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AUSTRALASIAN RAILWAY ASSOCIATION SUBMISSION

To

Infrastructure Victoria

On

The Development of a 30—year Infrastructure
Strategy for Victoria



THE ARA

The Australasian Railway Association (ARA) is a not-for-profit member-based association that represents rail throughout Australia and New Zealand. Our members include rail operators, track owners and managers, manufacturers, construction companies and other firms contributing to the rail sector. We contribute to the development of industry and government policies in an effort to ensure Australia's passenger and freight transport systems are well represented and will continue to provide improved services for Australia's growing population.

The ARA thanks Infrastructure Victoria for the opportunity to provide this submission to the development of a 30-year infrastructure strategy for Victoria process. For further information regarding this submission, please contact Rhianne Jory, General Manager Industry and Programs via rjory@ara.net.au or 02 6270 4504.

FACTS AND FIGURES

Network

- Australia's heavy rail network is approximately 33,300 kilometres long.
- Approximately 10 per cent of Australia's rail network is electrified.
- In 2013-14, 53 kilometres of heavy rail track were under construction, approximately 68 per cent being passenger rail.
- Australia has approximately 291 route-kilometres of operational light rail/tramway tracks.

Passenger

- In 2012, Australia's rail networks moved more than 850 million passengers.ⁱ That is 16.4 million passengers per week or 2.3 million people each day of the year.
- One passenger train takes 525 cars off the road
- The Victorian Regional Rail Link programme was completed in June 2015. This has separated inter-city trains to Bendigo, Ballarat, and Geelong from suburban Melbourne passenger trains. This reduces inter-city transit times, which may make inter-city Victorian rail travel more attractive.
- At the start of the 21st Century, more than 400 light rail systems were in operation and 100 systems were under construction around the world.ⁱⁱ Australia is experiencing a light rail renaissance, with multiple projects at varying stages of planning, construction or expansion around the country.
- 1 tram can move 10,000 people in a single lane of traffic that would otherwise move 800 cars or 140 buses.
- Melbourne has the longest light rail network in the world with 250km of double-track.

- In 2013-14, Melbourne's light rail system carried almost 177 million passengers.
- Light rail can move between 4,000 and 20,000 people per hour in one direction in space equivalent to one lane of road traffic.

Freight Rail

- The average freight takes 110 semi-trailers off the road.
- In 2013–14, almost 1.3 billion tonnes of freight was moved around Australia by rail. This was a 25 per cent increase on the previous year.
- 98 per cent of Australia's rail freight task is bulk movements (coal, iron ore, etc).
- In 2013–14, 70 per cent of Australia's national rail freight tonnage was bulk freight, principally iron-ore, moved within Western Australia.
- Bulk movements in Queensland and New South Wales, principally coal, equalled approximately 19 per cent and six per cent of the national freight task, respectively.
- Despite the reported end of the mining boom, internal rail freight movements in Western Australia increased by approximately 56 per cent between 2012–13 and 2013–14.
- Rail freight is up to 9 times safer than road freight.
- The main iron ore railways are in Western Australia's Pilbara region (with 2,642 route kilometres).
- The main coal networks are Aurizon's central Queensland systems (1,956 route kilometres) and the New South Wales Hunter Valley Coal network (approximately 785 route kilometres).
- Grain flows run from agricultural hinterlands to ports for domestic processing. There are approximately 5,100 route kilometres of operational railway that are largely or exclusively used for grain haulage in Australia.

The environment

- Road travel produces more than 40% more carbon pollution than rail for each kilometre travelled by a passenger.
- Every additional rail journey reduces carbon emission costs by around 2 cent so if 1000 people switched their daily commute from road to rail, this would reduce costs from carbon emissions by 11,000 per year.
- Rail freight causes up to 19 times less emissions than road freight.
- Rail freight is up to 23 times more energy efficient than road freight.
- Every tonne kilometre of freight moved from road to rail results in a reduction of carbon pollution costs of around 0.21 cents.

THE CHALLENGES FACING AUSTRALIA

A growing and urbanised population: Australia is one of the most urbanised countries in the world. Since 1977, almost 2/3 of Australia's population has called a capital city home. This is equal to almost 66% of our population living in an area equivalent to only 1% of Australia's land mass. 35 per cent of Australia's population resides in Melbourne and Sydney.ⁱⁱⁱ

Expanding and geographically spreading cities: Australia's capital cities are growing at triple the rate of regional areas.iv 74 per cent of Australia's population is expected to live in a capital city by 2061.v

Congested roads: By 2020, the Bureau of Infrastructure, Transport and Regional Economics (BITRE) forecasts that road congestion will cost Australia \$20.4 billion annually through lost productivity as a result of time wasted in traffic.vi

Increasing greenhouse gas emissions: On a per capita basis, Australia is the highest carbon emitter in the OECD and one of the highest in the world.vii

Road accidents: Road accidents cost Australia up to 1500 lives, 30,000 serious injuries and \$35 billion every year.

Growing freight demands: Australia's freight task is forecast to double by 2050.

THE ARA SUBMISSION

General comments

The ARA thanks Infrastructure Victoria for the opportunity to provide this submission and acknowledges the significance of this process.

The ARA supports the ten draft objectives and believes that effective investment in rail infrastructure can assist the Victorian Government in meeting these objectives. Rail infrastructure supports Australia's growing and demographically diverse population, drives productivity and improve our living standards. Continued investment in rail for improved passenger and freight movements will contribute to a stronger economy, reduce social exclusion and enhance the overall prosperity of our nation.

The significance of the rail industry warrants special attention and investment from both federal and state governments. Our networks of infrastructure and services connect people and communities, support freight transport across the country, help deliver our resources and products to overseas markets and continue to generate economic growth and employment.

Global trends

The ARA supports the paper looking at global trends and its effects on Victoria. Victoria's infrastructure needs will not only depend on local needs but also global opportunities and challenges. These include technology, urbanisation, movement of skilled workforce, global economy and climate change. Good infrastructure will act an enabler and facilitator to ensure that Victoria can fully participate in and capitalise on global opportunities.

Role of Governments

The ARA strongly supports Infrastructure Victoria as well as other state and federal infrastructure bodies. The ARA believes that all levels of Government have a role in creating long term, productive and sustainable infrastructure for the future.

The Federal and State governments must work together to identify and realise continued network efficiency and improvements.

Long term plans around freight and passenger transport must be developed to ensure services meet the needs of Australia's growing population.

Transport planning should also take a holistic approach that ensures the seamless integration of all transport modes for a smooth 'whole of journey' experience.

A long term pipeline of infrastructure projects with a solid public sector funding commitment

A large number of rail infrastructure projects are underway and in the pipeline. These projects cannot be delivered overnight. They take years of planning before the green light is given to proceed. The procurement, tendering, and funding process is demanding, time consuming and expensive. Gearing up and implementation can span years.

There must be certainty in this process. A "go / no go" approach dependant on political whim in the electoral cycle is not acceptable -- a problem compounded by Australia's federal system with nine federal, state and territory governments in the mix.

Cancelling or delaying projects has a significant adverse impact

A slash of the pen can result in a major rail infrastructure project being cancelled or delayed. Unfortunately this occurs all too often and the adverse impact on productivity, performance and

the availability of capability including labour skills is not understood. It is a practice not isolated to one state or any particular political party or private sector client, but with better planning and commitment, it may be avoided or at least minimised.

Recent examples of the adverse impacts of project cancellations and delays across Australian jurisdictions include:

New South Wales: In 2011-2012, the cancellation of CBD Metro project valued at circa \$3.48b resulted in \$500m to \$700m in compensation paid to proponents funded by tax payers.

South Australia: The withdrawal of Commonwealth funding relating to the Gawler rail project, due to its change in urban rail policy, has reduced the presence and capability of rail contractors in the state.

Western Australia: The Roy Hill Maintenance Alliance scheduled for 2013-14 and valued at circa \$120m has resulted in significant tender costs (estimated to be \$400K), wasted expenses for international partners and possible exposure of IP on asset management.

Tasmania: The election of a new state government saw the winding back of the Tasmanian rail revitalisation project, which has seen significant investment in track and bridge rehabilitation in recent years, co-funded by the Tasmanian and Federal governments. This has affected economic activity as local firms reallocate resources away from bidding for and working on rail projects and reduce the ability for Tasrail to become a more efficient rail operator.

Rail pipeline

In the past 12 months, the industry has put together its long term project pipeline of opportunities. The industry is now working to secure them beyond political cycles. The ARA believes that a long term project pipeline supported by government funding is vital for Australia's future. Federal and State Governments must agree to co-fund transport infrastructure and take investment and support for infrastructure projects out of election rounds. The rail pipeline is provided in attachment 1.

Investment

New approaches to funding should be introduced. This could include tax incentives, value capture and the use of innovative funding and financing mechanisms to provide long term

investment for infrastructure. The ARA has reviewed this issue in detail and developed a paper to inform discussion and debate on this matter. The paper is provided in attachment 2.

Capacity and supply chain capability

The ARA believes that there is a need to support development of supply chain capability and skills.

Freight and passenger rail capacity must continue to be increased to meet the needs of our growing population. Improved work practices, technologies and other means should be drawn on to enhance the capacity of existing infrastructure. Future service improvements or expansion should be planned for and secured by preserving the corridor today.

It should be noted that technologies can assist in optimising the service offered with existing infrastructure, expansion and upgrades to infrastructure is still a vital piece of the puzzle in meeting the needs of our growing population. Shared tracks reduce capacity. Separating the tracks for these services will improve capacity, reliability and service provision for urban and intercity passenger as well as freight operations.

Procurement reform

Tendering processes have a significant impact on the outcome of public infrastructure development. As the Productivity Commission pointed out in its 2014 Inquiry into Public Infrastructure report:

'The way in which government clients procure Australia's public infrastructure can play an important role in determining its costs. What is done prior to market, the type of contracts let and consequent risk allocation between parties, along with the ability of governments to subsequently manage the project are all critical ingredients of the story'.

Current tendering processes for public infrastructure in Australia are slow, expensive do not always promote new technologies and innovation, and tend to exclude private sector financing such as superannuation funds. Furthermore, a financial burden is placed all bidders, not just the successful one, representing the expenditure of considerable resources before construction has even begun. Design costs can sometimes comprise fifty per cent of tender costs, while tenders also routinely involve the submission of documentation relating to non-design issues such as workplace relations management and health and safety management. The consequence of this

is that tendering is becoming cost prohibitive to manage potential bidders according to the Australian Constructors Association:

"Procurement models and commercial risk management differ from government to government and even between agencies within the same government. This results in confusion for tenderers seeking consistency of approach, adds to cost and time pressures and does not support the capacity for a project to receive financing at best market rates available".

The complexity and costs of bidding for major projects (particularly for Public Private Partnerships), has become a major barrier to entry into the Australian infrastructure market. Few private companies, including superannuation funds have the financial capability to be involved in tender processes that require significant upfront investment.

The Solutions

There is wisdom among the various solutions that have been advanced – by the Productivity Commission, the House of Representatives Standing Committee on Infrastructure and Communications and others. Some of the solutions include:

1. A more streamlined information requirement for bidders, meaning detailed , non-design management plans are only required of the preferred tenderer;
2. Governments should invest more time and resources in the initial concept design specifications to help reduce bid costs (centralising common elements);
3. Governments should consider contributing to the design costs on the condition that governments own the design (co-funding design or purchase of IP rights);
4. A trial by governments of testing the benefits of applying past contract performance by tenderers as a means of selection a preferred bidder (and shortlisting high-performing tenderers);
5. Government clients should provide concept designs using Building Information Modelling (BIM) to help lower bid costs;
6. For complex projects, government clients should pre-test the market to gain insights into possible savings from packaging the project into smaller components (de-bundling projects);and

7. Government should invest more time and money in understanding site risks and update the information provided.

CONCLUSION

Once again, the ARA congratulates Infrastructure Victoria and those involved in delivering the *Laying the Foundations* report. The report provides an in-depth discussion on Victoria's challenges now and in the future. It also highlights where major reforms are needed to ensure we build and maintain productive and sustainable infrastructure for future generations. In this submission, the ARA discusses key reforms relevant to the transport industry, all of which are important and require urgent attention. The ARA looks forward to the opportunity to be involved in and contribute to the development of the Victorian Infrastructure Strategy. It would also welcome an opportunity to discuss in detail the industry infrastructure priorities for the future.

i <http://ara.net.au/UserFiles/file/Publications/Australian%20Rail%20Industry%202014%20web.pdf>

ii The European Rail Research Advisory Council and International Association of Public Transport (UITP). (2009). Metro, light rail and tram systems in Europe.

iii www.abs.gov.au/ausstats/abs@.nsf/products/AC53A071B4B231A6CA257CAE000ECCE5?OpenDocument

iv www.abs.gov.au/ausstats/abs@.nsf/Products/3235.0~2012~Main+Features~Main+Features?OpenDocument

v www.abs.gov.au/ausstats/abs@.nsf/Lookup/3222.0main+features62012%20%28base%29%20to%202101

vi https://bitre.gov.au/publications/2007/files/wp_071.pdf

vii www.garnautreview.org.au/pdf/Garnaut_Chapter7.pdf