Timber Ti

THE FIRST MILE 2016 - 2020 Executive Summary



Timber INDUSTRY Road Evaluation Study THE FIRST MILE

The Victorian timber industry is a substantial contributor to the state's regional and overall economies and is widely dispersed across the state, placing significant demands on Victorian road infrastructure.

The Timber Impact Roads Evaluation Study (TIRES) identifies the local road infrastructure required for the efficient operation of the Victorian forest industry, focusing on the first mile; the local roads utilised at the beginning of each timber run, currently unmaintained by state funding.

There are clear benefits to the whole community in developing an appropriate road network for the forest industries – safety for all other users (e.g. school buses, tourists), regional job security, and improved access for other primary industries including local farmers, to name just a few. Because the task of transporting logs is so large in terms of the annual tonnage hauled, the planning of upgrades of roads used by the forest industries also influences strategic planning of regional freight infrastructure, and can justify other areas of road development and provide additional regional benefits.

The road infrastructure required for the efficient operation of the forest industries is not necessarily more extensive than that required by other primary production sectors, but it involves the use of roads in more remote areas and often in more difficult terrain. Consequently, the forest industries in Victoria have a continuing need for a special category of road funding.

The last 12 years have seen the TIRES process deliver almost \$50 million for maintenance of timber-impacted roads. This vital funding benefits not only the timber industry, but also provides high levels of safety to the surrounding communities.

Local government in rural areas are under many pressures to deliver and maintain infrastructure. With the Financial Assistance Grants indexation freeze, Rate Capping policies to be implemented in the coming financial year, and the end of the Country Roads and Bridges Program, proven methods of advocacy such as the TIRES process have never been more important.

This study prioritises future infrastructure projects based on the total impact of road degradation upon the timber industry, and provides estimates on the monetary figures associated within these projects taken on by local government budgets.

The TIRES PROCESS

A regional approach was adopted to focus on the road infrastructure needs in each of four TIRES regions – the North East and Gippsland regions in the eastern half of the state, where timber is produced from both native forests and plantations; and the Central Victoria and South West regions, where timber production is associated with significant plantation resources.

The regions for this study are based on the TIRES regions established in 1999-2000. Each region comprises of a number of separate municipalities broadly aligned with key timber producing zones. Industry and municipality data has been collected over the past six months to create a well-rounded picture of the upcoming road maintenance projects to be undertaken in the following year.

This information, once captured, is collated and processed through the Timber index (Ti) formula as created by VicRoads, to rank each road maintenance project by regional priority. The Ti formula is calculated by taking into account the following information:

- The total volume of timber to be carted across the road over the five-year period;
- The number of years and number of months per year it would be used by the timber industry;
- The industry priority;
- The current weight restrictions of the road;
- Suitability for B-doubles or singles; and
- Availability of an alternative route.

TI FORMULA		Possible data values			3=high 3=clos 2=medium 2=byp 1=low 1=nor		3=closed 2=bypass 1=none		1=b-double 0.5=single		2=not avail. 1=avail			
	Ti =	Total 5 yr volume /100,000	*	No. years /5	*	No. months /12	*	Indsutry priority	*	Weight restriction factor	*	Vehicle factor	*	Alternative route factor
example	5.501	114,600/100,000	*	4/5	*	12/12	*	3	*	1	*	1	*	2

It is worth noting that interregional comparisons using this formula should be treated cautiously as the methodology does not seek to recognise inter-regional differences such as terrain and seasonal influences.

Regional BREAKDOWNS

Councils throughout the following regions have analysed the projected road use by the forestry companies within and have identified specific infrastructure projects for nominated sections of local roads including the estimated cost for each project.

This covers a range of issues including road alignment, road surface strengthening or widening, safety matters such as visibility, road drainage and bridge infrastructure.

In order to place these projects into the context of their importance from a timber haulage perspective, costs have been compared with the expected volume of wood to be carted across the respective roads over the five-year planning period as per the Ti formula previously outlined.



GIPPSLAND	NORTH EAST	CENTRAL VICTORIA	SOUTH WEST
Baw Baw	Alpine	Colac Otway	Glenelg
East Gippsland	Indigo	Golden Plains	Moyne
Latrobe City	Murrindindi	Hepburn	Southern Grampians
Wellington	Towong	Macedon Ranges	West Wimmera
	Wangaratta	Moorabool	
		Pyrenees	
		Surf Coast	

REGION AT A GLIMPSE – Central Victoria



The wide geographic spread of timber-producing forests in the Central Victorian region and the range of processing facilities mean that haulage patterns within the region are complex. Key processing destinations in Geelong receive wood from all parts of the region as well as from forests outside the region.

In contrast, wood is also transported from forests within the Central Victoria region to mills in the South West region, particularly from pulpwood plantations in Corangamite and Colac Otway municipalities.

1,200

TOTAL EMPLOYMENT

TOP FIVE PRIORITY ROAD PROJECTS ESTIMATED ROAD NAME MUNICIPALITY ROAD PROJECT **PROJECT COSTS** Surf Coast \$164,000 Bambra-Aireys Inlet Rd Gravel Resheet Spargo Creek Rd Moorabool Re-construct T intersection and removal of Y intersection at the intersection of Linehans Rd. \$65,000 Pipeline Rd \$400,000 Colac-Otway Heavy gravel resheet, drainage improvements Extensions of 5 culverts . Widen curves & improve delineation and line marking. Resheet Yendon-Egerton Rd Moorabool \$855,000 and widen road. Rehabilitate pavement. Replace and extend guardrail . Sand Rd Resheet and seal includes Rosenows intersection. Moorabool \$160,000

TOTAL WOODFLOW

(TONNES)

1,742,000

REGION AT A GLIMPSE – Gippsland



The road needs for the Gippsland region are significant and are driven by the year-round nature of supply to major processors based in the region: Australian Paper at Maryvale (hardwood and softwood pulpwood), and Carter Holt Harvey sawmill (softwood sawlogs).

In addition, some of the plantations are located in terrain that is steep and experiences relatively high rainfall. The costs of providing all-weather roads is significant, as are the costs of providing bridges or large culverts to cross streams and rivers. The information provided by councils has generally taken these needs into account.



TOTAL WOODFLOW (TONNES) 1,417,000

TOTAL ROAD COSTS (\$) 13,969,825

TOTAL ROAD COSTS (\$)

18,513,900

TOP FIVE PRIORITY ROAD PROJECTS

ROAD NAME	MUNICIPALITY	ROAD PROJECT	ESTIMATED PROJECT COSTS
Taylors Rd	Wellington	Construction	\$542,000
Ferguson Rd/Willow Grove Rd Intersection, Fumina	Baw Baw	Intersection improvement to improve limited sight distance to allow safer access to Willowgrove Rd	\$137,316
Grand Ridge Rd	Latrobe	Widening of approximately 15 corners to improve public safety. Some corners currently impassable to log trucks	\$930,000
Whitelaws Tk	Wellington	Needs resurfacing on all shaded corners with material suitable for wet weather haulage. Material used in previous upgrade is not suitable.	\$450,000
Gormandale Stradbroke Rd/Taylors Ln	Wellington	Resurfacing needed due to the difficulty trucks have in climbing the hill on Taylors Lane in all weather conditions. This is the shortest route between the plantation and the processing plants at Morwell and Maryvale.	\$900,000

REGION AT A GLIMPSE – South West



A detailed and recent analysis of the major timber haulage routes in the Green Triangle region shows the concentration of expected woodflows in a southerly direction from Casterton to Portland and Hamilton to Portland, and in a westerly direction to Gambia, Nangawarry and Tarpeena.

It is recognised that this region is currently experiencing increases of to 700% with volumes between 2015-2019 expected to be between 10 million - 15 million tonnes per annum.

TTV has provided much needed funds towards a socio-economic benefits study which will provide invaluable data to underpin the review of the road impacts and needs analysis.





S TOTAL ROAD COSTS (\$) **27,705,839**

TOP FIVE PRIORITY ROAD PROJECTS

ROAD NAME	MUNICIPALITY	ROAD PROJECT	ESTIMATED PROJECT COSTS
Wanwin Rd	Glenelg	Clear vegetation, widen formation, overlay existing pavement with minimum of 150 mm limestone and seal 6.2 m plus corner widening and culvert widening.	\$590,000
Mumbannar-Wanwin Rd and Wilsons Rd	Glenelg	Clear vegetation, widen formation, overlay existing pavement with minimum of 150 mm limestone and seal 6.2 m plus culvert widening.	\$2,475,000
Byjuke Forest Rd	Glenelg	Clear vegetation, construct and seal to 6.2 m. Install culverts.	\$1,975,500
McDonalds Rd	West Wimmera	Reseal	\$414,750
Fergusons Road	West Wimmera	Upgrade to 3.7m seal with 2.0m shoulders.	\$1,162,500

REGION AT A GLIMPSE – North East



The road needs for the North East region are significant and are driven by the year-round nature of supply of softwood logs to major processors based in the region: Alpine MDF at Wangaratta, Carter Holt Harvey sawmill/plymill at Myrtleford and the Henderson plant at Benalla.

In addition, some of the plantations are located in terrain that is steep and experiences relatively high rainfall. The costs of providing all weather roads is high, as are the costs of providing bridges or large culverts to cross streams and rivers.

TOTAL EMPLOYMENT
1,717

TOTAL WOODFLOW (TONNES) 4,851,000

5 TOTAL ROAD COSTS (\$) 10,128,045

TOP FIVE PRIORITY ROAD PROJECTS

road name	MUNICIPALITY	ROAD PROJECT	ESTIMATED PROJECT COSTS
Rubicon Rd	Murrindindi	Road widening and shoulder works	\$540,000
Hurdle Flat Rd	Indigo	Pavement upgrade, shoulder widening, and seal	\$277,200
Chambeyron Rd	Indigo	Pavement upgrade, shoulder widening, and seal	\$163,800
Snobs Creek Rd	Murrindindi	Reseal first 370m. Rehab patching	\$60,000
Avondale Rd	Towong	Resheet 6.5km x 100 mm depth pavement	\$267,680

Victorian **OVERVIEW**

Timber production, like all regionally based industries, is heavily reliant on the transport sector. The total annual log haulage across the four TIRES regions in 2015 reached eight million tonnes, across 220 local roads.

This log haulage figure represents most but not all of the local road usage for the timber industry. From forest establishment, through tending and maintenance to harvesting, all phases of the forest production cycle require transport services. Unlike many agricultural enterprises, almost all work is undertaken by external contractors so that nearly all personnel and machinery required must be transported to and from each forest area.

The Victorian timber industry is a substantial contributor to the state's economy especially in regional areas. The industry directly employs approximately 237000 people in businesses that generate net expenditure within the state of between \$1.2 and \$1.6 billion dollars annually with the total output from the Victorian forest and forest products industry estimated at \$6.4 billion per year.

The 2016 - 2020 TIRES collection process identified a total of 225 roads listed for infrastructure maintenance across the state which will carry an estimated 14.7 million tonnes over the next five years. The total cost of works required on the roads is in excess of \$70 million during 2016 – 2020, vital in meeting the needs of the Victorian forest industry.

In order to capitalise on the potential socio-economic benefits from the states timber resource, investments will be required for the long-term improvement of road infrastructure to ensure that transport of timber resources is efficient, safe and sustainable.



ECONOMIC BENEFITS (gross turnover)

Billion

EMPLOYMENT FIGURES $\mathbf{000}$

ROAD MAINTENANCE COSTS 70 Million

\$

The importance of INFRASTRUCTURE FUNDING TO TIMBER IMPACTED MUNICIPALITIES

The Victorian timber industry is heavily dependent on local infrastructure with almost all of the work conducted by the industry undertaken by external contractors, requiring personnel and machinery to be continuously transported to and from each forest area for the duration of the timber production process.

For plantations, site preparation and establishment involves the use of earthmoving and spraying machinery that must be transported to and from the site. During tending and maintenance, machines such as tractors, graders and spray units are used to control weeds and maintain firebreaks and roads. However, these transport requirements are relatively minor compared with harvest time when transport requirements reach their peak.

Haulage routes are not always suitable for all vehicle types and although large-capacity vehicles are preferred (as they are more cost effective), accessibility to the forest and the standard of public roads immediately servicing the harvested forest area are key determinants of vehicle type used.

Limiting factors such as pavement width and strength, the tightness of curves and bends in the road, the vertical profile (e.g. prevalence of crests and dips), and general safety aspects (such as school bus routes, visibility and obstructions) determine the suitability of a given road for timber haulage and proposed vehicle configurations. Seasonal change also has a large impact on the limitations faced by the industry during its production.

To ensure each stage of production runs without complications, as well as ensuring safety to all travellers, the infrastructure utilised during this time must be maintained in prime working order.

Without a safe and efficient local road network, operators would not be able to cost-effectively transport their resource during each stage of the timber process. Local government is the responsible authority for the provision of safe local road infrastructure. The cost of upgrading and enhancing local roads to service new plantation areas has been identified as a major impediment to an expanded, internationally competitive Victorian timber industry.

Road infrastructure is a complex issue, as it is further affected by Federal and State policies such as Vision 2020 (the trebling of the plantation base by the year 2020) as well as the outlined requirements tabled in the Code of Practice for Timber Production 2014. There are continuous demands for local road infrastructure to provide a link between the plantation site and the larger arterial road network with the cost of meeting this infrastructure in Victoria alone to be estimated at \$70 million over five years.

There is a substantial shortfall in the funding available for timber roads across the state. While the timber industry contributes some funding towards the maintenance of the local road network (through vehicle registration fees etc), this only makes up part of the money required to sustain the network.

The timber industry is not the only party to benefit from a future allocation of funding to local infrastructure projects; with the ripple effect ensuring local councils are provided with the possibilities of directing funds into other vital community projects and the provision of support to rural communities through the encouragement of tourism with the completion of local road projects which open up access to all vehicles in all terrain.

The discontinuation of these federal and state funded grants stands to jeopardise the volume of local infrastructure projects seeing completion thus also jeopardising not only the sustainability of a future timber industry but also the regional areas and their long term sustainability.



Timber Towns Victoria (TTV) is an incorporated local government association representing the interests of municipal councils in relation to forestry on both public and private land. The Association's primary function is to provide a forum for local government to address the management of forests and forest industries and their impact on local communities.

TTV are proud to present the information enclosed within this executive summary to be utilised by members of local government and industry departments to assist in future research endeavours.

Previous TIRES documents are available at www.timbertownsvictoria.org.au



TIMBER TOWNS VICTORIA A Local Government Association

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