



Economic Development,  
Jobs, Transport  
and Resources

# **Victorian Government submission to the Senate Inquiry into the State of Australia's Rail Industry**

Department of Economic Development, Jobs,  
Transport and Resources

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# 1 Introduction

On 16 March 2016, the Senate moved that the following matters be referred to the Rural and Regional Affairs and Transport References Committee for inquiry and report by 25 August 2016.

“State of Australia’s rail industry and how government procurement, including through the Australian Rail Track Corporation, and other policy levers can improve the value for money, competitiveness, stability of work and capability of the rail manufacturing industry with specific reference to:

- a. the importance of the national rail industry as a regional employer and activity generator, and the potential costs of further decline of rail manufacturing on the national and relevant regional economies;
- b. the state of the rail industry, barriers to growth and improved productivity, and the potential of Australia’s rail industry as a skills and technology incubator, supplier of domestic rail needs as well as potential exports;
- c. the potential for Australia to benefit from a nationally-coordinated approach to rail manufacturing standards and rail procurement projects given the size of the Australian rail industry; and
- d. any other related matters.”

On 9 May 2016, the inquiry lapsed with the dissolution of the Senate and House of Representatives for a general election on 2 July 2016. On 15 September 2016, the Senate agreed to re-refer the inquiry with a reporting date of 18 October 2017.

Below is the Victorian Government’s submission to the Standing Committee on these matters.

## 2 Victorian rail industry

Victoria has an extensive rail network with over 1,600 kilometres of track. A number of different railway operators and rolling stock operate over its government-owned railway lines. Victorian lines are primarily broad gauge, with standard gauge for freight and interstate lines and some experimental narrow gauge lines, as well as various private logging, mining and industrial railway infrastructure. Melbourne also has an extensive light rail network, with the largest operating tram network in the world at 250 kilometres of double track.

Passenger services today are operated by current franchisee Metro Trains Melbourne in suburban Melbourne with electric multiple units. V/Line operates diesel trains for regional Victoria. The current franchisee Yarra Trams operates the extensive Melbourne tram and light rail network. Freight services are operated by Aurizon, Pacific National, SCT Logistics, Qube Logistics and TransVolution.

The Australian Rail Track Corporation (ARTC) leases rail infrastructure from the Victorian Government via a 60-year Interstate Infrastructure Lease with Public Transport Victoria (PTV). The main ARTC line in Victoria is the North East Line between Melbourne and Albury. It also manages the Melbourne-Adelaide interstate line and the Portland-Maroon Line.

In terms of rolling stock, Metropolitan trains are manufactured at Alstom in Ballarat. Victoria’s newest rolling stock, its high capacity metropolitan trains, will be built by the Evolution Rail

consortium, comprising Downer Rail, CRRC and Plenary in Newport. Melbourne trams and Victorian regional carriages are manufactured by Bombardier in Dandenong, located in Melbourne's south east.

Metropolitan trains are currently maintained at facilities in Epping, Craigieburn, Newport, Westall, Bayswater and Macaulay. The tram fleet is currently maintained in Southbank, Malvern and East Preston. The regional fleet is maintained in West Melbourne, Ballarat East, Newport and Bendigo.

Southern Shorthaul Railroad in Bendigo manufactures freight wagons, maintains freight locomotives and provides rail freight service operations.

At a glance:

- Victoria is the only state in Australia to build both trains and trams
- Victoria's wider rail rolling stock supply chain is estimated to employ up to 10,000 people
- Significant trades feature across the sector, ranging from welding, boiler-making, design, research to carpentry, enhancing opportunities for skills transfer across sectors
- Each manufacturer reflects supporting local supply chains resulting in a significant employment multiplier
- Victoria has a fleet of almost 1,000 metropolitan trains, trams and regional carriages, of which 400 have been procured in the last 15 years
- Victoria has an extensive rail network with over 1,600 kilometres of track
- Our trains and trams carry almost 1.5 million passengers per weekday
- Over the past decade, annual patronage on trains and trams has risen by 118 million, an increase of over 40 per cent
- Annual patronage on public transport is forecast to grow to more than one billion passengers in 2031
- Weekday patronage across all trains, trams and buses will more than double from 1.8 million to 3.8 million boardings in 2031.

## 3 Rail as a regional employer and activity generator

### 3.1 Building a sustainable rail industry in Victoria

The market for new rolling stock procurement in Australia has historically been categorised by short term one-off orders, often of a small batch size, with no national co-ordination. It was estimated <sup>1</sup>that this approach is incurring a 30 per cent price premium across all rolling stock procurement.

Starting in 2015, the Victorian Government ended the ad-hoc procurement of trains and trams, provided certainty to thousands of local workers, provided a long-term pipeline of work and delivered more trains and trams for a better state rail network. In its plan to develop and grow a sustainable rail industry in the state – *Trains, Trams and Jobs: Victorian Rolling Stock Strategy: 2015 – 2025* – the Victorian Government outlined its intention to grow jobs, provide certainty, develop capacity and increase investment by leverage its unique capabilities in building rail rolling stock.

*Victoria's Future Industries: Transport Technologies Sector Strategy*, delivered in 2016, outlines how the Victorian Government will accelerate industry growth through government

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<sup>1</sup> Deloitte Access 2011

procurement, by ensuring a minimum 50 per cent local manufacturing content requirement will be applied to the procurement of transport-related products and services, and examine ways to design government contracts to accelerate the uptake of new technologies and adopt leading environmental and safety standards.

All Victorian Government procurement activities are underpinned by the Victorian Industry Participation Policy (VIPP). Local content requirements are now set for projects valued over \$50 million and commitments to local industry development and supply chain engagement are considered in the tender process. Projects valued over \$20 million are required to use local apprentices, trainees or engineering cadets for at least 10 per cent of the total estimated labour hours under the Major Projects Skills Guarantee. Collectively, these reforms will ensure that Victorian Government spending on transport means more business for local suppliers and more local jobs.

From 2015 to date, the state has added hundreds of jobs, billions in procurement and millions more in investment, and the following rail rolling stock and infrastructure projects are currently underway in the state:

- A \$2.3 billion contract for 65 seven-car new High Capacity Metropolitan Trains (HCMT), the single biggest train order in the state's history, which are 20 per cent bigger and will reduce crowding on Victoria's busiest rail corridor – the Cranbourne Pakenham line – before running as a dedicated fleet from Pakenham to Sunbury through the new Metro Tunnel. The new trains will be built and maintained in Victoria with 60 per cent local content, creating more than 1,100 highly skilled jobs in the state.
- The Victorian 2016-17 State Budget includes \$10 million in development funding for High-Capacity Next Generation Regional Rolling Stock to cater for the future needs of regional Victoria, a next generation high capacity regional train that will be commissioned in the coming years to cater for strong patronage growth and provide new peak services.
- The Victorian Government has committed to a package of works for the \$10.9 billion Metro Tunnel, one of the largest public transport projects ever undertaken in Australia, which will create a new end-to-end rail lines, with high capacity metropolitan trains and five new underground stations.
- The Victorian Government has committed \$2.4 billion to date to remove at least 20 level crossings by 2018, with the goal of removing 50 of Victoria's dangerous and congested level crossings across Melbourne by 2022.
- \$1 billion worth of signalling and communications systems as part of the Metro Tunnel project, to install high capacity signalling (HCS) on the new Sunbury-to-Pakenham line that will run through the Metro Tunnel, representing the first roll-out of HCS on an existing network anywhere in Australia.
- 20 additional E-Class Trams for Melbourne, built almost entirely by Bombardier and Victorian workers at the company's Dandenong-based manufacturing site.
- The Victorian Government has ordered 27 new VLocity regional carriages to be built in by Bombardier in Dandenong, on top of 21 carriages invested in the 2015-16 State Budget, taking the total to 48 additional VLocity carriages.
- 14 new six-car X'Trapolis trainsets for Melbourne's suburban rail network, expanding the state's fleet to 101 trains (606 cars) manufactured locally at Alstom's manufacturing facility in Ballarat.
- The Victorian Government is funding a major refurbishment and life extension of 130 B-Class trams for Melbourne which were delivered in the 1980s to address reliability and amenity, and to ensure passenger safety.

- The Victorian Government has issued a Request for Proposal (RFP) to build the \$518 million Ballarat Line Upgrade project, which will create space for more trains, more often on a major regional Victoria line.
- A \$395 contract for a package of works was signed to remove the dangerous and congested level crossing on the Melbourne eastern metropolitan Hurstbridge line.
- \$440 million Murray Basin Freight Rail Project, jointly funded by the Australian and Victorian governments, includes complementary works funded by the Victorian Government such as completion of sleeper and rail upgrades on the Hopetoun Line and as part of the tender for Stage two works, standardisation of the Ouyen to Murrayville line.

The Victorian Government has demonstrated its leadership in the manufacturing and industry sectors through its creation of a specialist Rolling Stock Development Division – the only State to have and led the process of linking strategy, procurement, industry capability and supply chain assessment. The Division, located in the Department of Economic Development, Jobs, Transport and Resources, ensures that its activities and foci are implemented in alignment within the overarching Transport function and Government objectives for manufacturing and industry.

## 3.2 Why Victoria needs rolling stock

### The Metropolitan Network

The Melbourne metropolitan train network is presently a commuter style network that is highly inter-connected and cross line dependent. The Government is well advanced in delivering plans for the network over the next decade to transform services line by line into a metro style operation characterised by “turn up and go services”. This transformation has commenced with the Government’s commitment to delivery of the Melbourne Metro Tunnel which links Sunbury through to Pakenham as a self-contained line where services and operations can be optimised to meet the needs of that particular corridor.

Current forecasts anticipate that weekday patronage on the metro rail system will grow from around 780,000 passengers per day, to more than 1.1million per day in 2025-26. Over the same period, loads in the AM peak at key cordon stations around central Melbourne are expected to grow from more than 150,000 to close to 200,000. It is this growth in the AM peak loads, when all the available fleet must be utilised in order to deliver the maximum number of services that most closely impacts on the need for additional metropolitan trains.

### The Regional Network

The Victorian regional rail network provides the backbone of the regional transport system. The public transport network connects those living in regional areas to jobs, education and health services, whether they are in Melbourne or other key regional centres such as Geelong, Ballarat or Bendigo. It also provides regional business with access to employees, production inputs, and distribution networks. By doing so, it not only strengthens regional communities and economies, it enhances their prospects to transform into major regional centres and materially reduce the reliance of regional areas on Melbourne.

However, demand growth in outer Melbourne and regional centres cannot be met with the existing regional rail fleet’s capacity and performance. Parts of Victoria’s regional rail network are at or are nearing capacity. Over the past year, regional commuters have experienced services where train loads exceed the total carrying capacity of the train, meaning that there were no available seats during their service. The population residing in Melbourne’s growth areas is estimated to nearly double from 4.5million to 8 million over the next 20 years. Whilst population growth is occurring in outer Melbourne and regional



Victoria, employment growth is concentrated in central Melbourne placing additional pressure on the regional rail network to provide services for commuters to access the city.

Growth in demand is forecast to be significant. Between now and 2031, the Geelong, Ballarat and Seymour corridors are forecast to experience significant patronage growth, placing an additional burden on the already strained network.

A further challenge to delivering a modern regional rail service is the age of parts of the existing fleet. Many of the 160 carriages for the Classic Fleet exhibit increasing failure rates and poor service reliability impacting the operation of both the regional and metropolitan train networks. In addition, the Classic Fleet consumes considerably more person-hours to maintain, is out of service longer and requires more maintenance depot space than other train types.

#### Future Rolling Stock Planning

Planning is well advanced in consideration of the implications of the patronage trends and what it means for longer term planning and delivery of both metropolitan and regional rail services, including rolling stock requirements. In the long term, further changes to regional services, including the range of rolling stock required and the extent of electrification, will impact services best suited to the urban fringe to maximise the quality of services to outer metropolitan growth areas and regional centres.

## 4 Barriers to growth and improved productivity

### 4.1 Lack of supply chain development poses risk to growth

Understanding, developing and engaging with the rolling stock industry and supply chain is critical to developing globally competitive and sustainable manufacturing capability, both at a state and national level. The Victorian Government is working to improve supply chain performance to increase industry competitiveness and sustainability. With three of the world's largest rail rolling stock manufacturers and much of their supply chains located in Victoria, significant rail design and manufacturing expertise resides in Victoria.

There is an opportunity to adapt and apply supply chain development approaches by the automotive and aerospace industries to the rail sector, leveraging the expertise developed by organisations such as the Automotive Supplier Excellence Australia program. The Victorian Government is working with the Commonwealth and industry to design and implement effective supply chain development initiatives.

An example of this supplier development is the HCMT project, which targets partnerships with Toyota, Chisholm Institute and Swinburne University to transition highly skilled workers from disadvantaged backgrounds, including automotive sector workers, across to the project and lift overall supplier capability. Another requirement within the HCMT project was for all tenderers to demonstrate their commitment to developing Victoria's manufacturing industry, including any proposed capital investment in manufacturing facilities in Victoria.

### 4.2 Investment attraction requires a long term pipeline of procurement

Investment in the rail industry requires procurement certainty, which comes from the delivery of a long term pipeline of projects. With its substantial pipeline of rail purchase orders, the Victorian Government is working to attract global investment into Victoria's rail sector. We are targeting investment opportunities that introduce new technologies and capabilities into

the local market, capitalise on the skills held by the local manufacturing industry, and develop innovative solutions to better utilise our existing transport network.

A recent example of a successful investment opportunity is the China Railway (CRRC) Australian headquarters, to be established in Melbourne in May 2017. This is a direct outcome of the successful High Capacity Metro Trains tender process, where the Evolution Rail consortium was appointed. Evolution Rail's members include the world's largest rail manufacturer, CRRC, a major Australian rail contractor and maintainer, Downer Rail.

This approach is outlined in the Victorian Government's *Trains, Trams, Jobs - 2015-2025* rolling stock procurement plan.

There is significant opportunity in realising in the short term a national rail industry approach, coordinating procurement of rolling stock, investment attraction and the connection of suppliers to national and global opportunities, resulting in the realistic ability for manufacturers and supply chains to participate in export supply contracts.

## 5 Nationally coordinated approach to standards and procurement

### 5.1 Procurement smoothing, pipeline of projects and harmonisation of standards

The Victorian Government is developing rail rolling stock procurement strategies, including future fleet procurement and maintenance requirements, and the identification of new rolling stock acquisitions and projects. It is also exploring efficiencies to be gained by considering rolling stock procurements at a national level, including the co-ordination of procurement orders for new rolling stock to facilitate a regular and sustainable stream of work for Victorian suppliers.

Victoria is the major location for rail manufacturing in Australia and Victorian businesses stand to benefit significantly from the creation of a national rolling stock market. Victoria is already taking a lead in championing national reform, advocating for the harmonisation of rail industry standards for the manufacture of rolling stock componentry and a national rolling stock procurement and maintenance plan.

The Victorian Government is advocating for the creation of a national market for transport-related products and services, and a 'smoothed' long-term order pipeline across Australian jurisdictions through the Council of Australian Governments and its Ministerial Transport and Infrastructure Council. With the creation of a coordinated national market, Victoria is well positioned to become Australia's principal supplier of transport-related products and services. Two areas the Victorian Government is focusing on include:

- Developing specifications for rail rolling stock that are driven by an outcomes-based approach and assisted by rail manufacturers
- Supporting and co-ordinating initiatives for the harmonisation of standards at a national level such as standards for bogies and glass

The Victorian Government together with other States is working with the Rail Industry Safety and Standards Board (RISSB) in this regard.



The Victorian Government has established strong working linkages and agreements with other States in relation to the specifications, harmonisation and future procurements, and was the first State to appoint a Rail Advocate to assist leading the supply chain, standards and harmonisation development process.

## 6 Recommendations

Australia is best served with a strong and sustainable rolling stock and rail manufacturing industry. This industry sector in turn supports a range of other activities within and external to it including maintenance, research and development and operating systems technologies including signalling.

The sector is a significant employer, and represents an industry sector that can enable effective and timely skills transfer from a range of other industries, including automotive and aerospace. Whilst the economy navigates structural transition, the rolling stock and rail industry in general remain steadfast in meeting the public transport, infrastructure and jobs responsibilities of our modern economies. In an Australian context, the Victorian Government is leading in understanding, developing and engaging with industry, and, features as the major location for rail manufacturing, design and ancillary support services

Recommendations to the Inquiry are for:

- A Federal and immediate focus on the importance of a sustainable national rail industry
- A coordinated national approach to rail rolling stock procurements
- A commitment to local content
- A commitment to continue harmonisation of national standards
- Strong support to companies and their supply chains for state, national, and global opportunities.
- Note Victoria's commitment to rolling stock procurement pipe line through its *Trains Trams and Jobs: Victorian Rolling Stock Strategy: 2015-2025*
- Note Victoria's commitment to the rolling stock and rail industry through its *Victoria's Future Industries: Transport Technologies Sector Strategy*
- Note Victoria's commitment to rolling stock procurement pipe line through its extensive investment into the sector, across rolling stock, design and infrastructure
- Note Victoria's rolling stock supply chain capabilities

Australia will benefit from a nationally-coordinated approach to rail procurement, rail manufacturing standards and projects given its size and location of the Australian rail industry members.

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