

Rail Futures Institute

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Getting freight back on track in Victoria

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This paper has been prepared by Rail Futures Incorporated in the public interest. Rail Futures Institute is an independent non-partisan group formed to advocate cost-effective rail and intermodal solutions for public transport and freight problems based on sound commercial, economic and social reasoning. Rail Futures members include experienced rail professionals, engineers and economists.

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Victorian rail freight is predominantly short-haul with average distances of 250 km

Summary

This purpose of this strategy is to bring about policy change which will enhance the competitiveness of Victorian rail freight operations and remove impediments facing potential rail users as part of a more economically, socially and environmentally-friendly freight transport system in Victoria.

It will help produce competitive rail freight services for customers including an increased share of rail freight to the Port of Melbourne. In particular, the paper highlights the institutional and governance arrangements of the Victorian rail freight system. The complexity of these arrangements significantly impedes efficient and competitive freight train operations in Victoria.

The strategy analyses rail freight's strengths, weaknesses, opportunities and threats before concluding and making recommendations. Rail Futures has developed these policies in the context of its broader multimodal views encompassing passenger rail, land use planning and economic development.

Introduction

"Freight rail will need to play a growing role in the movement of goods."

-Infrastructure Australia¹

Rail freight in Victoria has been in decline for over two decades and is now significantly underutilized compared with its potential. Other than transporting grain, containerized agricultural products and some bulk commodities Victorian rail freight does not have the importance it used to have in the State's freight task. Victorian rail freight needs a renewed policy focus from the Victorian government, together with significant modernization and catch-up infrastructure investment.

"Using rail to transport containers between the hinterland and ports can reduce road congestion, noise and air pollution."

Bureau of Industry, Transport and Regional Economics²

Investment in rail freight has significant benefits. Co-funding by the Victorian government and Graincorp in upgrading silos and associated rail infrastructure as part of Graincorp's 'Project Regeneration' will transfer 500,000 tonnes of export grain in the state from trucks to trains. This will provide annual benefits of \$2.2 million in reduced road maintenance and crash costs³.

A 2015 study for TasRail, Tasmania's rail freight operator, found that rail's 50% share of rail-road freight (2.6 million tonnes per annum) generated annual benefits of \$26 million to the Tasmanian economy⁴ in avoided road maintenance costs, avoided road accident and pollution costs, and operating efficiencies for industry and commerce. These benefits will continue to increase and accrue to \$159 million by 2019.

In 2010 the UK's Network Rail report 'The Value and Importance of Rail Freight', found that rail freight boosted the UK economy by 870 million pounds annually (A\$1.6 billion). The benefits of reduced congestion, noise, road crashes and pollution were estimated to be 376 million pounds (A\$700 million).

Freight trains in Victoria fall into the category of what is termed 'short-haul rail', traversing average distances of 250 kilometres and as little as 65 kilometres. This is considerably less than the mythical, conventional view that rail freight is only viable over distances of more than 1,000 kilometres.

"There are numerous short-haul urban and regional rail flows in Australia and overseas that lie well below this conventional 1,000 kilometres, indeed to distances under 30 kilometres."⁵

Upgrading and gauge standardising Victoria's north-west rail network will significantly improve the efficiency and competitiveness of Victorian rail freight. However, more needs to be done to enable rail freight to have a bigger role in the state's freight task and help reduce the economic, social and environmental costs of Victoria's freight transport.

¹ Infrastructure Australia Audit Report, May 2015, p8

² Bureau of Industry, Transport and Regional Economics, Research Report 139, *Why short-haul intermodal rail services succeed*, 2016, pv

³ Victorian Minister for Agriculture press release 29/4/16

⁴ *TasRail – Delivering value for Tasmania* 2015

⁵ BITRE op cit, p1

Historical trends

Victoria's regional rail freight business has been declining over the last 30 years due to:

- approval of bigger and heavier trucks to operate throughout the state
- relative lack of interest in Victorian regional rail freight services by national rail freight companies based in Sydney and Brisbane focused on interstate coal and minerals business
- inadequate rail investment
- transfer of locomotives and wagons to more lucrative traffic opportunities interstate
- upgraded interstate, regional and urban road links
- inefficiencies associated with a dual gauge rail network
- lack of law enforcement enabling truck drivers to speed, overload and drive unsafe hours
- complex and costly regulatory and administrative processes for freight train operators
- reduced open access terminals for freight train operators
- scrapping rather than sale of surplus locomotives and wagons which has prevented new rail freight business being developed by low cost freight train operators
- changes in grain marketing leading to increased truck transport of grain to handle customer requirements for small grain shipments and 'just-in-time' demand
- rail freight companies imposing expensive contract conditions on grain companies leading to more use of trucks
- anti-rail policies for short haul containerised freight to the Port of Melbourne
- cessation of production of some commodities (e.g. briquettes and gypsum).

Declining tonnages of regional rail freight in Victoria have outweighed the few gains, which have been in the following commodities:

- mid 2005 - containerised agricultural products from southern NSW to Melbourne Port (40,000 containers per annum)
- November 2011 - transport of mineral sands from Hopetoun to Hamilton (500,000 tonnes per annum) for separation into export product and tailings
- January 2016 - South Australian mineral sands imports from Ceduna to the Port of Portland to the Hamilton separation plant (100,000 tonnes per annum).



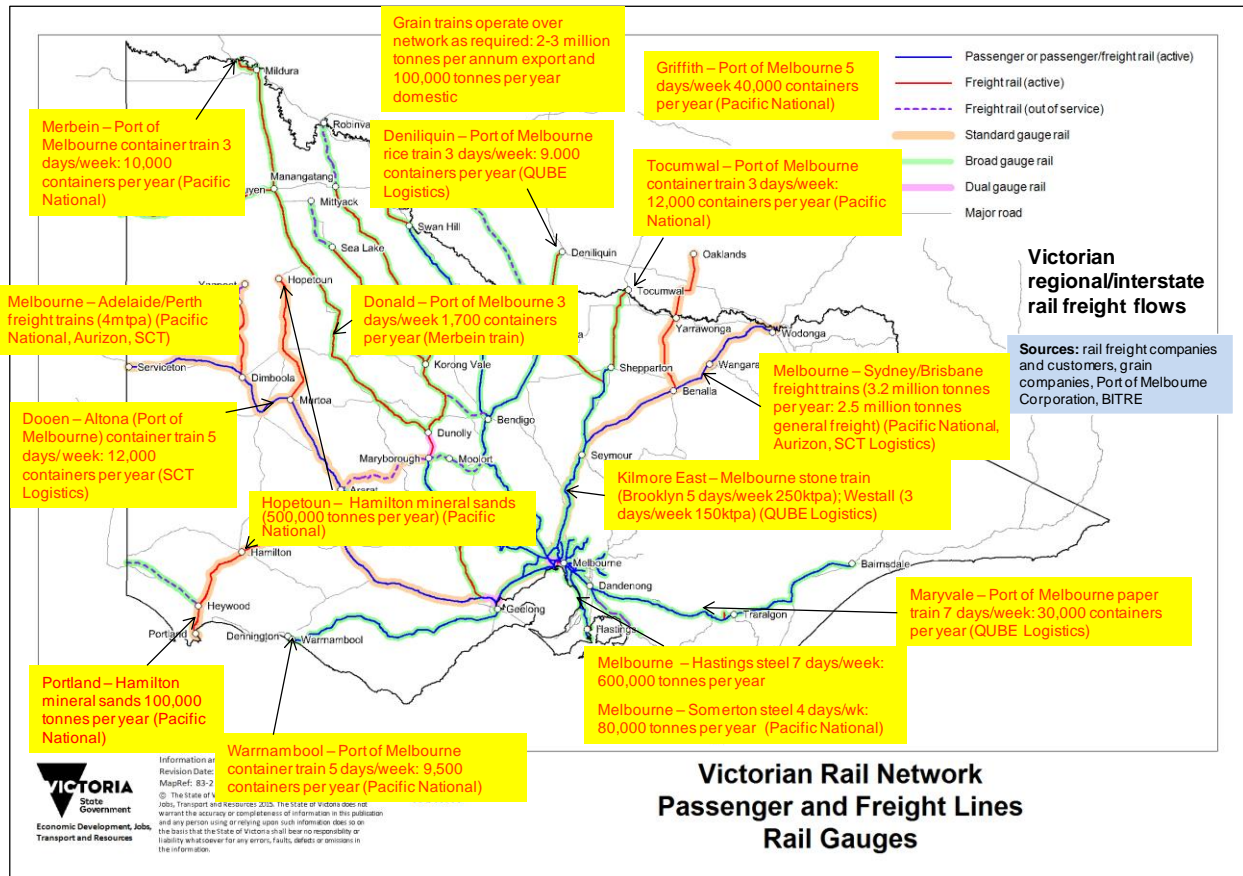
1,000 tonnes of grain transported by train replaces 25 trucks

Current role of Victorian rail freight

Victoria's freight train companies transport a wide range of commodities. These comprise export containers of agricultural and bulk products (grain, hay, potatoes, rice, peas, fruit, grapes, wine, meat, dairy, paper products and cement), export and domestic grain, mineral sands and crushed rock. Rail freight transports 41% of regional and interstate export containers through the Port of Melbourne which is 16% of total loaded export containers and 8% of the Port's throughput. The amount of Port containers transported by rail has declined from 14% ten years ago as the Port's business has increased and a greater proportion of Port containers are being transported by truck.

In terms of net tonne kilometres of freight transported (tonnes by distance), rail freight transports 30% of Victoria's non-urban land freight and 0% of Melbourne's urban land freight.

Victoria's rail freight services are shown below:



Rail freight companies presently operating in Victoria are:

- Pacific National -interstate and regional freight trains including grain trains for GrainCorp, Cargill and Emerald Grain
- Aurizon – interstate freight trains
- SCT Logistics – interstate and regional freight trains (Melbourne – Perth, Melbourne – Brisbane [part of an Aurizon train] and Melbourne – Dooen)
- QUBE Logistics: Deniliquin – Port of Melbourne containerised rice trains, Maryvale – Port of Melbourne containerised export and domestic paper products, crushed rock between Kilmore East and Brooklyn/Westall and grain trains for Noble Grain
- Genesee and Wyoming: export grain trains to the ports of Melbourne, Geelong and Portland

The small number of rail freight operators in Victoria contrasts with the vastly greater number of trucking companies from which freight customers can choose. It highlights the cost and complexity of operating freight trains compared with trucks.

Strengths of Victorian rail freight

Economies of scale

Victoria's rail freight services transport 13 million tonnes a year, keeping half a million truck trips off Victoria's roads or 1,500 truck trips per day. One freight train can replace 150 trucks. Rail freight is ideal for transporting bulk commodities or containerised cargoes between regional terminals and ports. Just 25 freight trains can fill a ship compared with 2,000 trucks.

Rail freight is an integral part of Australia's international supply chains and national distribution processes supporting primary and secondary industries. Freight trains save fuel, reduce road damage costs, road crashes, emissions and bridge damage. Residential amenity impacts and negative environmental effects are also reduced. Freight trains are vital for urban and environmental sustainability and public health and safety.

The regional rail network has capacity to accommodate more freight trains at minimal cost to taxpayers, unlike increased road freight which requires government investment in bigger roads and stronger bridges. The interstate and suburban rail network also has the ability to support the operation of container shuttle trains to/from the Port of Melbourne outside peak periods on existing networks.

Safety

"There is a considerable difference between rail operators and road transport companies in terms of safety systems with rail operators being at best practice."

Australian Transport Safety Bureau⁶

Rail systems have strictly enforced safety regimes. In contrast, official data and truck accident levels show that truck driver non-compliance with regulations involving drugs, over-loading, speeding, log book entries, truck roadworthiness and other regulations continues to be a serious problem. Roadside weighbridges for trucks are rarely open.



Truck safety is a major issue for other road users

The percentage of people killed in crashes involving articulated trucks since 2007 has remained constant at around 10% of all road fatalities despite the overall decrease in total road deaths. Many more are injured in road crashes involving trucks⁷. In Victoria alone, over 200 people are seriously injured each year in crashes involving heavy vehicles⁸. A road safety operation by police in northern Victoria in early 2013 found that 80% of trucks inspected had major safety defects.⁹

⁶ Australian Transport Safety Bureau report QT 2459, *Rungoo level crossing inquiry 2008* (Qld), p99

⁷ BITRE, *Fatal heavy crashes involving heavy vehicles Oct-Dec2014* and *Road deaths Australia December 2014*

⁸ Road Safety Victoria (VicRoads, Victoria Police and Transport Accident Commission) – Trucks (year)

⁹ Police heavy vehicle inspections as reported in Bendigo Advertiser 6/2/13 and Swan Hill Guardian 8/2/13

Life insurance industry research has found that the trucking industry is one of the most dangerous occupations in Australia¹⁰. According to the industry's research, truck drivers are ten times more likely to die at work than any other occupation.

The Transport Workers Union informed a 2015 Senate road safety inquiry¹¹ that low-cost contracts given by major retailers to trucking industry sub-contractors forced drivers to skip breaks and drive in a stressed and tired state with over-loaded vehicles:

*"Drivers are killed and blamed for taking risks to meet the economic demands of companies like Coles. Until we address the top of the supply chain the carnage will continue."*¹²

The retail industry is responsible for 40% of freight movement in Australia with Coles and Woolworths having 80% of that task¹³. An audit of three transport operators at the Coles Distribution Centre at Eastern Creek in NSW found 126 breaches of National Heavy Vehicle Regulations. These included drivers being forced to log loading and unloading time as rest time and drivers being denied rest time after 11 hours driving.

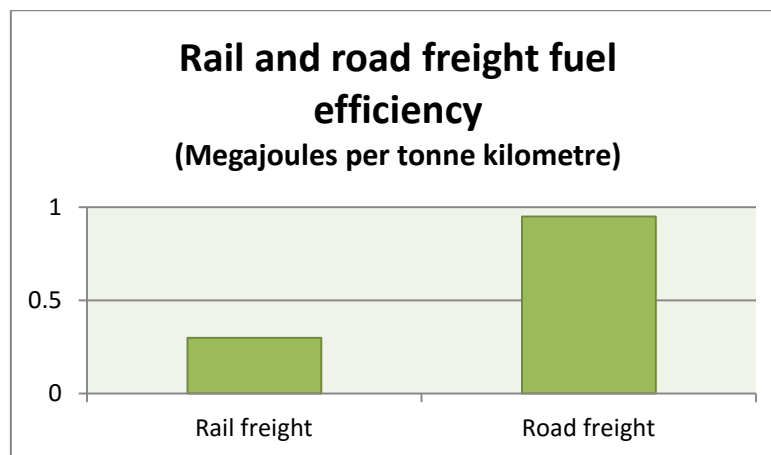
"Reducing the number of trucks will make our rural roads safer."

*Brett Hosking, Victorian Farmers Federation Grains Group president*¹⁴

Increased use of rail freight services can help reduce the national \$18 billion annual cost of road crashes.

Energy efficiency and reduced greenhouse gas emissions

Rail freight is over three times more fuel efficient than road freight. Rail freight uses only 0.30 Megajoules of fuel for each tonne of freight transported per kilometre compared with 0.95 Megajoules of fuel used per tonne kilometre by trucks.¹⁵



Rail freight's fuel use advantages mean that:

- Ouyen - Port of Melbourne: each train transporting 2,000 tonnes of grain 400 kilometres to port replaces 50 trucks, saving 5,500 litres of fuel and 14 tonnes of greenhouse gas emissions¹⁶
- Tocumwal – Port of Melbourne: each container train replaces 60 trucks, saving 6,200 litres of fuel and 16 tonnes of greenhouse gas emissions
- Sydney – Melbourne: each container train replaces 150 truck, saving over 45,000 litres of fuel and 120 tonnes of greenhouse gas emissions

¹⁰ Life Insurance Finder 20/10/14

¹¹ Senate Standing Committees on Rural and Regional Affairs and Transport inquiry, *Aspects of Road Safety* 2015

¹² *Seymour Telegraph*, 15 July 2015, p14

¹³ Senate Standing Committees on Rural and Regional Affairs and Transport inquiry, op cit

¹⁴ Swan Hill Guardian, 11/4/16, p2

¹⁵ *Victorian Transport Facts 2011*, pp181&185

¹⁶ Rail freight fuel consumption of 4.1 litres/1,000 gross tonne kilometres (PN) and truck fuel consumption of 62.5litres/100km Freight Metrics Truck Operating Cost Calculator and diesel fuel conversion of 2.6kg of CO² per litre consumed (Carbon Trust *Energy Conversion Factors* 2013, p3)

Weaknesses of the Victorian rail freight system – governance issues

Fragmented institutional arrangements

Victoria's rail freight system has been fragmented since its privatisation in 1999. The State's rail network is owned by VicTrack, a state corporation, and is leased to Public Transport Victoria (PTV) which sub-leases the network to:

- *Australian Rail Track Corporation (ARTC)*: 1,023 km of standard gauge interstate (Albury-Melbourne-Geelong-Serviceton) and regional (Maroona-Portland, Benalla - Oaklands) track
- *V/Line*: 3,670 km of regional broad and standard gauge track
- *Metro Trains Melbourne (MTM)*: 400 km of metropolitan broad gauge rail network

The ARTC, V/Line and MTM have different track access agreements and operating standards. A regional Victorian export container going to the Port of Melbourne requires track access agreements with four track access providers: V/Line for access to the regional rail network; MTM for parts of the metropolitan rail network; the ARTC for access into the Port; and a stevedore for access into a port rail terminal.

In contrast, transporting containers by truck to the Port of Melbourne is subject to far simpler and less onerous regulations even though road safety issues indicate existing truck regulations should be more rigorously enforced.

V/Line and MTM are bound by legislation to give passenger trains priority over freight trains. This often delays freight trains which can adversely affect freight customers (e.g. missing a ship).

Lack of rail freight governance

Victoria has appointed Ministers for Roads (and Ports) and Public Transport, but none specifically for rail freight. The Department of Economic Development, responsible for freight and passenger transport, does not measure performance of the rail freight system. There is no Victorian rail freight facilitator or 'One Stop Shop' to assist rail freight service providers or customers to understand the complexities of the rail freight system and how to use it. This compares with the road freight sector which is supported by the National Transport Commission, National Heavy Vehicle Regulator, VicRoads, etc.

The lack of clarity of responsibility for rail freight makes it difficult for new freight train operators to enter the market. There is a lack of government policy support for operators of freight trains which are expensive and complex to manage. There is also no group within government focussed on promoting rail freight, identifying market opportunities, solving problems of businesses wanting to use rail freight or planning the future rail freight investments and developments required in Victoria.

Rail freight opportunities

Murray Basin Rail Project

The \$440 million allocated by the Victorian and federal governments to standardise and upgrade the State's north-west rail lines will increase competition between the ports of Geelong and Portland for export products transported by rail and provide a 15% increase in train loads. This includes a major upgrade of the Maroona to Portland line to 21 tonne axle load capability. Converting the north-west grain lines to standard gauge also enables grain trains to be moved more easily between states without costly and time consuming conversion to standard gauge. This will provide the opportunity for more grain trains to operate in Victoria during strong harvest years.

Another benefit of standard gauge operations is increased competition on the State's rail network and use of newer equipment. This would benefit existing grain rail customers and customers of the intermodal container train which operates between Merbein (Mildura) and the Port of Melbourne.

Rail gauge standardisation

The Murray-Basin Rail Project will leave the Toolamba and Echuca to Deniliquin and Shepparton to Toomumwal lines as the only operational broad gauge freight-only rail lines in Victoria. Standardising these lines, including necessarily Mangalore to Shepparton, would result in the State's freight only rail

network being entirely standard gauge providing an integrated network for rail freight customers and freight train operators. Standardising the Tocomwal railway line would also support construction of the Melbourne to Brisbane Inland Railway via Shepparton.

Container freight train incentives

The \$5 million per annum Mode Shift Incentive Scheme (MSIS) is essential in retaining over 70,000 export containers on rail between Warrnambool, Dooen, Merbein (Mildura), Tocomwal, Deniliquin and Maryvale (Morwell) and the Port of Melbourne. The MSIS (due to expire on 30/6/17) enables regional container trains to compete with trucks by offsetting the relatively high truck pickup and delivery costs of short haul rail. MSIS benefits include improved competitiveness of rail freight, retention of freight terminal jobs in regional areas and fewer trucks on highways and at the Port of Melbourne.

The MSIS should be retained post mid 2017 to ensure the retention of regional Victorian container trains and the economic, social and environmental benefits they provide.

Metropolitan port rail shuttles

“As Melbourne’s roads become more congested, rail is the logical solution. It’s illogical that it is not happening.”

Clarenzo Perna, Austrak National Development Manager¹⁷

The Port of Melbourne’s container throughput generates over 2 million truck trips each year and truck traffic through the Port could possibly double in the next 30 years. Consequently, it is critically important to develop transport arrangements which minimise the impact of Port related truck traffic on road congestion as well as health and amenity effects in suburbs affected by this traffic. A metropolitan Port Rail Shuttle (PRS) using spare rail network capacity is the most cost effective way to solve this problem.

However, QUBE Logistics Managing Director, Maurice James, commented that Melbourne is at risk of losing its status as Australia’s number one container port to Sydney because of its lack of efficient port rail links and suburban port rail shuttles. Mr James commented that because Melbourne has not made a serious push for modal shift to rail: “We are not wasting any more time on that in Melbourne.”¹⁸

Similarly Simon Ormsby, the ATRC’s Executive General Manager - Strategy has pointed out:

“Melbourne is a long way behind Sydney in terms of utilising rail connections to the Port of Melbourne.”¹⁹

Port rail shuttles operate in Sydney, Adelaide and Perth and in numerous major overseas container ports. QUBE Logistics operates container shuttle trains to and from its terminals at Minto, in Sydney’s south, and Yennora, in Sydney’s west transporting 300,000 containers to and from Port Botany each year.

Similarly, the proposed Moorebank intermodal terminal in Sydney’s inner south-west will have provision for 500,000 interstate containers per year and up to 1.05 million containers railed to and from Port Botany each year. This will significantly ease road congestion in and around Port Botany which is predicted to be handling 19,000 containers per day by 2030. The Moorebank terminal is planned to be opened progressively between 2017 and 2019. The Federal Government and private sector (QUBE Logistics and Aurizon) are investing \$1.9 billion in developing the terminal.²⁰

In March 2016, a successful port rail shuttle trial operated in Melbourne between SCT’s Altona terminal and DP World’s terminal at the Port of Melbourne. However, much more can be done for port rail shuttles in Melbourne to increase rail’s share of Port container traffic from its present very low 8%. The Victorian and federal governments allocated \$58 million (\$20 million state and \$38 million federal) in their 2014 budgets to develop a Port Rail Shuttle system (PRS). Immediate release of this money would facilitate the start of regular port rail shuttles in Melbourne. These shuttles could remove up to one-third of port-related truck movements per day from Melbourne’s road network.

¹⁷, *The Age* 6/8/14, p34

¹⁸ Maurice James, QUBE Logistics Managing Director, Sydney Morning Herald, 19/8/15

¹⁹ Alliance of Councils for Rail Freight Development, Melbourne conference, 7/10/15

²⁰ Moorebank Intermodal Company press release 4/6/15



Container trains reduce road congestion at the Port of Melbourne and on nearby roads

However, a major disincentive to using rail to/from the Port of Melbourne is that stevedores charge \$85 per rail container compared with no charge for trucks.²¹ This charge reflects current inefficiencies in how rail containers are currently handled at the Port and undermines the potential of the PRS. Rail terminals at the Port need to be modified to eliminate their present inefficiencies.

The PRS will also be undermined by the City Link - Monash Freeway widening and the Western Distributor tollway. These projects will increase road capacity to/from the Port of Melbourne, further entrenching truck transport of Port containers. Transurban's Victorian group general manager has said:

*"The Western Distributor will provide direct freeway-standard access in and out of the country's busiest container port and one of Victoria's most important economic assets."*²²

According to the Western Distributor Heavy Vehicle Fact Sheet the Western Distributor is being designed for 160 tonne gross mass trucks. It is unclear how many containers these trucks will be able to transport, but there is no doubt that trucks of that size will significantly undermine the viability of the PRS.

Rail network capacity

The following works on the intrastate rail network, many of relatively modest scale and cost, will greatly improve freight and passenger train operations:

- duplication of the Gippsland railway line between Moe to Morwell and Longwarry to Bunyip
- replacement of the Avon River bridge at Stratford on the Bairnsdale line to enable freight trains (logs, containers, and possibly iron ore) to operate from Bairnsdale
- re-opening and automating a crossing loop at Murchison East on the Shepparton line
- reinstatement and lengthening of Tourello Loop between Ballarat and Maryborough
- reopening and automation of Meredith Loop between Gheringhap and Warrenheip
- ensuring that the level crossing removals on the Dandenong Line are designed to accommodate provision of two extra tracks in future
- construction of the Melbourne – Brisbane inland rail link via Shepparton (this is shorter than the Albury option and provides more direct connectivity to the Port of Melbourne for agricultural products from northern Victoria and southern NSW)

As the frequency and hours of operation of regional and metropolitan passenger trains increases, it is critical that future network capacity is provided for freight trains. This particularly applies to some sections of the metropolitan rail network which are shared with both freight and V/Line passenger trains such as the Dandenong/Pakenham and Broadmeadows/Craigieburn lines.

²¹ Clarenzo Perna, Austrak National Development Manager, The Age 6/8/14, p34

²² The Australian, 18/9/15, p4

Comparable rail-road pricing

“Road-user charging would level the playing field and increase rail and road freight contestability. This will improve the efficiency of the freight supply chain and lower the cost of getting goods to markets and ports.”

Phil Allan, Acting CEO, Australasian Railway Association²³

A fully loaded B-double truck causes the same amount of road damage as 20,000 cars. However, truck owners do not pay for the full extent of this damage.²⁴ One year after the widespread introduction of B-double trucks in Victoria in 1995, bridge maintenance costs increased 150% from \$7 million per annum to \$18 million per annum.²⁵

The Federal Government’s Competition Policy Review commented:

“Lack of proper road pricing distorts choices between road and rail freight.”²⁶

In the United States, B-double trucks are generally prohibited whereas in Victoria the use of increasingly larger trucks is constantly promoted, despite the absence of an adequate regime to recover the costs they impose on the community and despite many independent inquiries recommending such regimes.

The Henry Review of Taxation, the Productivity Commission Inquiry into Public Infrastructure²⁷ and the Federal Government’s Competition Policy Review²⁸ all found present road funding and pricing to be deficient. According to the Competition Review, “Lack of proper road pricing leads to inefficient road investment and distorts choices between transport modes particularly between road and rail freight.”²⁹

Road funding reform is strongly supported by the Premier of South Australia, Jay Weatherill. In July 2015, Premier Weatherill said:³⁰

“South Australia would be willing to trial a national scheme where federal and state based fuel excise and registration fees for trucks would be replaced by a charging system based on mass, distance and location which reflects actual road use.”

This is comparable to the mass-distance based rail access pricing principles which apply to Australia’s interstate and regional rail networks. It would provide a more accurate measurement of road damage costs arising from heavy vehicles than the present system based on average vehicle mass.

This view is supported by the Australian Logistics Council:

“Premier Weatherill’s proposal to establish a more transparent pricing mechanism to more closely link road charges with road investment is an important step in the debate and worthy of consideration by all levels of government.”

Michael Kilgarriff, Australian Logistics Council Managing Director³¹

New rail freight

Opportunities for increased use of rail freight in Victoria are:

- sand (South Gippsland to Melbourne’s to various concrete batch plants) – this would require partial re-opening of the Cranbourne and Leongatha railway line
- containers to/from Webb Dock – requires a reinstated rail line to Webb Dock
- processed mineral sands for export by sea (Hamilton to Portland, Melbourne or Geelong)
- mineral sands from north-west Victoria and south-west NSW to the Hamilton processing plant

²³ Press release 29/5/15

²⁴ *Road Access Charges in Queensland under National Competition Policy*, PLI McInnes Van (1997), p10

²⁵ Boxcar Logistics, Rail Privatisation Conference, May 1997

²⁶ Competition Policy Review 2015 p88

²⁷ Productivity Commission, *Inquiry into Public Infrastructure*, May 2014, p303

²⁸ *Competition Policy Review*, 2015, p88

²⁹ Ibid p38

³⁰ Speech to National Press Club, 8/7/15

³¹ Australian Logistics Council press release 8/7/15

- logs (Portland line to the Port of Geelong , East Gippsland to the Port of Geelong, etc.)
- grain (improved silo and rail system efficiencies regaining market share from trucks)
- general containerised freight (Gippsland-Melbourne, etc)
- construction materials in Melbourne and regional areas
- waste/garbage to regional recycling centres as occurs in NSW and overseas

These opportunities all require supportive government policies, facilitation and investment.

Impacts of increased freight demand

“The freight task is going to grow and we won’t have enough trucks to carry it. We need rail and we need the rail network to develop.”

Peter Anderson, CEO Victorian Transport Association³²

Increased use of rail freight as the State’s freight task grows has significant economic benefits:

- fewer road deaths and injuries from crashes involving trucks
- reduced road damage and road maintenance costs - these are already a significant cost burden for local councils
- decreased amenity and health issues (congestion, noise, dust) from trucks
- decreased fuel use and emissions retention of jobs in regional areas from the operation of intermodal freight terminals and rail freight services
- reduced costs to regional producers
- less road congestion in and around ports and on inner suburban roads.

Local governments are aware of the impact of the increasing size and volume of trucks on local roads. It is a major cost issue with flow-on effects to the economic viability of small communities.

“Upgrading the rail network would reduce the proportion of council budgets deployed for road infrastructure, enabling those funds to be used for much needed community and social infrastructure and services to benefit the community more widely.”

Rural Councils of Victoria submission to Switchpoint, August 2007



The cost of repairing local roads is a major issue for rural councils

The impact of heavy vehicles on local government infrastructure costs has been an issue for many years. The Industry Commission in its 1991 report *Rail Transport* commented that:

“The pavement damage caused by more heavy vehicles on local roads can add significantly to local government road expenditure. Transfer of freight from rail to road means that costs initially borne by a rail track manager are effectively transferred to local governments then to state governments.”

³² *Ballarat Courier* 13 May 2015, p10

Threats to Victorian rail freight

Federal-State government policies

Federal and State Government transport funding needs to support rail infrastructure maintenance and upgrades as for roads. The 2016-17 federal budget allocation of \$594 million towards development of the Inland Rail line between Melbourne and Brisbane is a welcome investment towards upgrading Australia's interstate rail network. It will also support the \$3 billion in public money invested by the federal government in upgrading the interstate rail network since 2008. It is a positive change for rail infrastructure development from the two preceding federal budgets. These allocated significant investment for roads, but very little for rail. Two thirds of the federal government's 2015-16 budget allocation of \$8.6 billion for transport infrastructure was for roads compared with one eighth for rail³³.

Similarly, Federal Government co-funding of the \$440 million Murray Basin Rail Project will greatly assist regional producers in the State's north-west through improved supply chain efficiency and reduced transport costs. It is to be hoped that Federal/Victorian Government funding to rail network upgrades will continue so that rail freight can have an increasing role in the State's transport task. Federal/NSW Government funding for Sydney's intermodal freight system is a good example of such cooperation.

The Federal Government's decision not to proceed with the sale of the ARTC is also welcome. Selling the ARTC would likely have caused increased rail access fees with consequent loss of rail market share to trucks and ships, particularly the latter for non-time sensitive freight between the east coast and Perth. Pacific National, Australia's largest interstate rail freight operator, commented:

"Wherever there is a commercial owner looking for commercial returns...the cost of access will go up, not down."

David Irwin, Director, Pacific National

Another threat to rail freight is lack of efficient road pricing, as noted previously. The federal government's decision to cut the fuel tax rate for diesel used in heavy vehicles on public roads (known as the Road User Charge) from 26.14 to 25.9 cents per litre from 1 July 2016 is contrary to developing a system of road user charging for heavy vehicles to reflect the road damage caused by these vehicles.

The road transport industry has long argued road transport operators are overcharged for their fair share of road construction and maintenance, paid for through the Federal Road User Charge and through State-based vehicle registration fees. However, as noted by various Federal Government enquiries, the present system of cost recovery for heavy vehicle road damage is already deficient.

Reducing the fuel tax paid by heavy vehicles will exacerbate the existing situation of inadequate road cost recovery caused by increasing volumes of freight being transported in increasingly bigger trucks.

Continued approval of bigger and heavier trucks

Bigger trucks may mean fewer trucks where there is no rail competition such as many metropolitan freight tasks. However, where a rail freight alternative exists, such as in regional Victoria, bigger trucks may still mean more trucks because mode share is not fixed i.e. bigger trucks induce mode shift from rail unless rail freight can also transport heavier loads.

A report for the UK Department of Transport³⁴ found that the introduction of trucks heavier than the existing 44 tonne semi-trailers (45.5 tonnes in Australia) would lead to mode shift from rail to road causing increased road damage, increased road crashes and increased transport emissions. Similarly, a report for the International Union of Railways *Mega-trucks versus Rail Freight*³⁵ concluded that increased truck size and weights beyond a basic 40 tonne semi-trailer would *trigger a dynamic process whereby freight would shift from rail to road*.

³³ Analysis by the Australasian Railway Association, the peak rail industry organisation for Australia and New Zealand representing all sectors of the rail industry as well as associated industries such as financial and legal companies

³⁴ *A study of the effects of longer and heavier goods vehicles*, TRL Consultants

³⁵ *Mega-trucks versus rail freight*, International Union of Railways 2008, p8

The Victorian government should disallow widespread operation of Super B-double trucks and B-triple trucks in Victoria because of their impact on the state's road network, road safety and rail freight market share. Super B-double (or larger) trucks should only be allowed within the Port of Melbourne precinct or on specified urban and regional roads serving intermodal freight transport hubs.



Bigger and heavier trucks undermine rail freight and increase road damage and road safety risks

Inadequate track and signal maintenance

Standardising and upgrading Victoria's north-west rail infrastructure will significantly improve the efficiency of Victoria's rail freight operations. However, an adequate annual budget allocation to maintain Victoria's track and signal infrastructure is required to ensure the benefits of this investment is maintained. Otherwise the condition of these lines, as well as the other freight only rail lines will deteriorate causing:

- train derailments
- more train speed restrictions
- increased rail freight transit times
- increased costs to rail freight customers from increasingly slow and unreliable freight trains
- mode shift to trucks due to customer dissatisfaction with rail freight.

The state government needs to work with V/Line and Public Transport Victoria to determine an appropriate level of capital and maintenance funding for the state's rail freight network. Initially this would involve an investment of \$100 million per year over four years to improve the ongoing condition and sustainability³⁶ of the network and reduce recurring track maintenance costs. After that, an annual state budget allocation is required to maintain the rail freight network to a standard capable of efficiently handling the existing and potential rail freight task.

³⁶ This includes the progressive replacement of timber sleepers (often sourced from environmentally sensitive wetland areas) with steel or concrete sleepers which provide a more robust track structure and have at least double the life of timber sleepers.

Conclusion

“With Australia’s freight task projected to grow 80 per cent, between 2010 and 2030, there is clearly a need for more freight to be moved by rail between our major capitals, ports and regions.”

Michael Kilgariff, Australian Logistics Council Managing Director³⁷

Victoria’s rail freight system is now grossly under-utilised compared with its potential. The system is in need of significant modernisation and catch-up investment including consideration of ongoing rail gauge standardisation where appropriate. Under-investment in rail freight infrastructure and a regulatory and institutional environment which is not supportive of rail freight have led to a significant decline in Victorian regional rail freight volumes over the past 20 years including loss of freight to NSW. This requires major policy reform at all levels of government to assist the revitalisation of Victorian rail freight. It is currently far more difficult to invest in and operate freight trains than trucks.

Federal, state and local governments all have a role to play in ensuring that rail freight is an integral part of freight transport strategies. The cost of developing and maintaining regional and rural roads and the cost of road crashes involving trucks will continue to increase unless more freight is transported by train.

Victoria’s regional rail freight services have the potential to provide immense economic benefits through reduced road crash costs, reduced road damage, reduced road congestion improved amenity of regional towns, reduced transport fuel use and emissions and job creation in regional areas through the operation of intermodal freight terminals. These are benefits which flow through to the whole community not just freight customers.

In order to maximize these benefits, a supportive transport environment is needed for Victorian rail freight. This requires investment in improving intermodal terminal efficiency and track upgrades as well as ongoing funding of track maintenance to support rail freight customers. This will benefit Victoria’s economy as the freight task grows.

Investment in rail freight should also be seen as an investment in roads by reducing the amount of funding required for road maintenance and expansion.



Rail has an integral role in Victoria’s freight task transporting containers and bulk commodities

³⁷ Australian Logistics Council press release 11/6/15

Recommendations

A The federal government should:

1. Introduce mass-distance access pricing for trucks
2. Ensure truck operators have comparable taxes, safety compliance and enforcement regimes as those which apply to freight train operators
3. Use triple bottom line evaluations of transport investments, policy and projects
4. Ensure that consideration of urban development issues recognizes the importance of competitive freight train systems and rail-road intermodal terminals and their contribution to sustainability, liveability and reducing the impacts of climate change
5. Accelerate funding for the Melbourne to Brisbane inland rail line

B The Victorian government should:

1. Appoint a Minister responsible for Victorian rail freight
2. Establish a Rail Freight Facilitation Unit to assist the development of rail freight
3. Provide incentives for freight forwarders and freight train operators to co-invest with government in rail freight projects
4. Continue the Mode Shift Incentive Scheme beyond June 2017 until the Federal Government levels the rail-road competition regimes (re A 1 & 2 above)
5. Support its South Australian counterpart in advocating mass-distance road user charges for trucks (re A1 above)
6. Only allow Super B-double trucks within the Port of Melbourne precinct or on specified urban and regional roads serving intermodal freight transport hubs
7. Develop the Port Rail Shuttle system using the \$58 million allocated for it to reduce port truck traffic on inner suburban roads instead of further upgrading road networks for port traffic
8. Provide V/Line and MTM with increased annual funding to maintain the rail freight network to a higher standard – this includes funding for increased track axle loads (e.g. to at least 23 tonnes) to improve freight train productivity and competitiveness with increasingly heavier trucks
9. Provide funding to V/Line to install steel or concrete sleepers on the regional rail freight network in order to reduce the long term maintenance costs of the network
10. Consider standardising the Deniliquin – Echuca – Toolamba and Tocumwal – Toolamba – Seymour lines after completion of the Murray Basin rail project
11. Fund rail network improvements (track and signals) when justified for freight train operations
12. Facilitate the development of sidings and terminals to enable a shift from road to rail (and for start-up freight train operations) as in the UK and in some European countries (e.g. Switzerland)
13. Support development of the proposed Melbourne to Brisbane inland rail line
14. Investigate how regional distribution of petroleum products could be returned to rail in the interests of road safety and how rail freight could be used to transport waste from Melbourne to regional landfills in order to reduce reliance on road freight for this business

C Local Governments should:

1. Ensure highways and local roads facilitate truck access to rail-road intermodal terminals
2. Protect established and proposed rail infrastructure and ensure land use plans do not impinge upon rail services (freight and passenger)
3. Protect local roads and bridges from damage caused by trucks through measures which support transferring freight from trucks to trains including road load limit signage and enforcement