommendations has been undertaken within the context of a set of guiding principles – principles that were based on the review brief and refined through consultation with stakeholders. Agreement on a 'principles-based' approach is intended to simplify comparison of possible options.

Principle	The cost apportionment model ...
<b>Equity</b>	... fairly allocates expenditure and income between member Councils, using appropriate measures of equity
<b>Transparency</b>	... fairly captures the actual costs of the library service and each branch ... is understood by key stakeholders
<b>Reliability</b>	... is predictable, and does not produce unexpected, unexplained or widely variant outcomes
<b>Value to the community</b>	... facilitates delivery of good quality library services ... encourages (or does not discourage) desirable behaviours among users or member Councils (e.g. increased service use)

#### Cost models

It should also be noted that analysis of the cost apportionment model is an endeavour aimed at finding a model which works best for the Regional Library in 2015 and for the next five years.

There is no perfect model. Cost apportionment models are never right or wrong, only ever good or bad in a particular context. That is because cost models are simply mathematical algorithms used to estimate or apportion the cost of a product or service. They function purely on the basis of input parameters, business rules and assumptions. If the current model is not serving its purpose then the failing lies in:

- the data (being inaccurate or inappropriate) and/or
- the business rules (in that methods of cost apportionment do not reflect expectations or reality).

The outputs of the current cost apportionment model are based on the best available data and accurately reflect the inputs and assumptions. That is, YPRL is deploying the model exactly as it is intended.

Therefore, any concerns with the current outputs from the model must be addressed through review and refinement of the model's business rules and assumptions.

In doing this, it should also be recognised that **the same level of analytical rigour** must be applied to both the assumptions within the current model and any proposed alternatives.

## 4. ISSUE 1 – UNDERSTANDING THE MODEL

The YPRL cost apportionment model, as originally developed in 1995 and most recently revised and documented in the Supplemental Agreement 2010, aims to fairly apportion the cost of library services to the three member Councils.

The model comprises five steps (as described in Section 2.2). Within each step there are varying levels of complexity, depending on the step, the application of cost drivers and the usage calculations.

- |        |   |
|--------|---|
| Step 1 | Calculate branch costs  |
| Step 2 | Apportion branch costs by branch usage                        |
| Step 3 | Sum usage costs across all branches for each Council          |
| Step 4 | Add in Mobile, Outreach and other costs                       |
| Step 5 | Allocate and deduct State Government Grant and direct income. |

In effect, Step 1 sets the total cost for the annual provision of branch library services. Steps 2 and 3 apportion this 'fixed' cost between the member Councils based on usage by branch. Then Steps 4 and 5 adjust the calculated cost of using branch library services to take account of some specific expenditure and income items.

As far as possible, the cost model seeks to achieve **a balance between simplicity and complexity**.

- The 5 steps are, at face value, easy enough to understand (even if there are some complicated mathematical formula happening in the background).
- The model is transparent, in that the information used and calculations made are open to Board members and member Councils should they wish to examine it.
- Fairness and equity are seen as being more important (within reason) than simplicity.
  - For example, even though each branch PC costs \$3k or only about 0.02% of the total cost of providing library services, computer costs are allocated to branch libraries by the number of PCs because this is fair and equitable, and is not a complicated calculation.

### A 'user pays' model

The key to understanding the YPRL cost apportionment model is to recognise that it is a user pays model. While Step 1 of the model determines the cost of providing library services through the YPRL branch network in the next financial year, the subsequent steps apportion this cost in a way that charges Councils for their residents' use of the library services. That is, the more you use the library (actually – the more loans of physical collection items you make), the more you pay.

This means that the differential treatment of each branch's staffing numbers, collection size and PC counts in Step 1, and even the 'blunt' allocation of \$3.2 million LSS administration costs (23% of the total cost) on a per branch basis, has much less influence on the total contributions made by each Council than the number of loans made by library members at each branch and overall.

However, in saying that, there are two further points that must also be understood.

#### Differential branch costs

Firstly, because the model calculates branch costs and then allocates these on the basis of usage at each branch, the cost of making a loan at each branch varies. As seen in the following table (and also in Appendix 1), the cost per loan ranges from a low of \$3.77 at Eltham to \$18.70 at the new Whittlesea library. This cost differential is due to the different mix of staffing, collection and computers at each branch and the overall level of loans at each branch – which is typically related to the branch size.



The two largest branches at Mill Park and Eltham have cost per loan figures under \$4. Libraries with relatively lower loan numbers (such as Thomastown and Lalor) have above average cost per loan figures. Whittlesea, by far the smallest library with an estimate of only 49,411 loans in 2014-15, has a cost per loan figure five times that of Eltham. This is driven to a considerable extent by each branch library having an equal share of the LSS administration cost. That is, the \$360k administration cost at Eltham represents \$0.66 of the \$3.77 cost per loan (18%), while at Whittlesea the \$360k adds \$7.29 to the cost of each loan (39%).

Branch		Branch cost \$000	Total loans (annualized)	Cost per loan
Diamond Valley	N	\$1,453	274,308	\$5.30
Eltham	N	\$2,052	543,695	\$3.77
Ivanhoe	B	\$1,738	371,504	\$4.68
Lalor	W	\$1,691	255,323	\$6.62
Mill Park	W	\$2,091	525,851	\$3.98
Rosanna	B	\$1,405	301,784	\$4.66
Thomastown	W	\$1,334	137,553	\$9.70
Watsonia	B	\$1,519	309,313	\$4.91
Whittlesea	W	\$924	49,411	\$18.70
<b>Total</b>		<b>\$14,205</b>	<b>2,768,741</b>	<b>\$5.13</b>

Consequently, in the YPRL user pays model it matters not only 'How many loans residents make', but also 'Which library they borrow from', as loans from Whittlesea library cost considerably more than loans anywhere else.

#### Fixed total cost of branch services

The second important point about the user pays model is that Step 1 in the model fixes the total cost of providing branch services for the year. Thereafter, the usage patterns at each branch and overall serve only to apportion this fixed cost. Total usage may increase or decrease, and the loans profile between Councils may shift, but this will not change the total cost once it is set. For every additional loan in a branch that is charged to a Council, there must be a corresponding reduction in the total cost apportioned to the other Councils.

#### **Conclusion**

The YPRL cost apportionment methodology is a user pays model. It employs a selection of relevant cost drivers to determine the cost of providing services at each branch. Then through the application of usage statistics in apportioning costs at branch level, and in apportioning costs and revenues at Council level, **the model explicitly charges each Council for their residents' use of the library (not the cost of the Council providing library services to its residents)**. In that sense YPRL's cost apportionment model is perhaps the most sophisticated model currently in use among Victoria's regional library corporations (which typically have some but a lesser emphasis on usage as the defining driver of cost).

Given this blend of simplicity and complexity it is important that Board members and member Council's understand how the model works – and how the contribution they are apportioned each year has been derived. Through this review it is hoped that the current Board now has a greater understanding of how the model works, and are able to use this knowledge to inform their decision-making. As membership of the Board changes in time it would be desirable for this knowledge and understanding to be shared.

## 5. ISSUE 4 – ADMINISTRATION COSTS

### 5.1. LSS administration costs

When the current model was introduced there was a fair degree of uniformity in the size of the library branches. Therefore, allocating some corporate expenses on a 'per branch' basis was not an unreasonable way of apportioning costs.

However, the method of allocating LSS administration costs has been brought into greater focus through the opening of a small library at Whittlesea, which shares the apportioned cost of LSS administration (and community engagement) equally with the largest branches in the region.

Under the current model the 2015-16 LSS administration cost of \$3,237k is split equally across all nine branches. This equates to \$360k per branch, and on average represents 23% of total branch costs, although this varies from 39% of costs at Whittlesea to 17% of costs at Mill Park. Once the branch service provision costs from Step 1 in the model are then passed through the loans-based usage filter in Step 2, Whittlesea ends up contributing 43% of the LSS administration cost, Banyule 38% and Nillumbik 19%.

#### Administrative cost drivers

The current method of allocating LSS administration costs equally to branches is simple to explain and easy to apply. The model assumes that the work of running the Regional Library is equally beneficial to each branch.

However, this approach does not reflect the actual cost to each Council, branch or library user of performing these 'corporate' functions, because not all administration functions are directly related to service delivery in library branches. Some centralised administration functions (e.g. executive management, strategy and policy development) are truly 'regional', benefitting all member Councils equally. Other functions such as corporate information systems and marketing are influenced by regional, municipal and branch-related factors.

An apportionment model that recognises the actual cost of LSS administration functions might have a mix of:

- a fixed one-third 'per Council' component, assuming that LSS functions benefit each member Council equally
- a fixed one-ninth 'per branch' component, as in the current model
- a variable component, which might employ library use or population as a cost driver
- a 'direct cost' component, as is currently used in the model for items like the CCTV cameras in 2015-16.

#### More detailed allocation of LSS administration costs

Analysis of the \$3,237k LSS administration cost shows that it could be further broken down and re-allocated within the model, especially the salaries and on-costs that can be attributed to regional functions.

The first level of disaggregation is to separate LSS executive management salaries and associated costs (\$599k) from the overall total. This Regional Library function might more appropriately be split equally between the three member Councils.

The remaining \$2,638k might continue to be allocated on a per branch basis, although around half of this amount (\$1,314k) can be allocated to community engagement, collections, IT and organisational development functions – each of which is already apportioned to branches within the model via accepted cost drivers. If this approach were to be adopted the balance in LSS administration would be \$1,324k (41% of the original LSS amount). In the absence of any other clear functional allocative mechanism this administration cost might continue to be apportioned equally to each of the nine branches.

<b>LSS Administration</b>	<b>\$000</b>	<b>Potential re-allocation</b>
<b>LSS Executive management</b>	<b>\$599</b>	<b>Distribute equally across three member Councils</b>
<b>LSS Administration</b>	<b>\$2,638</b>	
Administration	\$1,324	Equally per branch
Community engagement	\$572	Include with Community engagement (per branch)
Collections	\$361	Include with Collections (% of collection)
IT	\$295	Include with Computers (% of PCs)
Organisational development	\$87	Include with Org. Devt. (% of staff EFT)
<b>Total</b>	<b>\$3,237</b>	

Therefore, the treatment of LSS administration costs in the current model might be adjusted to distinguish between corporate, branch-related and service related functions. The impact of this adjustment is only observed on the cost side of the model.

<b>LSS Administration</b>	<b>\$000</b>	<b>Banyule</b>	<b>Nillumbik</b>	<b>Whittlesea</b>	<b>Total</b>
Current distribution of \$3,237k		\$1,248	\$603	\$1,386	\$3,237
<b>Impact of reallocating costs for executive management (only)</b>		<b>(\$31)</b>	<b>\$88</b>	<b>(\$57)</b>	<b>\$0</b>
<b>Impact of reallocating costs for executive management, community engagement, collections, IT and organisational development</b>		<b>(\$42)</b>	<b>\$105</b>	<b>(\$63)</b>	<b>\$0</b>

Separation of \$599k executive management costs from LSS administration and reallocation of this amount equally between the member Councils increases Nillumbik's costs by \$88k and reduces the cost share of Whittlesea and Banyule. Nillumbik has only two out of nine branches and relatively high out of area use, which means that in the past it has been paying much less than a one-third share of 'corporate' costs.

The further reallocation of community engagement, collections, IT and organisational development costs on the basis of usage, rather than equally by branch has the net effect of increasing Nillumbik's cost share by a further \$17k, with Banyule's costs down by \$11k and Whittlesea by \$6k.

## Conclusion

The current treatment of LSS administration costs assumes all administration costs are related directly and equally to branch operations. This approach does not reflect the actual cost to each Council, branch or library user of performing 'corporate' functions. More detailed analysis of the \$3,237k which is currently described as LSS administration shows that \$1,314k of this can be associated with delivery of library services that are already apportioned through the model using discrete cost drivers. A further \$599k can be attributed to centralised executive management, strategy and policy development functions that are truly 'regional', and benefit all member Councils equally.

## 5.2. Community engagement

As described previously, the total \$211k cost of community engagement activities (e.g. publications and printing, regional events, branch activities, library user survey) is spread equally across all branches. That is, the Step 1 calculation of service delivery cost for each of the nine YPRL branches includes \$23k for community engagement.

The assumption, as is the case for LSS administration, is that the performance of these 'central' functions benefits all branches equally. There is some validity to this argument as community engagement activities and outputs are available to and present at every branch, regardless of the extent to which each branch actually delivers community engagement programs.

However, to ensure consistency with the rest of the cost apportionment model the review must consider whether there are other cost drivers that more accurately reflect the 'use' of centralised community engagement functions. These might include:

- a 3-way 'per Council' split, assuming that community engagement is a core YPRL function that benefits each member Council equally
- a 'usage' split, with participation in YPRL programs the closest measure of use of the outputs of the community engagement functions
- a population split, assuming that all residents in the region benefit from the performance of these functions.

Uptake or attendance at library programs conducted at each branch is perhaps the best alternative to the current model (although not necessarily a better option). If program attendance numbers at each branch in 2014-15 were then used to apportion the \$211k community engagement cost to the nine branches in Step 1, the resulting cost allocation (after passing through an estimated 'usage' filter in Step 2) would see Whittlesea contribute an additional \$10k, with corresponding reductions of \$7k at Banyule and \$3k at Nillumbik. The reason for this change is that while Whittlesea has four of nine branches (44%), 50% of program attendance across YPRL is at Whittlesea's four libraries, and after passing through the usage filter Whittlesea would pay a slightly greater share of the community engagement costs.

<b>Community Engagement</b>	<b>\$000</b>	<b>Banyule</b>	<b>Nillumbik</b>	<b>Whittlesea</b>	<b>Total</b>
Current distribution of \$211k (cost driver = per branch)		\$82	\$39	\$90	\$211
<b>Impact of alternative method</b> (cost driver = program attendance)		<b>(\$7)</b>	<b>(\$3)</b>	<b>\$10</b>	<b>\$0</b>

If, however, there was a reallocation of LSS administration costs as discussed in Section 5.1, the total cost of community engagement activities would increase from \$211k to \$783k. Under this scenario, and using program attendance as the cost driver, Whittlesea's increased usage share would be \$39k, with Banyule and Nillumbik's cost share down by corresponding amounts.

<b>Community Engagement</b>	<b>\$000</b>	<b>Banyule</b>	<b>Nillumbik</b>	<b>Whittlesea</b>	<b>Total</b>
Distribution of \$783k		\$302	\$146	\$335	\$783
<b>Impact of alternative method</b>		<b>(\$27)</b>	<b>(\$12)</b>	<b>\$39</b>	<b>\$0</b>

### Conclusion

The rationale for allocating community engagement costs equally across all YPRL branches is not unreasonable. Consequently, there is no compelling case to change the current model.

However, for consistency with the rest of the cost apportionment model, where all other costs other than central administration are allocated on the basis of specific cost drivers, community engagement costs might be apportioned to branches on the basis of total attendance at library programs at each branch.

## 6. ISSUE 5 – SENSITIVITY TO SHIFTS IN USAGE

### Shifts in usage affect Councils' budget approach

There is concern among Board members and member Councils that small changes in usage can impact significantly on the annual cost of the library to a member Council. Changes in usage, at a branch and an overall level, are influential in the cost apportionment model as they affect both the expenditure and the income side of the equation.

With the introduction of rate capping in 2016-17 the expectation is that Regional Library expenditure will be contained to the nominated figure being used by Local Government Victoria. While this may be achieved at a regional level, individual Council contributions could still experience large variation.

The reliability of the cost apportionment model (in terms of avoiding significant year on year fluctuations in total contribution) is a critical principle for the member Councils in the review of the Regional Library Agreement.

### Recent changes in total contribution

The total net cost of running the Yarra Plenty Regional Library (expenditure less income) increased by 6.3% in 2014-15 from \$10.7 million in 2013-14, and then by a further 4.1% in 2015-16. However, in this time two of the three member Councils have experienced significant movement in their annual contribution, with Whittlesea's costs increasing by 12.7% in 2014-15 and then by only 0.9% the following year, while Nillumbik's net contribution dropped by \$5,000 in 2014-15 before increasing by 9.8% (\$222k) in 2015-16.

Total Contribution \$000	Banyule	Nillumbik	Whittlesea	Total
2013-14	\$4,074	\$2,282	\$4,336	\$10,692
2014-15	\$4,195 +3.0%	\$2,277 -0.2%	\$4,889 +12.7%	\$11,361 +6.3%
2015-16	\$4,395 +4.8%	\$2,499 +9.8%	\$4,934 +0.9%	\$11,828 +4.1%

Analysis of the workings of the cost apportionment model clearly shows the reasons for these changes.

Significant shift in contribution	Major contributing factors
<b>Whittlesea</b>	<b>+ \$553k total</b>
2014-15 + 12.7%	<b>+ \$597k branch usage costs</b> <ul style="list-style-type: none"> <li>▪ <b>+ \$732k Whittlesea (new branch)</b></li> <li>▪ <b>- \$66k Mill Park (branch costs down \$81k or 4%)</b> <ul style="list-style-type: none"> <li>- \$35k Staff</li> <li>- \$26k Collections</li> <li>- \$20k Administration</li> </ul> </li> <li>▪ <b>- \$61k Lalor (branch costs down \$68k or 4%)</b> Similar to Mill Park</li> </ul>
<b>Nillumbik</b>	<b>+ \$222k total</b>
2015-16 + 9.8%	<b>+ \$253k branch usage costs</b> <ul style="list-style-type: none"> <li>▪ <b>+ \$133k Eltham (branch costs up \$167k or 9%)</b> <ul style="list-style-type: none"> <li>+ \$112k Staff costs +1.0EFT</li> <li>+ \$33k Collections up 1,200</li> <li>+ \$13k Computers</li> </ul> </li> <li>▪ <b>+ \$70k Whittlesea (usage up from 0% to 8%)</b></li> <li>▪ <b>+ \$33k Watsonia (usage up from 7% to 9%)</b></li> </ul>

The \$553k increase in Whittlesea's contribution in 2014-15 is completely explained by the opening of the new branch library at Whittlesea, which added \$732k to branch usage costs. The cost of opening the new branch was partially offset by corresponding reductions in staff, collections and administration costs at the Mill Park and Lalor branches.

Similarly, the \$222k increase at Nillumbik in 2015-16 is substantially explained by agreed increases in staffing, collections and computers at the Eltham branch. There was also an additional \$70k due to usage of library services at the new Whittlesea branch that had not been assumed in the previous year, and a 2% increase in the share of loans at Watsonia.

That is, the two significantly above average increases in Council contributions in the past two years have both been due to changes in the service delivery model.

### Variation in usage

As shown above, cost variability due to changes in usage has a real but secondary impact on the total annual cost contribution for each Council. Usage changes are more likely to represent upward or downward variation of \$20k to \$30k per annum at a branch than any larger cost movement. It is, however, worth examining the variations in usage that have occurred over recent years to see if the cost model could be improved to minimise any sensitivity to shifts in usage.

Under the current cost apportionment model the more you use the library the more you pay. However, any increased/decreased usage at branch level also leads to an increased/decreased share of overall usage and the State Government Grant, which partially offsets any change in usage cost.

Analysis of the usage profile at each branch over the four year period from July 2011 to June 2015, looking at various 6, 9 and 12 month time periods shows that at most branches there is little change in the proportion of loans originating from library members from each LGA.

Council	%	DV	Elt	Iva	Lal	MP	Ros	Tho	Wat	Whi	All
Banyule	Max	33.5	19.9	95.1	3.1	8.8	94.4	3.7	85.7	11.1	41.7
Nillumbik	Max	60.8	78.1	2.7	1.0	4.7	4.2	2.1	10.5	8.3	24.3
Whittlesea	Max	8.8	3.2	3.7	96.9	88.2	3.3	95.5	8.1	82.3	37.4
Banyule	Min	30.5	19.0	93.9	2.2	7.8	92.7	2.6	81.6	10.9	39.3
Nillumbik	Min	59.3	77.2	1.4	0.8	3.8	3.1	1.2	6.8	6.7	23.0
Whittlesea	Min	7.0	2.7	3.0	95.9	86.5	2.4	94.7	7.5	80.6	34.2
Banyule	Diff	3.0	0.9	1.2	0.9	1.0	1.7	1.1	4.1	0.2	2.4
Nillumbik	Diff	1.5	0.9	1.3	0.2	0.9	1.1	0.9	3.7	1.6	1.3
Whittlesea	Diff	1.8	0.5	0.7	1.0	1.7	0.9	0.8	0.6	1.7	3.2

For example, at Eltham, with more than half a million loans per annum the branch with the highest number of loans, Nillumbik residents make between 78.1% and 77.2% of the total number of loans. Banyule residents account for between 19.9% and 19.0% of loans and Whittlesea residents make between 3.2% and 2.7% of the loans at Eltham library. That is, depending on the timeframe used for statistical calculation in the four year period the maximum amount of variation in the usage distribution between Councils is 0.9%. If this 0.9% variation was experienced from one costing year to the next the impact on the total Council contribution would be around \$18,000.

The highest degree of variability in usage is at Watsonia, where Banyule residents account for between 85.7% and 81.6% of loans, and Nillumbik residents account for between 10.5% and 6.8% of loans. If this variation of around 4% was experienced from one costing year to the next the impact on the total Council contribution would be around \$50,000 to \$60,000.

So cost sensitivity to usage is greatest for branches where there is year on year variation in the usage profile by Council (notably Watsonia and Diamond Valley), or for branches which have a high average cost per loan (i.e. Whittlesea \$18.70, Thomastown \$9.70).

If, however, usage is based purely on annual statistics, or even averages of annual statistics, the variability in the usage profile is diminished considerably (as shown in the table below). In fact, the variation in usage profile from the average of the annual figures for 2011-12 to 2013-14 to the annual figures for 2012-13 to 2014-15 is in almost all cases less than less than +/- 0.4%. This means that annual variation in usage costs per branch for any member Council would in most cases be no more than +/- \$6,000 (often less than this amount).

Council	%	Year	DV	Elt	Iva	Lal	MP	Ros	Tho	Wat	Whi	All
Banyule		11-12	33.5	19.3	94.3	2.9	8.8	93.7	2.8	85.7		41.1
Banyule		12-13	32.1	19.0	94.1	2.3	8.0	94.3	2.6	84.8		41.4
Banyule		13-14	31.2	19.8	94.5	2.3	7.8	93.4	3.2	85.0		40.9
Banyule		14-15	31.6	19.2	93.9	3.1	8.0	92.7	3.4	81.6	11.0	40.6
Nillumbik		11-12	59.5	78.0	2.7	0.9	4.7	3.6	1.7	6.8		23.6
Nillumbik		12-13	60.8	78.1	2.7	1.0	4.2	3.2	2.0	7.1		23.8
Nillumbik		13-14	60.4	77.4	2.2	0.8	4.1	3.9	1.7	7.3		23.8
Nillumbik		14-15	60.4	77.7	2.5	1.0	4.4	4.2	1.7	10.5	6.7	24.3
Whittlesea		11-12	7.0	2.7	3.0	96.1	86.5	2.7	95.5	7.5		35.3
Whittlesea		12-13	7.1	2.9	3.2	96.7	87.8	2.5	95.3	8.1		34.8
Whittlesea		13-14	8.4	2.9	3.3	96.9	88.2	2.7	95.1	7.7		35.3
Whittlesea		14-15	8.0	3.2	3.6	95.9	87.6	3.2	94.9	7.9	82.3	35.1
Average %	Year	DV	Elt	Iva	Lal	MP	Ros	Tho	Wat	Whi	All	
Banyule	11-14	32.3	19.4	94.3	2.5	8.2	93.8	2.9	85.2		41.1	
Banyule	12-15	31.6	19.3	94.2	2.6	7.9	93.5	3.1	83.8	11.0	41.0	
Nillumbik	11-14	60.2	77.8	2.5	0.9	4.3	3.6	1.8	7.1		23.7	
Nillumbik	12-15	60.5	77.7	2.5	0.9	4.2	3.8	1.8	8.3	6.7	24.0	
Whittlesea	11-14	7.5	2.8	3.2	96.6	87.5	2.6	95.3	7.8		35.1	
Whittlesea	12-15	7.8	3.0	3.4	96.5	87.9	2.8	95.1	7.9	82.3	35.1	
Variation %	Year	DV	Elt	Iva	Lal	MP	Ros	Tho	Wat	Whi	All	
Banyule		- 0.7	- 0.1	- 0.1	+ 0.1	- 0.3	- 0.3	+ 0.2	- 1.4		- 0.1	
Nillumbik		+ 0.3	- 0.1	0.0	0.0	- 0.1	+ 0.2	0.0	+ 1.2		+ 0.3	
Whittlesea		+ 0.3	+ 0.2	+ 0.2	- 0.1	+ 0.4	+ 0.2	- 0.2	+ 0.1		0.0	

## Conclusion

While shifts in usage at a branch level and overall affect both the cost and the income calculations in YPRL's cost apportionment model, the main driver of above average increases in total contributions in the past few years has been agreed changes to the service delivery model (i.e. changes in branch numbers, size and structure).

The usage-based model could, however, be improved by adopting a longer timeframe for tracking the usage distribution at each branch, which would have the effect of dampening any short to medium term volatility in usage levels. Using a longer timeframe would also mean that any change between a preliminary run of the model and the final calculations would be much smaller than occurs with the current process.



## **7. ISSUE 3 – LOANS AS THE SOLE MEASURE OF USAGE**

The YPRL cost apportionment model uses a number of cost drivers (e.g. collections, staff, computers) to determine the cost of providing library services in its nine branches. Thereafter, the model almost exclusively uses a measure of library usage to apportion costs and income to each of the member Councils. Loans at each branch are used to apportion the cost of using each branch, and overall loans are used to apportion income back to each Council.

The sole measure of usage in the model is the number of loans of physical collection items (e.g. books, DVDs, magazines).

### **Use of a modern public library**

Loans, and in particular loans of books, continue to be the primary service offered by public libraries, and the service used by the highest proportion of library users. Library surveys typically show that around 90% of active library members borrow collection items during any year. In 2014-15 there were just over 2 million loans of physical collection items at YPRL's libraries.

The number of loans made at each branch by residents from each LGA is also the simplest 'usage' measure for use in the model. Loans can only be made with a library membership card, and the Library Management System (LMS) automatically records the borrowing and borrower location.

However, the reliance of the cost model on loans as the sole measure of usage ignores the many other uses of a modern library. For example:

- participation in educational and cultural programs such as Story Time, literacy programs, school holiday programs and book clubs (in 2014-15 there were around 140,000 attendances at YPRL programs)
- borrowing of digital collection items (more than 100,000 loans in 2014-15)
- use of computers and use of wifi to access information and the internet (nearly half a million computer bookings and wifi sessions in 2014-15)
- use of library facilities as a place for study, business or relaxation (included within a total of 1.4 million library visits in 2014-15)
- use of library facilities as a meeting place and community hub (also within the visits total).

Ideally the cost model would recognise a wider range of uses to reflect the way in which different cohorts use the library. That is:

- more literate readers borrow books and resources, and attend book clubs and events
- young families attend Story Time and early years' literacy activities
- people of all ages use the library's computers and wifi (especially people with limited access to technology at home, work or school)
- people borrow digital resources
- school students do homework and participate in holiday programs
- older and/or socially isolated people use the library as a place to be.

### **Alternative measures of use**

In practice, broadening the definition of usage in the current cost apportionment model beyond loans of physical items is problematic at this time as it relies on being able to know BOTH the library branch at which the usage occurred AND the residential location of the library user.

As noted previously, the number of loans of **physical collection items** can be linked to membership and borrowing location via the LMS. Similarly, loans of **digital collection items** can be linked to membership and the borrower’s location, although in this case the items are not borrowed from a physical ‘branch’ – digital items being part of the online regional collection that has no fixed location.

Total **attendance at programs** run at or by each library branch is measured through headcounts of participants. However, in most cases there are no conditions of entry or registration requirements, and no requirement to present a library membership card – the point being that anyone can attend the programs run by the library. If program participation were to be viable as a measure of library usage for use in the cost apportionment model YPRL would need to be able to track what proportion of program attendees were from each LGA. This might be done through the introduction of program registration or sample surveys of participants, although these processes could have the unwanted effect of discouraging program participation.

YPRL could use **computer or wifi usage** as a measure of library usage. If a library user wants to book a library computer or log on to the library wifi they must be a registered library member. Hence their residential location is known via their library membership details. The branch location of the usage is also known through the library’s PCRes and Bluesocket (wifi) systems. However, while the library systems currently track the number of computer and wifi sessions at each branch in any period, they do not match this up with the users’ library membership details (and in particular postcode). This could be done but would require some additional reporting functionality to be programmed on the systems. [It might also be noted that some public libraries are considering moving to open access to their wireless networks. If YPRL were to adopt this approach it would de-link access to library membership, although postcode might be retained as a mandatory log on field.]

Finally, YPRL does track the number of **visits** to each branch library through people counters at the entry doors. However, this process does not record any information about the library user, other than that they entered the library. Furthermore, recording any form of personal information on entry to the library, on either a regular or a sample basis, and with whatever reasonable justification, would require a significant logistical effort and might be perceived as contrary to the idea of public libraries being free, open, welcoming and accessible to all.

Measure of library usage	Library branch at which use occurred?	Residential location of library user?
Loans of physical collection items	✓ (via library membership card and LMS)	✓ (via library membership card and LMS)
Loans of digital collection items	X (digital collection does not belong to a physical branch)	✓ (via library membership card and LMS)
Attendance at library programs	✓ (via headcounts)	X (no registration requirements or recording process)
Use of library computers or wifi	✓ (via PCRes system)	✓ (via library membership card and PCRes system, but not currently tracked)
Visits to the library	✓ (via door counters)	X (no entry conditions)

So, while there are other measures of library use that might be used to supplement the number of loans in the YPRL cost apportionment model, the structure of the current model dictates that the

practical value of these other measures is limited unless additional information can be obtained about the profile of use within each branch.

#### Estimating the profile of use within a branch

The previous table shows that YPRL already has data on the number of program attendances, the number of computer bookings and wifi sessions and the number of visits at/to each library branch. What the Regional Library does not have is a documented breakdown of this level of branch usage by the users' LGA.

YPRL does, however, have a proxy indicator of the distribution of library use by Council area. That is, the proportion of loans of physical items made at each branch.

For example, in describing Step 2 of the model in Section 2 of this report, it was noted that only 60% of loans at Diamond Valley are made by Nillumbik residents. Thirty two percent of loans are made by Banyule residents and 8% by Whittlesea residents. If this is the borrowing profile of the people who use the Diamond Valley library, it might also be assumed that the profile of program participation at the branch also has a 60-32-8 split, as does the distribution of computer use and the distribution of library visits. Similarly, if 94% of borrowers at Ivanhoe are Banyule residents, might it not be assumed that 94% of program attendances, computer uses and visits at Ivanhoe are also made by Banyule residents?

Whilst there are clearly differences in the profile of library users **between** branches, as evidenced by the borrowing statistics (e.g. the number of loans per collection item per annum at Eltham is 10.2 vs 3.0 at Whittlesea – see Appendix 1), it might reasonably be argued that there is likely to be less variation in the profile of library use **within** a branch. This assumption is, of course, untested, just as are some the assumptions in the current model.

#### **The cost impact of a broader definition of library use**

For the purposes of examining the possible implications of adopting a broader definition of library usage on the cost allocations between the three member Councils, assume that the distribution of library use by residents' LGA is common across loans, program attendance, computer use and library visits. That is, as outlined in the following table (from Section 2).

Branch		Use distribution*			Cost \$000			
		B	N	W	Branch cost	B	N	W
Diamond Valley	N	32%	60%	8%	\$1,453	\$470	\$868	\$115
Eltham	N	19%	78%	3%	\$2,052	\$397	\$1,591	\$64
Ivanhoe	B	94%	2%	4%	\$1,738	\$1,634	\$42	\$62
Lalor	W	3%	1%	96%	\$1,691	\$53	\$16	\$1,621
Mill Park	W	8%	4%	88%	\$2,091	\$169	\$92	\$1,830
Rosanna	B	93%	4%	3%	\$1,405	\$1,303	\$56	\$45
Thomastown	W	3%	2%	95%	\$1,334	\$48	\$22	\$1,264
Watsonia	B	83%	9%	8%	\$1,519	\$1,258	\$142	\$119
Whittlesea	W	11%	8%	81%	\$924	\$101	\$70	\$753
<b>Total</b>					<b>\$14,205</b>	<b>\$5,433</b>	<b>\$2,899</b>	<b>\$5,873</b>
Overall %		40.6%	24.3%	35.1%	100%	38.2%	20.4%	41.4%

\* Based on % of loans by LGA of borrower.

What this shows is that it, in terms of allocating and aggregating branch costs in Steps 2 and 3 of the cost apportionment model it **does not matter** what measure of library usage is used. What matters is

the distribution profile. That is, if it is assumed that Ivanhoe has a 94-2-4 split, then the \$1.738 million cost of providing branch services will be split 94-2-4.

However, the choice of usage measure **does matter** on the income side of the model. In Step 5 of the model it is the overall usage distribution that factors in to the apportionment of income – not the branch by branch figures, as shown in the following tables.

Branch	Loans		Program attendance		Computer/wifi sessions		Library visits	
	No.	%	No.	%	No.	%	No.	%
Diamond Valley	205731	9.9%	12440	8.9%	23941	5.1%	82044	5.9%
Eltham	407771	19.6%	15401	11.0%	60586	12.9%	250024	17.9%
Ivanhoe	278628	13.4%	17389	12.4%	64985	13.8%	169103	12.1%
Lalor	191492	9.2%	19167	13.7%	73259	15.6%	211219	15.1%
Mill Park	394388	19.0%	33472	23.9%	101288	21.6%	218674	15.6%
Rosanna	226338	10.9%	10827	7.7%	35410	7.5%	135293	9.7%
Thomastown	103165	5.0%	11362	8.1%	59141	12.6%	151981	10.9%
Watsonia	231985	11.2%	13785	9.9%	48102	10.2%	145276	10.4%
Whittlesea	37058	1.8%	5944	4.3%	2715	0.6%	35887	2.6%
<b>Total</b>	<b>2076556</b>	<b>100%</b>	<b>139787</b>	<b>100%</b>	<b>469427</b>	<b>100%</b>	<b>1399501</b>	<b>100</b>

Type of library use	Use distribution*			
	Banyule	Nillumbik	Whittlesea	YPRL
Loans of physical items	40.6%	24.3%	35.1%	100%
Program attendance	35.2%	17.0%	47.8%	100%
Computer/wifi sessions	35.4%	16.0%	48.6%	100%
Library visits	36.7%	20.2%	43.1%	100%
Population (for reference)	33.4%	16.7%	49.8%	100%
Income distribution \$000				
State Government Grant \$000				\$2,209
Direct income \$000				\$697
<b>Total distributed income</b>				<b>\$2,906</b>
Loans of physical items	\$1,180	\$705	\$1,021	\$2,906
<b>Current measure</b>	-	-	-	-
Program attendance	\$1,023	\$494	\$1,389	\$2,906
<b>Impact on modelled income</b>	<b>(\$157)</b>	<b>(\$211)</b>	<b>\$368</b>	<b>\$0</b>
Computer/wifi sessions	\$1,029	\$465	\$1,412	\$2,906
<b>Impact on modelled income</b>	<b>(\$151)</b>	<b>(\$240)</b>	<b>\$391</b>	<b>\$0</b>
Library visits	\$1,066	\$587	\$1,253	\$2,906
<b>Impact on modelled income</b>	<b>(\$114)</b>	<b>(\$118)</b>	<b>\$232</b>	<b>\$0</b>

\* Overall use distribution is that which is determined once the branch totals are distributed according to branch usage and then summed by LGA.

What becomes evident when alternative measures of library usage are considered is that the overall distribution of loans by LGA is quite different to the distribution of other library uses. Banyule residents make 40.6% of the loans but are estimated to use only 35% to 37% of other library services. Whereas, Whittlesea residents make 35.1% of loans but are much more likely to be using the library to attend programs (47.8%) or access the computers and wifi (48.6%), in line with the regional population.

If program attendance were the sole measure of library usage (as opposed to loans), the total usage cost apportioned to each member Council would not change. However, because the model has a concentrated focus on use as the means of apportioning both cost and income, the return of the State Government Grant and other direct income to Councils would change. In this case, Banyule would receive \$157,000 less and Nillumbik \$211,000 less than under the current loans-based model because their residents use less of the program services provided by the library. Whittlesea, whose residents are relatively greater users of library programs would receive \$368,000 more than at present (the net impact being \$0 under the fixed cost model).

Similarly, if use of computers was the sole measure of usage Whittlesea would contribute \$391,000 less than at present with the lesser using Councils Banyule and Nillumbik contributing more. So too if library visits were the usage measure, Whittlesea would pay less and Banyule and Nillumbik would pay more.

## Conclusion

Having loans of physical collection items as the sole measure of library usage in the YPRL cost apportionment model fails to recognise the much broader range of services offered by a modern library – services that are highly valued and regularly used by different cohorts of the population. To the extent that it is possible the cost apportionment model should use a broader definition of library usage. This broader definition would still include loans as the primary measure, but might also incorporate other measures of use. For example, and as an arbitrary split of use, there being no relevant industry standard or accepted definition:

- 50% of use = loans of physical collection items
- 25% of use = attendance at library programs
- 25% of use = use of computers and wifi.

While a number of alternative measures of library use can be easily identified, and use by branch measured, the methods for definitively determining the profile of within branch use by LGA do not yet exist, and even if they were to be implemented might negatively influence use of the library services.

However, a proxy measure of the distribution of library use within branches does exist (loans by LGA) and, subject to further practical testing of its applicability, might be used to apportion costs and income within the YPRL model.

Based: i) on current and historical usage statistics; and ii) on using the proxy measure of within branch use, the impact of this broader definition of library use would mean that each Council's total cost of using library services would be unchanged, but that the State Government Grant and direct income would be reallocated with:

- Banyule contributing an extra \$77,000 per annum
- Nillumbik contributing an extra \$113,000 per annum
- Whittlesea contributing \$190,000 less per annum.

## 8. ISSUE 2 – STATE GOVERNMENT GRANT

### Library funding

The State Government provides a grant to every Victorian Council to support provision of public library services. From a total pool of money allocated in the State Budget for this purpose, the amount given to each LGA is determined on the basis of population characteristics.

In distributing the funding the State Government advice states:

*87.5% of the total State Government funding pool is allocated between Councils on a per capita basis*

*12.5% of the funding pool is allocated on the basis of a flat amount per Council adjusted using Grants Commission weightings for remoteness, population dispersion, English proficiency, socio-economic disadvantage and ageing*

*95% of the amount allocated to each service is designated as ‘Core Funding’*

*5% of the amount allocated is designated as ‘Local Priorities Funding’.*

In 2015-16 the flat amount per Council (the 12.5% component) was \$59k, which after adjustments across all Victorian LGAs led to Whittlesea being allocated \$59k, Banyule \$53k and Nillumbik \$48k.

Beyond stating its method of determining the funding allocation and distinguishing between ‘core’ and ‘local’ priorities funding, the State Government does not dictate how the library grant is to be spent. To simplify its accounting and distribution of funds, for Regional Library Corporations the State Government sums the amount allocated to each LGA and makes one single payment to the regional library.

For 2015-16 the State Government Grant to YPRL’s three member Councils totaled \$2,209k.

### Allocation of the State Government Grant

In the 2010 review of the Yarra Plenty Regional Library Agreement the ‘equitable’ allocation of the State Government Grant was a point of contention between the member Councils. Whittlesea argued that the amount allocated to each Council should be returned to each Council as income that reduced their total cost of using the library. Banyule and Nillumbik argued that the total Grant amount should be returned to Council’s in accordance with their relative use of library services. As agreement could not be reached within internal processes the matter was referred for arbitration.

The Arbitrator Mr Golvan concluded that:

*Allocation of funds based on library usage criteria in a regional library service seem to me to be a fairer and more consistent approach (than a population or collection offset approach).*

*It also ensures that the State Government funding is allocated for library purposes, which is the purpose of the recurrent annual funding.*

The 2010 Supplemental Agreement clearly differentiates calculation of the cost of providing library services from the treatment of income. The State Government Grant appears on the ‘Income’ side of the model, and is deducted once the total cost of using library services is determined.

Pursuant to Mr Golvan's findings, the 2010 Supplemental Agreement states that:

*Each Council's annual financial contribution will be reduced by the amount of income it receives by way of State Government library grants.*

*All income from State Government library grants received by the Regional Library with reference to a Council will be credited by reference to the proportion which the usage of each Branch Library in that Council's municipal district bears to the total usage of all Branch Libraries in the region.*

In effect, consistent with YPRL's user pays approach to cost apportionment, in Step 5 of the model the 95% 'core funding' allocation is returned to member Councils in the proportion of their total use of the branch libraries, which as previously noted in 2015-16 was:

- 40.6% Banyule
- 24.3% Nillumbik
- 35.1% Whittlesea.

Year	Grant Amount \$000				RLA 'usage' apportionment \$000			Variance \$000		
	B	N	W	Total	B	N	W	B	N	W
2011-12	645	347	827	1,820	723	375	721	78	28	(106)
2012-13	698	375	944	2,017	712	476	828	14	102	(116)
2013-14	711	378	1,010	2,100	872	495	733	161	116	(277)
2014-15	715	378	1,061	2,155	854	495	806	139	117	(256)
2015-16	735	389	1,076	2,200	893	534	773	158	145	(303)
<b>Total</b>	<b>3,504</b>	<b>1,868</b>	<b>4,919</b>	<b>10,290</b>	<b>4,054</b>	<b>2,376</b>	<b>3,861</b>	<b>550</b>	<b>508</b>	<b>(1,058)</b>
2011-12	35.4%	19.1%	45.5%	100%	39.7%	20.6%	39.6%			
2012-13	34.6%	18.6%	46.8%	100%	35.3%	23.6%	41.1%			
2013-14	33.9%	18.0%	48.1%	100%	41.5%	23.6%	34.9%			
2014-15	33.2%	17.6%	49.2%	100%	39.6%	23.0%	37.4%			
2015-16	33.4%	17.7%	48.9%	100%	40.6%	24.3%	35.1%			
<b>Total</b>	<b>34.0%</b>	<b>18.2%</b>	<b>47.8%</b>	<b>100%</b>	<b>39.4%</b>	<b>23.1%</b>	<b>37.5%</b>			

\* Total 'core funding' excludes 5% 'local priorities funding'. Total amount may vary slightly from budget estimates in the cost apportionment model (e.g. \$10k in 2015-16) due to differences in timing of budget processes and grant funding. Any variation is addressed in annual accounting provisions.

Over the past five years Banyule has been allocated \$3.50 million by the State Government for 'core funding' of library services, or 34.0% of the total amount allocated to YPRL. Having used, on average, 39.4% of library services, Banyule has through the YPRL model been credited with \$4.05 million. Nillumbik's total Grant amount from the State Government is \$1.87 million, and it has received \$2.38 million back through the cost apportionment model. The State Government has allocated \$4.92 million to YPRL based on Whittlesea's growing population and its demographic characteristics. Through the loans-based usage model Whittlesea has received \$3.86 million in deductions from its contributions.

### A fair and equitable approach

The simplest method of allocating the State Government Grant is to return to each Council the amount calculated for each Council by the State Government. That is, for example, if the State Government gives YPRL \$735k in core funding in 2015-16 based on Banyule's population profile then this is the amount which is deducted from Banyule's cost of using library services in Step 5 of the model. This approach:

- is simple to understand, calculate and administer
- most closely reflects the method used by the State Government to calculate the amount per LGA
- directly and predictably enables each Council to reduce the cost of using library services.

YPRL's cost apportionment model, however, for the most part adopts an approach that is premised on use of library services, and in particular determining net costs and allocating these between Councils on the basis of usage. It appears that the comprehensive focus on apportionment by usage in all other elements of the model contributed to Mr Golvan's conclusion that the model should also align the distribution of income with usage. Thus, the current model is slightly more complicated than it might be, but it has a greater degree of internal consistency.

In a normalised world where the profile of library use was consistent across different population cohorts and the only variant was the volume of use, which increased or decreased as the population did, the State Government's population-based approach and YPRL's usage-based approach would have produced similar results. In fact, if the YPRL model had in the past five years adopted a broader definition of library usage (as discussed against Issue 3, Section 7), it is likely that the amounts allocated to each Council by the State Government and the amounts deducted by the model from each Council's usage cost would have been very close. This is because library uses such as program attendance, computer use and visits are more aligned to the general population distribution than readership and borrowing of collection items – which has been the model's sole measure of library usage.

Ultimately, the method of allocating the State Government Grant is a decision for the YPRL Board. The State Government does not define how the funding should be distributed.

Also, it is understood that there is no single approach to this issue that is favoured by other regional libraries. The different approaches used include allocating the Grant amount:

- directly back to member Councils
- to member Councils as a share of the population
- to member Councils as a share of total costs (which are typically calculated using cost drivers and usage measures like those in the YPRL model).

## Conclusion

Crediting the State Government Grant amount back to member Councils as a deduction from their total cost of using library services is the simplest and fairest method of allocation.

<b>State Government Grant</b>	<b>\$000</b>	<b>Banyule</b>	<b>Nillumbik</b>	<b>Whittlesea</b>	<b>Total</b>
Current usage approach		\$897	\$536	\$776	\$2,209
Direct credit of allocated amount		\$738	\$391	\$1,080	\$2,209
<b>Impact of changed approach</b>		<b>(\$159)</b>	<b>(\$145)</b>	<b>\$304</b>	<b>\$0</b>

Under this approach Whittlesea would have its total use cost reduced by an additional \$304k, with Banyule receiving \$159k less of the State Government Grant and Nillumbik \$145k less.

If the YPRL Board wishes to retain consistency with its user pays approach to cost apportionment, as occurs on the cost side of the model and should continue for the allocation of other direct income, allocation of the State Government Grant on the basis of usage is appropriate, although a broader definition of library usage should be considered (see Section 7).



## 9. CONCLUSIONS AND RECOMMENDATIONS

### 9.1. Conclusions

#### Review of the Regional Library Agreement

Yarra Plenty Regional Library reviews its Regional Library Agreement every five years. Analysis of the Agreement aims to ensure:

- that it fairly captures the actual costs of each component of the library service
- that it fairly captures direct and indirect costs for each branch
- that costs are transparently and fairly apportioned according to usage.

In particular, the 2015 review was to examine a number of issues related to the definition and working of the YPRL cost apportionment model, as outlined in the 2010 Supplemental Agreement. These included:

1. Insufficient understanding of the workings of the current (and perceived to be complicated) cost apportionment model.
2. Inequities in the allocation of LSS administration costs, especially for smaller branches.
3. Sensitivity of the model to shifts in usage that influence member Councils' ability to budget for a predictable cost of using library services.
4. The use of loans of physical items as the sole measure of library usage, ignoring the many other ways in which people use a modern library.
5. Allocation of the State Government Grant for libraries.

The review has involved thorough analysis of the YPRL cost apportionment model, as well as consultation with relevant stakeholders including Library Board members, member Council CEOs and Directors and YPRL senior staff.

#### Key findings

The review has found that YPRL's cost apportionment model is perhaps the most sophisticated model currently in use among Victoria's regional library corporations. The reason for this is that the YPRL model explicitly and consistently has an emphasis on library usage as the defining driver of cost allocation and apportionment.

The YPRL cost apportionment methodology is a user pays model. It employs a selection of relevant cost drivers to determine the cost of providing services at each branch. Then it applies usage statistics to apportion costs at branch level, to apportion costs at a regional level, and finally to apportion revenues at a Council level. In effect, the model explicitly charges each Council for their residents' use of the library (not the cost of the Council providing library services to its residents). That is, the more the residents of any LGA use the library (actually – the more loans of physical collection items they make), the greater that LGA's share of the total fixed cost of service provision.

The model is at the same time both conceptually simple and mathematically quite complex. However, it is important that Board members and member Council's understand how the model works – and how the contribution they are apportioned each year has been derived.

Analysis of the cost model and each of the highlighted issues has identified areas for refinement. These do not substantially change the conceptual basis of the user pays model, but are suggested as ways to improve the integrity and transparency of the model in its contemporary setting, without introducing

unnecessary or undue complexity to the model. Most importantly, it is recommended that YPRL endeavour to broaden the definition of usage used on both the cost and income side of the model to incorporate library uses other than just loans.

## 9.2. Recommendations

The following recommendations are made to enhance the fairness, integrity and transparency of YPRL's cost apportionment model as defined in its 2010 Supplemental Agreement.

### Recommendation 1

That YPRL ensure that its induction processes for new Board members include a clear explanation of the workings of the cost apportionment model. This explanation should, at a minimum, include:

- an outline of the key steps in the calculation and apportionment of income and expenditure
- a 'worked' example of the key inputs and outputs from the model, using data from the most recently completed round of annual model calculations
- emphasis on the implications of having a service usage model (as distinct from a service provision model).

### Recommendation 2

a) That LSS executive management costs be separated from LSS administration costs and apportioned equally between member Councils.

b) That salaries and on-costs related to community engagement, collections, IT and organisational development functions that are currently included in LSS administration be reallocated to the respective cost area and distributed between branches in line with the cost drivers that are already used in the model.

c) That the balance of LSS administration costs be apportioned equally to each YPRL branch.

### Recommendation 3

That YPRL's cost apportionment model be adjusted to allocate community engagement costs to branches on the basis of total attendance at library programs at each branch.

### Recommendation 4

That YPRL's cost apportionment model be adjusted to determine the usage profile at each branch (and overall) as the average annual figure over the past three calendar years.

That is, calculation of cost contributions for the 2016-17 financial year would be undertaken in January 2016 based on the average of annualised usage data from January 2013 to December 2015.

### Recommendation 5

That YPRL's cost apportionment model be adjusted to recognise a broader and more relevant definition of library use. That is, in allocating both costs and income the model allocate:

- 50% on the basis of loans of physical collection items
- 25% on the basis of attendance at library programs
- 25% on the basis of the number of computer and wifi sessions.

### Recommendation 6

a) That in the absence of more definitive data the YPRL cost apportionment model use the distribution of loans by LGA at branch level as a proxy indicator of within branch library use for both program attendance and computer use.

b) That YPRL undertake further testing of library attendance and computer use by user's residential location to validate the use of the proxy indicator or establish separate profiles of within branch use by LGA.

### Recommendation 7

That YPRL's cost apportionment model be adjusted so that the amount of the State Government Grant provided to YPRL and attributed to each Council be deducted from each Council's cost of using library services.

### Recommendation 8

That there be no change to the method of allocating direct income in the model, other than any change arising from the adoption of Recommendation 6.

## 9.3. Net effect of recommendations on 2015-16 cost apportionment

In 2015-16 the YPRL cost apportionment model determined that the total cost of using branch services would be \$14.2 million, with the total cost of service usage \$14.8 million. After deductions of the State Government Grant, direct and other income the total cost of using library services was \$11.8 million. The City of Whittlesea contributed \$4.9 million, Banyule \$4.4 million and Nillumbik \$2.5 million.

If the recommendations made as a result of the 2015 review of the Regional Library Agreement had been factored into the 2015-16 calculations the net result would not have changed the total cost and income amounts (the model fixing these amounts and then being a cost apportionment model). It would, however, have affected each Council's share of the overall usage cost.

As indicated throughout this report, the recommendations influence each Council's net cost of using library services. Some recommendations have quite a small impact on the overall cost share per Council, but represent a better and/or more consistent way of apportioning costs. Others have a significant impact on the apportionment of costs – notably the treatment of the State Government Grant (net \$304k), a broader definition of usage (\$190k) and allocation of executive management costs (\$88k). The individual cost impact of each recommendation is shown in the following table.

Recommendation	\$000	Banyule	Nillumbik	Whittlesea	Total
1	Board member induction				
2a	Executive management costs	(\$31)	\$88	(\$57)	\$0
2b	Community engagement, collections, IT and organisational development costs	(\$11)	\$17	(\$6)	\$0
2c	LSS administration costs				
3	Community engagement cost driver	(\$7)	(\$3)	\$10	\$0
4	3 year average usage data	(\$4)	(\$13)	\$17	\$0
5	Broader definition of cost usage	\$77	\$113	(\$190)	\$0
6a	Loans as proxy indicator of usage				
6b	Testing of usage indicators				
7	State Government Grant	\$159	\$145	(\$304)	\$0
8	Direct income				

However, it should be understood that due to the nature of the YPRL cost apportionment model some of the recommendations are inter-related. For example, as discussed in Section 5.2, changing the cost driver for allocating community engagement costs to branches (Recommendation 3) would have an impact on the outcome of Recommendation 2b which increases the reported cost of community engagement activities. More significantly, there is considerable overlap in the effects of Recommendations 5 and 7 (the two recommendations with the individually greatest cost impact), such that the combined effect is less than the sum of the two separate actions.

Overall, the net effect of adopting **all recommendations** from the review in the 2015-16 cost apportionment model would have been to:

- increase Banyule's contribution by \$104k (an increase of 2.4%)
- increase Nillumbik's contribution by \$254k (+ 10.2%)
- decrease Whittlesea's contribution by \$358k (- 7.3%).

Item	\$000	Banyule	Nillumbik	Whittlesea	Total
<i>Current model</i>					
Total cost		\$5,576	\$3,205	\$6,017	\$14,798
Total income		\$1,181	\$706	\$1,083	\$2,970
<b>Total contribution</b>		<b>\$4,395</b>	<b>\$2,499</b>	<b>\$4,934</b>	<b>\$11,828</b>
<i>Adoption of all recommendations</i>					
Total cost		\$5,503	\$3,286	\$6,009	\$14,798
Total income		\$1,004	\$533	\$1,433	\$2,970
<b>Total contribution</b>		<b>\$4,499</b>	<b>\$2,753</b>	<b>\$4,576</b>	<b>\$11,828</b>
<i>Net impact of adopting all recommendations</i>					
Total cost		(\$73)	\$81	(\$8)	\$0
Total income		(\$177)	(\$173)	\$350	\$0
<b>Total contribution</b>		<b>\$104</b>	<b>\$254</b>	<b>(\$358)</b>	<b>\$0</b>
% impact on total contribution		+ 2.4%	+ 10.2%	- 7.3%	

The explanation for the changes can be summarised in three points. That is, the cost apportionment model that YPRL has used for the past five years has:

- linked apportionment of the State Government Grant to usage (and in fact linked it to one particular form of usage that is not solely representative of the variety of uses of a modern library)
- favoured Council's with high levels of loans and relatively lower use of library programs, technology access and other services
- benefited Council's with a small number of branches, which has reduced their share of the cost of Regional Library management.

## APPENDIX 1. BRANCH METRICS

Key branch metrics from the 2015-16 cost apportionment model are presented in the following table.

Measure	D. Valley	Eltham	Ivanhoe	Lalor	Mill Park	Rosanna	Thomastown	Watsonia	Whittlesea	Branches
<b>Step 1 – Calculate branch costs</b>										
<i>Cost drivers</i>										
Staff (no. of EFT)	6.0	11.1	8.4	7.4	10.2	6.7	5.1	7.5	4.3	66.8
Collections (no. of items)	45,600	53,200	52,300	52,200	67,200	41,200	34,100	35,900	16,600	398,200
Computers (no. of PCs)	26	59	48	51	54	26	44	35	11	354
Staff (% of EFT)	6.5%	12.1%	9.2%	8.0%	11.1%	7.3%	5.5%	8.2%	4.7%	72.6%
Collections (% of items)	11.1%	13.0%	12.8%	12.8%	16.4%	10.0%	8.3%	8.8%	4.0%	97.2%
Computers (% of PCs)	6.6%	15.1%	12.2%	13.0%	13.8%	6.6%	11.2%	8.9%	2.8%	90.3%
<i>Branch cost (\$000)</i>										
Staff	578	986	758	683	918	596	448	683	385	6,035
Furniture/Utilities	96	126	84	106	156	57	132	90	3	850
Collections	306	357	351	350	451	276	228	241	111	2,671
Computers	78	176	143	152	161	78	131	104	33	1,057
Organisational development	13	24	18	16	22	15	11	16	9	144
Community engagement	23	23	23	23	23	23	23	23	23	211
Administration	360	360	360	360	360	360	360	360	360	3,237
<b>Total branch cost</b>	<b>\$1,453</b>	<b>\$2,052</b>	<b>\$1,738</b>	<b>\$1,691</b>	<b>\$2,091</b>	<b>\$1,405</b>	<b>\$1,334</b>	<b>\$1,519</b>	<b>\$924</b>	<b>\$14,205</b>
<b>Step 2 – Apportion branch costs by branch usage</b>										
<i>Usage (no. of loans)</i>										
Banyule	66,553	78,900	262,007	6,009	31,829	210,002	3,716	192,156	4,044	855,216
Nillumbik	122,868	316,249	6,727	1,825	17,415	9,021	1,704	21,627	2,823	500,259
Whittlesea	16,310	12,622	9,894	183,658	345,144	7,315	97,745	18,202	30,191	721,081
Total	205,731	407,771	278,628	191,492	394,388	226,338	103,165	231,985	37,058	2,076,556
<i>Usage (% of loans)</i>										
Banyule	32%	19%	94%	3%	8%	93%	3%	83%	11%	40.6%
Nillumbik	60%	78%	2%	1%	4%	4%	2%	9%	8%	24.3%
Whittlesea	8%	3%	4%	96%	88%	3%	95%	8%	81%	35.1%

Measure	D. Valley	Eltham	Ivanhoe	Lalor	Mill Park	Rosanna	Thomastown	Watsonia	Whittlesea	Branches
<i>Cost allocation (\$000)</i>										
Banyule	470	397	1,634	53	169	1,303	48	1,257	101	5,433
Nillumbik	868	1,591	42	16	92	56	22	142	70	2,899
Whittlesea	115	64	62	1,621	1,830	45	1,264	119	753	5,873
<b>Total branch cost</b>	<b>\$1,453</b>	<b>\$2,052</b>	<b>\$1,738</b>	<b>\$1,691</b>	<b>\$2,091</b>	<b>\$1,405</b>	<b>\$1,334</b>	<b>\$1,519</b>	<b>\$924</b>	<b>\$14,205</b>
<b>Comparative indicator*</b>										
Cost per loan	\$5.30	\$3.77	\$4.68	\$6.62	\$3.98	\$4.66	\$9.70	\$4.91	\$18.70	\$5.13
Salary cost per loan	\$2.11	\$1.81	\$2.04	\$2.67	\$1.75	\$1.98	\$3.26	\$2.21	\$7.78	\$2.18
EFT per 10,000 collection items	1.3	2.1	1.6	1.4	1.5	1.6	1.5	2.1	2.6	1.7
Loans per collection item	6.0	10.2	7.1	4.9	7.8	7.3	4.0	8.6	3.0	7.0

\* Shading of Comparative indicators = Green (better than average) ... Orange (worse than average).