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# TIMBER TOWNS VICTORIA LOCAL ROADS FUNDING STRATEGY

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## REPORT FOR THE CENTRAL WEST REGION

Prepared by  
**Ratio Consultants Pty Ltd**

Prepared for  
**Timber Towns Victoria**

23 June 2005

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# TABLE OF CONTENTS

Chapter / Section Page No.

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<b>1</b>	<b>INTRODUCTION</b>	<b>1</b>
1.1	Background.....	1
1.2	Study Objectives.....	1
1.3	Study Approach.....	1
1.4	Study Process.....	2
1.5	The Central West Region.....	2
1.6	Structure of Report.....	2
<b>2</b>	<b>LOCAL ROAD PLANNING AND ADMINISTRATION</b>	<b>3</b>
2.1	Key Organisations.....	3
2.2	Funding Sources and Opportunities.....	4
<b>3</b>	<b>INDUSTRY STRUCTURE AND WOODFLOWS</b>	<b>5</b>
3.1	Review of TIRES.....	5
3.2	Changes to Woodflows.....	5
3.3	Changes to Assessment Process.....	6
<b>4</b>	<b>STRATEGIC HIGH PRIORITY ROADS</b>	<b>7</b>

## APPENDICES

**Appendix A.** Workshop Notes

**Appendix B.** TIRES (2000) Priority Road Project List

# 1 INTRODUCTION

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## 1.1 BACKGROUND

The Victorian timber industry continues to evolve as it works toward the 2020 Vision to treble timber plantations and create a sustainable resource that meets the government's social, economic and environmental objectives.

Recognising the importance of transport infrastructure in meeting the industry's needs, Timber Towns Victoria (TTV) commissioned the benchmark Timber Industry Roads Evaluation Study (TIRES), released in 2000. The Study produced a separate report for each of Victoria's four timber producing regions; namely Gippsland Region, North East Region, Central West Region and South West Region.

For each Region, the Study provided strong economic justification for infrastructure improvements that would increase transport efficiencies and reduce industry costs. Specifically, the Study identified a set of strategically important local roads<sup>1</sup> and the associated improvement works that, if undertaken would yield positive economic benefits.

TIRES was effective in promoting the local road funding needs of many Councils throughout Victoria and TTV is now seeking to update and expand the process. In addition, TTV is seeking to respond to State and Federal Government guidelines for local road funding which increasingly requires project justification to demonstrate multi-sector and region-wide benefits. For example, funding priority to be given to timber road upgrading projects that assist tourism and other non-timber industry sectors, or which assist regional access across Council boundaries.

Accordingly in 2004 the TTV appointed Ratio Consultants to undertake a review of the priority local road projects identified under TIRES, and to prepare updated project lists for each of the four regions.

This report documents the research and findings for the **Central West Region**.

## 1.2 STUDY OBJECTIVES

The key objective of the Local Roads Funding Strategy Study was to develop a list of priority projects that demonstrate benefits primarily to the timber industry, but also to non-timber industries within the Central West Region.

## 1.3 STUDY APPROACH

This Report presents a brief overview of industry, policy and funding developments that have impacted the timber industry in the Central West Region since TIRES (i.e. 2000 to 2005).

The purpose of this Study is to review the previous TIRES list of priority projects and to assess the relevance of those projects in light of the above developments.

The primary output of this Report is a list of 42 priority projects, each with associated timber and (where applicable) non-timber related justifications for the identified works.

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<sup>1</sup> "Local" roads are public roads under the control of Councils. They generally provide a local traffic access and distribution function and act as feeders to "main" roads, the latter being under the control of VicRoads.

## 1.4 STUDY PROCESS

The basis of the Study process was workshop consultation with Council Officers from each of the eleven local government areas that make up the Central West Region. Also included in the consultation process were VicRoads Officers, the regional Plantation Committee and industry representatives.

The Central West workshop was held on Wednesday 24 November 2004 in Ballarat. Five Councils were represented out of the eleven invited. Also in attendance were representatives from VicRoads, the Plantation Committee and local Timber Industry.

The Workshop notes are attached as Appendix A.

The main aim was to determine which TIRES projects had been completed, which of the others were still relevant, and which (if any) new projects had acquired priority status.

The consultation process was also used as a forum for identifying changes to industry, policy and funding arrangements that have impacted the region.

In most cases, there was a need for follow-up discussions and provision of additional information by each of the represented groups.

## 1.5 THE CENTRAL WEST REGION

The Central West Region incorporates the following municipalities:

- City of Ballarat
- Colac Otway
- Corangamite
- Golden Plains
- Greater Geelong
- Hepburn
- Macedon Ranges
- Moorabool
- Mount Alexander
- Pyrennes
- Surf Coast

## 1.6 STRUCTURE OF REPORT

Section 2 of this Report provides an overview of the current organisational structure of the timber industry.

Section 3 summarises progress that has been made in the region since the completion of TIRES.

Section 4 presents the Ratio Consultants strategic priority projects for the Central West Region.

## 2 LOCAL ROAD PLANNING AND ADMINISTRATION

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### 2.1 KEY ORGANISATIONS

#### 2.1.1 Councils

Local Councils control and manage all local roads, and have funds available mainly through government grants, which are supplemented by rate revenues.

The Council Officers that undertake the day-to-day management task of the local road network are in the Asset and/or Engineering divisions of Councils.

With regard to timber impacted roads, Council Officers are routinely provided with information on future haulage routes from either government or private operators (e.g. 'plantation development notices'). The Officers use this information, along with any region-wide information (e.g. TIRES) to assign both Council funds and other available funds to priority projects.

#### 2.1.2 VicRoads

Along with controlling and managing main roads, VicRoads administers funding for "timber impacted roads" including local roads, and therefore plays a key role in the Central West region.

#### 2.1.3 Regional Plantation Committee

Australia's Regional Plantation Committees were established in 1996 to promote farm forestry and plantations in regions of Australia with the best growing prospects.

Central Victorian Farm Plantations is the Regional Private Forestry Development Committee for Central West Victoria. It is jointly funded by the Australian Federal and Victorian State Governments. The Executive Officer of the Committee is David Fiskin.

To assist in its monitoring of the timber industry, Central Victorian Farm Plantations has prepared a mapped database of plantation resources within the region<sup>2</sup>.

Also, Central Victorian Farm Plantations commissioned a study in 2003<sup>3</sup>, which considers the socio-economic aspects of the region's forest industries.

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<sup>2</sup> 'Plantation Resource Inventory of Central Victoria' (2004), Central Victorian Farm Plantations

<sup>3</sup> 'Socio-Economic Study of the Forest Industries in Central Victoria', July 2003, URS Forestry

### 2.1.4 Need for an On-Going TIRES Committee

There has **not** been any on-going regional coordination within the Central West region since the completion of the TIRES study.

We note that On-Going TIRES Committees have been established in the North East and Gippsland regions of the State. These Committees meet regularly and typically comprise representatives from Councils, VicRoads, the Plantation Committee and the timber industry. The main aim of these On-Going TIRES Committees is to continue the work commenced by TIRES and established a process of reviewing, monitoring and refining the TIRES priority local road projects for that region.

Through our consultation process, various key groups have expressed the need for continued regional coordination, and we therefore recommend that such a Committee (or similar) be investigated for the South West region.

## 2.2 FUNDING SOURCES AND OPPORTUNITIES

### 2.2.1 Roads to Recovery

The Federal Roads to Recovery Programme was extended in January 2004 and will continue until 2009 using the existing formula based allocation method. Part of the new Programme is the specific allocation of funding to Councils for local land transport infrastructure projects of **strategic regional importance**. The intention of this funding is to encourage and reward strategic and collaborative planning approaches among Councils, with states in some instances and between local industries and communities.

The broad guidelines of the strategic component of the Roads to Recovery Programme recommends that Councils take into account the following:

- whether the project enhances the ability of regional industry and communities to compete in the national and global market;
- whether it performs a connecting function to a larger road network, within the shire or through a neighbouring shire to railhead, freight depot or higher order regional roads connecting to ports and airports;
- whether it has been generated through a regional planning process and is consistent with State/Territory regional planning.

At the time of this Report, specific programme guidelines were yet to be determined.

### 2.2.2 Better Roads Victoria

The Victorian Better Roads fund was established in 1993 and provides funds for road projects that contribute to the state's economic development.

Under the category of Rural Local Roads, funds are available for reconstruction and upgrading of local roads in rural areas where the nature and volume of traffic has been affected by State Government initiatives. Priority is given to projects of regional importance and specifically, funds are available to repair and upgrade rural local roads affected by the cartage of timber from crown lands.

The VicRoads North East Region administers the applications for Better Roads funding in the region.

## 3 INDUSTRY STRUCTURE AND WOODFLOWS

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### 3.1 REVIEW OF TIRES

Key outputs of the TIRES Central West Report were the 'strategic regional road network' and a list of 62 priority projects (refer Appendix B).

The strategic regional road network was selected considering a broad range of factors, including timber tonnages along each route and other factors such as *"interaction with other traffic (eg tourism, school bus route)"*, however these factors were not quantified or specifically documented in the TIRES report.

The TIRES list of priority projects includes information relating to timber tonnages (in five year periods) and cost/benefit ratios were calculated for each. Notably, the list of priority projects did not identify any specific prioritisation.

### 3.2 CHANGES TO WOODFLOWS

Our consultation process with government and industry representatives has highlighted the dynamic nature of the timber industry, and the challenges involved in keeping up to date accounts of the many forces that drive the sector. These include frequent changes to the production, sales and distribution of wood products, and periodic changes to federal, state and local government policies and strategies that affect the timber industry.

From our consultations with the Plantation Committee and our review of its 2003 Socio-Economic Study, the **key changes** to the timber industry in the Central West region since the release of the original TIRES report are the major reductions in the harvesting of native timber from the region, including:

- reduction in total timber harvest from the Wombat Forest area in the Midlands (reduced sawlogs and no woodchips);
- reduction in total timber harvest from the Otways area, decreasing to zero by 2008.

The many other developments that have affected the timber industry since TIRES are not documented (to our knowledge), but we assume that they are generally reflected in our list of priority projects, as reviewed by the regional Council Officers.

### 3.3 CHANGES TO ASSESSMENT PROCESS

The original TIRES report focused strongly on the economic aspects of the timber industry, including the costs and benefits of individual road projects.

Since that time, accumulated experience has revealed that economic indicators such as cost/benefit ratios are not the most useful tools in the evaluation of road projects, and that in fact other more direct indicators, such as timber haulage are more suitable.

Although the broader benefits to the non-timber sector are generally acknowledged as being relevant, there has yet to be any specific documentation of these factors in any of the assessment processes reviewed during the course of our investigations.

## 4 STRATEGIC HIGH PRIORITY ROADS

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In overview, the Central West region has not continued the regional coordination that was started with TIRES.

As such, we have relied on the original TIRES list of strategic road projects, and their review by Council Officers from each of the municipalities.

Through our process of research and consultations, Ratio Consultants have further updated this list and expanded its scope to include (where available) non-timber industry criteria.

**The resultant list of priority projects for the Central West Region is attached as Table 1 and shown graphically as Figure 1.**

**Table 1 shows that the total investment requirement is \$14,659,960.**

Notably, the Table 1 list comprises 42 individual projects. Although our TTV brief specified the inclusion of only ten (10) projects, we currently have no specific basis for selecting any ten projects above others, therefore we have included the list in its entirety. The list is in the alphabetical order of the Central West region Shires.

**In our view, the process of establishing priority projects for the region requires continuous and frequent input from the various stakeholder groups, including Council, VicRoads, the Plantation Committee and industry. We therefore recommend that an 'On-Going TIRES Committee' be established in the Central West region (as per the North East and Gippsland regions).**

Shire	Road	Indicative Cost	Timber Related Justification	Non-Timber Related Justification			
				Tourism Road	Other Industry Road (grain, dairy, quarry, etc)	Other Regional Function	Road Safety Issue
Colac Otway	McDonalds Road	\$240,000	as per TIRES				
Colac Otway	Hoveys Road	\$46,000	as per TIRES				
Colac Otway	Colac Muroon Road	\$140,000	as per TIRES				
Colac Otway	Swan Marsh Road	\$291,460	as per TIRES				
Colac Otway	Irrewillipe Pirron Yalook Road	\$87,000	as per TIRES				
Corangamite Shire	Pipeline Road	\$66,000	as per TIRES				
Corangamite Shire	Blackwood Park Road	\$51,000	as per TIRES				
Corangamite Shire	Coradjil Road	\$200,000	New Project				
Corangamite Shire	Valley View Road	\$120,000	New Project				
Corangamite Shire	Valley View Road	\$215,000	New Project				
Corangamite Shire	Fords Road	\$318,000	New Project				
Corangamite Shire	Tomahawk Creek road	\$74,000	New Project				
Corangamite Shire	Tomahawk Creek road	\$229,000	New Project				
Golden Plains	Dereel – Mt Mercer Road	\$320,000	Used by B doubles transporting timber to Colac-Ballarat Rd from Bunniyong-Mt Mercer Rd				Some sections of narrow seal and heavily tread roadsides
Golden Plains	Bunniyong Mt Mercer Road	\$60,000	Used by B doubles transporting timber to Colac-Ballarat Rd from the Garibaldi area	Used by tourist traffic travelling from Ballarat to Great Ocean Road areas.	General farming transport access to Ballarat area is restricted by the Garibaldi Bridge load restriction.	As for tourism and general farming access to Ballarat from south of Mt Mercer	Narrow seal including narrow one lane bridge
Hepburn	Pearces Road	\$420,000	as per TIRES				
Hepburn	South Bullarto Road	\$476,000	as per TIRES				
Hepburn	Pearsons Road	\$150,000	as per TIRES				
Hepburn	Pearsons Road (bridge)	\$100,000	as per TIRES				
Hepburn	Telegraph Road	N/A	New Project. Hancocks using road to remove timber from softwood plantations		Route used by all industries particularly the agricultural industry for cropping, farm produce and potato production		Narrow road close to small township of Sailors falls
Hepburn	Basalt Road	N/A	New Project. Hancocks using road to remove timber from softwood plantations	Road used as alternate route to Lavandula Complex in Shepherds Flat			
Hepburn	Leonards Hill- Bullarto Road	N/A	New Project. Principal route for hardwood timber removal within the Wombat Forest				
Macedon Ranges	Blackwood Road	\$465,000	on draft TIRES list but didn't make final - still relevant	yes - road is in a forest area which is popular with travellers and day trippers. Substantial amount of recreation bike traffic			Road also used by people going to and from properties. Barely adequate for continuous two way traffic
Macedon Ranges	Canning Park Road	\$390,000	on draft TIRES list but didn't make final - still relevant	yes - road is in a forest area which is popular with travellers and day trippers. Substantial amount of recreation bike traffic			Road also used by people going to and from properties. Barely adequate for continuous two way traffic
Macedon Ranges	Scout Camp Road	\$360,000	on draft TIRES list but didn't make final - still relevant	yes - road is in a forest area which is popular with travellers and day trippers. Substantial amount of recreation bike traffic			
Moorabool	Yendon Egerton Road	\$750,500	This is a local short cut in preference to Highway, only some minor Council funded works done				
Moorabool	Yendon Egerton Road (BRIDGE)	\$68,000	as per TIRES				major safety issues (single lane bridge)
Moorabool	Spargo Creek Road	\$1,476,000	This is a high tonnage route. Retain high priority and seek further funding.				
Moorabool	Spargo Creek Road (bridge)	\$49,000	as per TIRES				
Pyrenees	Beaufort Carngham Road	\$2,200,000	major bluegum impacts, 40 % completed	yes	Quarry	Link Ballarat South to the west	Y School Bus Route
Pyrenees	Beaufort Carngham Road (3 BRIDGES)	\$120,000	major bluegum impacts	yes	Quarry	Link Ballarat South to the west	Y School Bus Route
Pyrenees	Mount Lonarch Road	\$175,500	as per TIRES				
Pyrenees	Fortes Road	\$117,500	as per TIRES				
Pyrenees	Beaufort Amphitheatre Road	\$1,475,000	Main route to forest areas, 80 % completed	yes			Y School Bus Route
Pyrenees	Beaufort Amphitheatre Road	\$380,000	State Impacted Funding Bid to Vicroads				
Pyrenees	Elmhurst Beaufort Road (bridge)	\$50,000	important Hancock route	yes			Y Narrow Bridge
Pyrenees	Elmhurst Beaufort Road (bridge)	\$40,000	important Hancock route	yes			
Pyrenees	Elmhurst Beaufort Road	\$680,000	major bluegum area, important Hancock route	yes			
Pyrenees	Elmhurst Beaufort Road	\$1,460,000	major bluegum area, important Hancock route	yes		Link to Winery Area to North west	Y Narrow Pavement
Pyrenees	Carngham - Trawalla Road	\$800,000	bluegum area, important Hancock route				
<b>TOTAL COST</b>		<b>\$14,659,960</b>					

Table 1  
Priority Projects



Figure 1  
**PRIORITY PROJECTS - CENTRAL WEST TIRES REGION ROAD NETWORK**

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## Appendix A. Workshop Notes

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### Key Workshop Findings

Some key points to come out of the workshop:

- The Central West Region has not progressed significantly from TIRES in terms of regional coordination.
- Council Officers, the Plantation Committee representative and Timber Industry representatives generally expressed a desire for a structure that provides improved communications between Council and industry, and the coordination of funding bids on a regional level.
- The TIRES list of priority projects is still the base list.

### Central West Region - Workshop Notes

Present		Key Comments
Russell Symons	Ratio Consultants (Director)	
Tina Webb	Ratio Consultants (Associate Director)	
Graham Freestone	VicRoads Ballarat	Identifies Auslink and R2R2 as important general funding sources for road projects and VicRoads 'Better Roads' as a more specific source that was borne directly from TIRES.
David Fiskin	Central Victorian Farm Plantations	<p>David Fiskin is surprised that no official updates of the TIRES priority projects lists have been released. He has produced a map of softwood and hardwood plantations in the region, which he has provided to each Workshop attendee in a CD format. He acknowledges that timber areas and flows change regularly.</p> <p>David further identified a number of plantation growth areas (around Ballarat, Skipton and others), including former dairy farms. Ian Karutz (VicRoads Geelong) queried whether the conversion of dairy farms to timber would actually increase traffic (i.e. 2 dairy trucks per day vs shorter more intense timber trucks every 10 yrs). David also noted the expansion of timber crops into higher rainfall areas using new agricultural technology (raised beds).</p>
Bill Bui	VicRoads Kew (Senior Transport Planner)	Bill Bui is preparing an Arterial Road Strategy for the Green Triangle region, which specifically addresses the Bluegum 'explosion'. The Strategy is an extension of the South Australian 'Limestone Coast' Study. It seeks to address the problems associated with timber trucks mixing with recreational and tourist vehicles, including cyclists.
Ian Karutz	VicRoads Geelong	Ian Karutz has a long background in the timber roads industry. He is working on the Arterial Road Strategy with Bill Bui. His view is that TIRES did not adequately address the cross-boarder traffic issues through the Green Triangle to ports and processing plants.
Gary Dolan	Colac Otway Shire	<p>Gary Dolan had previously assisted in the preparation of the 'Colac Otways Timber Study'. He noted that:</p> <ul style="list-style-type: none"> <li>▪ He would prefer the TIRES regions to align with the VicRoads regions.</li> <li>▪ He would like to see Councils identifying their preferred timber routes rather than the plantations setting their own preferred routes.</li> <li>▪ He referred to modelling work being undertaken by the National Institute of Economic and Industry Research (NEIR).</li> </ul>
Terry McAliece	Hancock Vic Plantations	Whilst the Council Officers agreed that there is insufficient notice of timber activity, Terry McAliece and David Fiskin (Central Victorian Farm Plantations) confirmed that 5-year plans and plantation notices are already provided to Councils – this highlights a general lack of communication within the region between industry and Council Officers. Nils Gunnensen (Midway) noted that precise 5-year plans are difficult to prepare due to the dynamic nature of the industry.
Nils Gunnensen	Midway	Nils Gunnensen noted Bluegums and Shining Gums as their main crops. New areas are being established around Skipton and Beaufort. Midway also operate a port facility in Geelong
Andrew Bainbridge	Moorabool Shire	Andrew Bainbridge has already received funding under VicRoads' Better Roads. He agreed that Councils are not being involved early enough in the process (i.e. prefer more involvement in the establishment phase rather than the harvesting phase).

APPENDIX A

Nick Haslinghouse	Macedon Ranges Shire	Nick Haslinghouse was also involved in TIRES. His Shire has not received funding lately for timber roads under VicRoads' Better Roads. His view is that R2R2 funding is not suitable for timber impacted roads and that the Better Roads funding is more appropriate. His Shire has a major tourism component.
Trevor Smith	Pyrenees Shire	
Peter Bate	City of Ballarat	
<b>Not Present</b>		
Paul Semaratunge	Corangamite (Assets Planning Manager)	Provided emailed information.
Rick Hattam	Golden Plains (Works Manager)	Provided emailed information.
Andrew Bourke	Hepburn (Manager Operations)	
Brett Martini	Mount Alexander (Director Operations)	
David Mitchell	Surf Coast	
Peter Reeve	Greater Geelong	

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**Appendix B. TIRES (2000) Priority Road  
Project List**

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Appendix B: Costing of Upgrades - Council Data

Project Number	Road	Section		Existing B-Double Route?	Future B-Double Route?	Existing Conditions			Existing Surface Treatment	Terrain	Future Surface Treatment	Major Changes to Geometri cs?	Bridge Upgrade Required ?	Period Upgraded	Length (km)	Unit Cost Roadworks (\$'000/km)	Total Cost Roadworks (\$'000)	Bridge Upgrade (\$'000)	Roadworks Plus Bridgeworks Total Cost (\$'000)	Council Priority	Regional Priority	Council	Timber Period 1 - 5 year period	Tonnage Period 2 - 5 year period	Predicted Timber Vehicle Numbers		
		From	To			Existing Traffic Volumes																			Current Condition	Period 1	Period 2
						Total Daily Volume	% CV	Growth Rate (% pa)																			
CW1	Wait a While Road	Lavers Hill - Beech Forest Rd	2.5	N	N	14	8	0	F	U	U	U	N	N	1	6.3	16.6	104.7	0	104.7	M	M	Colac Otway	309777	130177	10551	4434
CW2	Wait a While Road	8.8	7.6	N	N	14	8	0	F	U	U	U	N	N	1	1.2	28.6	34.3	0	34.3	M	M	Colac Otway	309777	130177	10551	4434
CW3	Lardner Road	Beech Forest Rd	Sayers Rd	Y	Y	25	4	0	F	U	U	U	N	N	1	2.6	30.8	80.2	0	80.2	M	M	Colac Otway	140110	135050	4772	4600
CW4	Lardner Road	0	2.8	Y	Y	25	4	0	F	U	U	U	N	N	1	2.8	30.8	86.3	0	86.3	M	M	Colac Otway	140110	135050	4772	4600
CW5	Old Beech Forest Road/Colac Beech Forest Road	1.7	2.8	Y	Y	100	5	0	F	U	U	U	N	N	1	2.8	21.5	60.3	0	60.3	M	M	Colac Otway	204116	177777	6952	6055
CW6	Old Beech Forest Road/Colac Beech Forest Road	4.5	7.2	Y	Y	100	5	0	F	U	U	U	N	N	1	2.7	27.5	74.3	0	74.3	M	M	Colac Otway	204116	177777	6952	6055
CW7	Old Beech Forest Road/Colac Beech Forest Road	10	11.1	Y	Y	100	5	0	F	U	U	U	N	N	1	1.1	26.5	29.2	0	29.2	M	M	Colac Otway	204116	177777	6952	6055
CW8	Old Beech Forest Road/Colac Beech Forest Road	11.1	14.3	Y	Y	100	5	0	F	U	U	U	N	N	1	3.2	17.3	55.5	0	55.5	H	M	Colac Otway	204116	177777	6952	6055
CW9	Mt Sabine Benwirin Road	Sunnyside Rd	7.6	Y	Y	40	8	0	F	U	U	U	N	N	1	7.6	14.7	112.0	0	112.0	M	M	Colac Otway	230447	62900	7849	2142
CW10	Mt Sabine Benwirin Road	8.6	17.2	Y	Y	40	8	0	F	U	U	U	N	N	1	8.6	14.3	123.0	0	123.0	M	M	Colac Otway	230447	62900	7849	2142
CW11	Sunnyside Road	Forrest Apollo Bay Rd	Mt Sabine Rd	Y	Y	63	5	0	F	S	U	S	N	N	1	2.4	60.8	145.8	0	145.8	M	M	Colac Otway	38254	19400	1337	661
CW12	Sunnyside Road	Mt Sabine Rd	3.9	Y	Y	63	5	0	F	U	U	U	N	N	1	1.5	27.7	41.5	0	41.5	M	M	Colac Otway	38254	19400	1337	661
CW13	McDonalds Road	Karwarren East	Parkes Lodge	N	N	80	20	0	G	U	U	U	N	N	1	4.8	50	240	0	240	M	M	Colac Otway	342789	31000	11675	1056
CW14	Hoveys Road	Old Wonga	Colac Lavers Rd	N	N	60	2	0	F	U	U	U	N	N	1	1.9	24.2	46.0	0	46.0	M	M	Colac Otway	63770	34500	2172	1175
CW15	Pipeline Road	South Shire Boundary		N	N	20	5	0	P	U	F	U	N	N	1	5.1	40	205	0	205	L	L	Corangamite	11098	47580	378	1621
CW16	Blackwood Park Road	Pipe Line Road	Lavershill Cobden Road	N	N	50	10	0	F	U	F	U	N	N	1	3.8	22	84	0	84	L	L	Corangamite	11098	47580	378	1621
CW17	JanCourt Forest Road	Timboon Colac Road	End Forest Reserve	N	N	40	34	1	F	U	F	U	N	N	1	6.4	17.2	110	0	110	M	M	Corangamite	20523	20500	699	698
CW18	Coradjil Road	Lavershill Cobden Road	Majestic Drive	Y	Y	600	3	1	P	S	F	S	N	N	1	4.9	143	700	0	700	M	M	Corangamite	17700	18790	603	640
CW19	Delaneys Track	Loves Rd	3	N	N	70	5	0	F	U	U	U	N	N	1	3	16.2	48.7	0	48.7	M	M	Colac Otway	101480	69250	3456	2359
CW20	Colac Muroon Road	Colac Forrest Rd	Birregurra - Forrest	N	N	400	5	0	G	S	U	S	N	N	2	2	70	140	0	140.0	L	L	Colac Otway	7000	7000	238	238
CW21	Swan Marsh Road	Princes Hwy	Irrewillipe Pirron Yalook Road	N	N	100	5	0	G	S	U	S	N	N	1	2.6	112.1	291.46	0	291.5	M	M	Colac Otway	5000	5000	170	170
CW22	Irrewillipe Pirron Yalook Road	Swan Marsh Rd	Irrewillipe Road	N	N	390	5	0	G	S	U	S	N	N	1	5.2	16.7	87	0	87.0	L	L	Colac Otway	5000	5000	170	170
CW23	Depeel - Mt Mercer Road	Colac Ballarat Road	3.27	N	N	130	5	1	F	S	U	S	Y	N	2	3.8	84.2	320	0	320.0	L	L	Golden Plains	26000	15000	886	511
CW24	Bunniyong Mt Mercer Road	Yarrowee River	Yarrowee River	N	Y	800	5	2	P	S	U	S	Y	Y	1	0.2	300	60	0	60.0	H	H	Ballarat	20580	20580	701	701
BCW25	Bunniyong Mt Mercer Road (BRIDGE)	Yarrowee River	Yarrowee River	N	Y	800	5	2	P	S	U	S	Y	Y	1	NA		440	0	440.0	H	H	Ballarat	20580	20580	701	701
CW26	Bunniyong Mt Mercer Road	Skirkas Rd	2km South of Skirkas Rd	N	Y	800	5	2	P	S	U	S	N	N	1	2	300	600	0	600.0	H	H	Ballarat	20580	20580	701	701
CW27	Bunniyong Mt Mercer Road	Yarrowee Creek	Yarrowee Creek	N	N	592	4	3	P	S	U	S	Y	Y	1	0.4	125	50	0	50.0	H	H	Golden Plains	20580	20580	701	701
BCW28	Bunniyong Mt Mercer Road (bridge)	Yarrowee Creek	Yarrowee Creek	N	N	592	4	3	P	S	U	S	Y	Y	1			450	0	450.0	H	H	Golden Plains	20580	20580	701	701
CW29	Bunniyong Mt Mercer Road	McKees Rd	Shire Boundary	N	N	592	4	3	F	S	U	S	Y	Y	1	0.6	100	60	0	60	H	H	Golden Plains	20580	20580	701	701
CW30	State Farm Road	Sebastopol-Smythesdale Road	Victoria Road	N	N	388	4	3	F	S	U	S	Y	N	1	5.7	75	428	0	428	M	M	Golden Plains	68908	68908	2347	2347
CW31	Beaufort Carngham Road	0	11	N	Y	150	10	2	F	S	U	S	N	Y	1	11	120	1320	0	1,320	M	M	Pyrenees	66532	66532	2266	2266
BCW32	Beaufort Carngham Road (3 BRIDGES)	0	19.4	N	Y	150	10	2	F	S	U	S	N	Y	1	NA		120	0	120	M	M	Pyrenees	66532	66532	2266	2266
CW33	Yendon Egerton Road	Yendon	12615	N	N	535	6	3	P	S	U	S	N	Y	1	7.9	95	751	0	751	H	H	Moorabool	10070	9486	343	323
BCW34	Yendon Egerton Road (BRIDGE)	Yendon	12615	N	N	535	6	3	P	S	U	S	N	Y	1	NA		68	0	68	H	H	Moorabool	10070	9486	343	323
CW35	Ballarat Navigator Road	Yendon No @	8600	N	N	2300	10	3	F	S	U	S	N	N	1	8.66	10	87	0	87	H	M	Moorabool	10746	0	366	0
CW36	Mt Doran - Settlement Road	Midland Hwy	5545	N	N	120	8	1	P	S	U	S	N	N	2	5.55	110	611	0	611	L	M	Moorabool	0	10746	0	366
CW37	Blakeville Road	Ballan Greendale + 300m	10200	N	N	180	12	2	P	S	U	S	N	N	1	9.9	110	1089	0	1089	H	H	Moorabool	177566	177566	6048	6048
CW38	Spargo Creek Road	Bungaree Wallace Rd	15020	N	N	765	5	3	P	S	U	S	Y	Y	1	12.3	120	1476	0	1476	H	H	Moorabool	311040	311157	10594	10598
BCW39	Spargo Creek Road (bridge)	Bungaree Wallace Rd	15020	N	N	765	5	3	P	S	U	S	Y	Y	1	NA		49	0	49	H	H	Moorabool	311040	311157	10594	10598
CW40	Werona Road	Midland Highway		N	Y	100	25	1	F	Part S/Part U	U	S	N	N	1	5.5	110	605	0	605	M	M	Hepburn	26130	26130	890	890
CW41	Suttons Lane	Daylesford Malmesbury Rd	Glenlyon Little Hampton Rd	N	Y	10	25	1	P	U	U	U	Y	N	1	1.6	20	32	0	32	H	H	Hepburn	109648	109648	3734	3734
CW42	Glenlyon Little Hampton Road	Suttons Lane	Mudlark Rd	N	Y	30	50	1	F	U	U	U	N	N	1	4	60	0	0	60	M	M	Hepburn	109648	109648	3734	3734
CW43	Fingerpost Road	Calder Hwy	Burnt Mill Rd	N	N	150	5	1	G	U	U	S	N	N	1	7.1	100	710	0	710	H	H	Macedon Ranges	40000	0	1362	0
CW44	Campaspe Road	Burnt Mill Rd	End	N	N	50	20	1	F	U	U	U	N	N	2	2.5	40	40	0	40	M	M	Macedon Ranges	110950	110950	3779	3779
CW45	Pearces Road	South Bullarto Rd		N	Y	50	25	1	F	S	U	S	N	N	2	3	140	420	0	420	M	M	Hepburn	240366	240366	8187	8187
CW46	South Bullarto Road	Daylesford Trentham Rd	Shire Boundary	N	Y	110	30	1	P	S	F	S	N	N	1	3.4	140	476	0	476	H	H	Hepburn	110950	110950	3779	3779
CW47	Pearsons Road	Lagoon Rd	Kyneton Trentham Rd	N	Y	100	20	1	F	S	U	S	N	Y	1	2	150	150	0	150	H	H	Hepburn	110922	110922	3778	3778
BCW48	Pearsons Road (bridge)	Lagoon Rd	Kyneton Trentham Rd	N	Y	100	20	1	F	S	U	S	N	Y	1	NA		100	0	100	H	H	Hepburn	110922	110922	3778	3778
CW49	Mount Lonarch Road	0	3.9	N	Y	150	80	1	P	U	U	U	N	N	1	3.9	45	175	0	175	H	H	Pyrenees	256460	26483	8735	902
CW50	Fortes Road	0	2.35	N	Y	150	80	1	P	U	U	U	N	N	1	2.35	50	117									