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# AUSTRALASIAN RAILWAY ASSOCIATION SUBMISSION

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To

Standing Committee on Infrastructure and  
Communications

On

Inquiry into Infrastructure Planning and  
Procurement



## THE ARA

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The Australasian Railway Association (ARA) is a not-for-profit member-based association that represents rail throughout Australia, New Zealand and Indonesia. 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 the Committee for the opportunity to provide this submission to the *Inquiry into Infrastructure Planning and Procurement*. For further information regarding this submission, please contact Rhianne Jory, Associate Director Environment and Regulation via [rjory@ara.net.au](mailto:rjory@ara.net.au) or Christopher Oborn, Policy Officer via [coborn@ara.net.au](mailto:coborn@ara.net.au).

## FACTS AND FIGURES – AUSTRALIAN RAIL<sup>1</sup>

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- Australia's rail network is the 6th largest in the world with almost 45,000 kilometres of track, 1,800 locomotives and 32,000 wagons and carriages. Melbourne's 250 km tram network is the largest in the world.
- The transport sector represents about 4.7% of Australia's GDP.
- In 2013, rail provided more than 784 million journeys: 601 million by heavy rail, 166.5 million by light rail and 16.5 million by regional rail. This equates to over 15 million journeys each week.
- For freight, rail carries around 929 million tonnes of goods and materials annually, a 61.5% increase since 2003.
- The transport sector is the third largest source of greenhouse gas emissions (GHGs) in Australia, contributing almost 20 percent of Australia's net emissions. However, rail produces 40% less carbon pollution than road travel for each kilometre travelled by a passenger and for freight, road freight produces more than seven times as much carbon pollution per tonne kilometre as rail freight.

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<sup>1</sup> ARA, Australian Rail Industry Report (2013) and ARA and Deloitte Access Economic, True Value of Rail (2010)

## TERMS OF REFERENCE

The ARA commends the Committee's initiative to look into the issue of infrastructure planning and procurement. Efficient public infrastructure such as transport infrastructure plays a key role in a competitive and productive economy. Access to reliable and affordable public infrastructure also has an important role in meeting social and environment objectives.

Passenger and freight rail offers a number of benefits including the ability to:

- Reduce traffic congestion;
- Improve urban amenity;
- Help communities achieve their environmental goals;
- Promote public health; and
- Reduce social isolation.

Deloitte Access Economics found that each journey made by passenger rail instead of road reduces congestion, accident and carbon costs to the Australian economy between \$3.11 and \$8.41 in total depending on the cities.<sup>2</sup> For freight, the study shows that if rail was to achieve a 40% share of the North-South freight corridor along the east coast of Australia, the savings would reach around \$250 million a year.

For more details of the above benefits as well as information on advantages of passenger and freight rail, the ARA urges the Committee to refer to the *True Value of Rail* report (Deloitte Access Economics, 2011) as well as the ARA's submission to the Rural and Regional Affairs and Transport Reference Committee's *Inquiry on Investment of Commonwealth and State Funds in Public Passenger Transport Infrastructure and Services* (2009) available on the ARA website ([www.ara.net.au](http://www.ara.net.au)).

### Public Transport Eases High Costs of Living

Further to this, using public transport such as rail also eases the high costs of living. According to the Association's recent study, *Commuter costs and potential savings: Public transport versus car commuting in Australia*<sup>3</sup>, to own and commute to work in the CBD five days a week by car,

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<sup>2</sup> Deloitte Access Economics, True Value of Rail, 2010

<sup>3</sup> Australasian Railway Association, *Commuter costs and potential savings: Public transport versus car commuting in Australia, 2013*

costs the average Australian commuter between \$7,432 (5km from the CBD) and \$14,639 (25km from the CBD), or an indicative average cost of \$11,031 each year.

Focusing on commuters travelling to the CBDs in Sydney, Melbourne, Brisbane, Perth, Adelaide, Canberra and Hobart, the study also found that if Australian commuters decide to retain their car but take public transport to work in the CBD, the annual cost drops to an average of \$5,541, a saving of \$5,490 (or 50 per cent) compared to driving five days a week. Sydney and Perth commuters can expect the most significant cost savings, averaging \$8,232 and \$8,141 per year (or 62 per cent and 60 per cent savings) by leaving their car at home.

These higher savings are a reflection of the CBD parking charges but also the relatively cheap public transport costs currently in Sydney and Perth. Sydney and Perth are followed by Melbourne and Brisbane commuters, with similar significant cost savings ranging from \$6,402 to \$5,688 per annum. Adelaide, Canberra and Hobart commuters, meanwhile, can expect more moderate savings by leaving their car at home averaging savings of \$3,238, \$3,516 and \$3,214 respectively per year.

Further, if Australian commuters do not own a car or choose not to purchase a second car and instead commute by public transport to work in the CBD, the annual commute costs drops to an indicative average of \$1,607. This figure excludes travel costs to and from a bus or train station and the potential parking costs at park and ride facilities but can result in an indicative saving of \$9,425 (a massive 85 per cent) compared to owning and using a car to commute to work. Again, Perth and Sydney commuters can expect the highest cost savings, averaging a saving of \$12,011 and \$11,946 respectively per annum.

These high savings are a reflection of high vehicle running costs and parking costs, coupled with relatively cheap public transport costs in Perth and Sydney. Similar cost savings have also been identified in Melbourne and Brisbane, ranging from \$10,234 to \$9,680. Even in Adelaide, Canberra and Hobart, significant cost savings (\$7,463, \$7,348 and \$7,291 respectively) can be expected for commuters that do not own a car or choose not to purchase a second household vehicle and instead commute via public transport five days a week.

On account of the longer distances commuters are required to travel, on average, commuters living in the outer suburbs of capital cities incur higher costs and therefore also have the potential for higher savings by shifting to public transport than those living in inner areas. The potential savings also depend on the type of vehicle a commuter owns and drives. Due to higher running costs, commuters who drive large vehicles such as SUVs can achieve more significant savings by changing to public transport than those driving light and small vehicles.

## KEY ISSUES

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### What initiatives are operating around Australia at local and state government levels that might lower the cost of planning approvals and reduce timeframes for delivery of projects?

Lowering the cost of planning approvals and reducing timeframes for delivery of projects will come from both government and industry initiatives. On the government's part, a less stringent tendering process will reduce both time and costs of the bidding process for industry. Done effectively, a reduction in these requirements will not necessarily mean that the quality of planning will be hampered either. On the industry's part, more rigorous and detailed planning will result in quicker and more cost-effective planning and bidding processes.

The Productivity Commission outlined in its recent draft report on public infrastructure that the bidding process for construction contracts was an onerous one, requiring substantial amounts of time financial resources even before the project had begun. Industry claims that the costs involved in the tendering process are around 1.5 per cent of total project costs, a substantial amount given that, potentially, there are a number of organizations submitting tendering applications (PC 2014, p. 367).

### **Government Can Reduce the Requirements for the Bidding Process without Forgoing the Quality of Planning**

Government initiatives based on reducing the requirements for the bidding process is one way that will reduce the time and financial costs of project planning. Along with this, the Productivity Commission recommends that governments should invest more in the initial concept design specifications to help reduce costs, but in doing so, provide opportunities for tenderers to contest the specifications of the design. Other recommendations include governments contributing to design costs in return for ownership of designs and also governments altering the timing of information provision in the tendering process for infrastructure projects so that non-design management plans are only required of the preferred tenderer (PC 2014, p. 372-378).

Industry initiatives based on more rigorous and detailed planning will play a substantial role in reducing the cost of planning approvals and reducing the timeframes for delivery of projects.

The Gold Coast Rapid Transit project has been described as a model example of how rigorous and detailed planning can reduce planning costs and reduce the timeframe for project delivery.

*A quality reference design for this project was the result of a comprehensive two-year planning process which demonstrated potential impacts of building transport infrastructure in a regional city. The final documentation (the CDIMP) included detailed analysis of technical feasibility, environmental impacts, patronage forecasts and City Building outcomes that provided the community, investors, stakeholders and government with a clear understanding of the project and its benefits (Gold Coast Rapid Transit).*

This rigorous and detailed planning can coincide the introduction of new technologies to the planning stage such as Building Information Modelling (BIM). BIM is a database that provides digital information about the design, fabrication, construction, project management, logistics, material and energy consumption of a building. Proponents of BIM have suggested it has a number of significant benefits, including improved information sharing, time and cost savings, improved quality, greater transparency in decision making. BIM also allows any potential tenderer to put forward more accurate costings for infrastructure projects. This would allow for the least whole-of-life cost tender to be selected.

## Of those initiatives that the Committee has considered, are any able or appropriate to be implemented on a broader basis, including at Federal level?

Two critical issues that can be addressed at the Federal level include:

### **Inconsistent, complex and expensive bidding process**

The complexity and costs of bidding for major projects, particularly PPPs, has become a major impediment to market entry in Australia. Few private companies, including superannuation funds have the financial capability to be involved in tender processes that require significant upfront investment, without guarantee of success. Even though governments have worked to address this problem, more work is required. The Commission's report has also highlighted the obstacles posed by tendering specifications in the procurement stage which contribute to the costly nature of infrastructure bidding costs and procurement. Design costs alone comprise around 50 per cent of the total tender costs. The remaining half of the bidding costs are made up of both the on-costs of the constructor's staff involvement in the process, along with the costs associated with preparing and submitting the other documentation requirements. For a

contractor that has been sent a request for tender, documentation relating to a number of non-design issues is also required, including plans to:

- Workplace relations management
- Health and safety management
- Schedule of compliance with various state or national codes of practice
- Industry participation plans

Other plans are also often required, which include:

- Project management plan
- Construction plan
- Community engagement plan
- Enterprise training plan
- Environmental plan
- Earthworks plan
- Indigenous participation plan
- Traffic management and safety plan

Although these specifications are paramount to regulatory compliance and often project efficiency, there are possible avenues in which such compliance and efficiency is obtained but at lower procurement costs.

### **A lack of clear project pipelines and long term government commitment**

A lack of clear project pipelines and long term government and commitment is also a key barrier for private sector investment. The changes in government priorities lead to delayed and cancelled projects which in turn impact on the risk profiles, project costs and the rate of return on investment for the private sector. For institutional investors such as superannuation funds to make large investments, there must be certainty around future project pipelines, specifically around the funding sources and commitment of the sponsor government.

## Are local, state and federal governments adequately considering the infrastructure challenges that they face and do they have long term plans in place to deal with those challenges?

The role of the federal government in infrastructure planning and spending has expanded during the Labor Government, resulting in more investment in areas such as ports and urban transport which had previously been neglected by the states. Coordination between the various levels of government and long-term planning efforts have been strengthened in the ports and urban transport sectors during this time. This has had positive results. An example of which can be seen through a national ports strategy which is being devised by the Council of Australian Governments (COAG) to eliminate obstacles to development (Giorno 2011, p. 11). However inter-governmental coordination can produce negative effects, such as cost transfers. The application of the Auslink Program for roads between 2005 and 2009 prompted the local authorities to use federal subsidies to scale back their own capital investment (ANAO, 2010). Most States now also have their own transport plans and policies which aim to address various challenges faced by the jurisdictions. The key is to ensure the States and Federal Government plans and policies are aligned and directed at meeting national objectives such as improving productivity, economic efficiency as well as social and environment sustainability.

With an increasing population and the greater economic activity that this increased population brings, there is an urgent need to improve the inter-state freight networks in Australia. Improving these networks will alleviate the problem of increased traffic on our roads, lowering motor-vehicle accident rates and will also provide major environmental benefits by lowering carbon emissions. An improvement to these networks will also act as vital economic infrastructure for the future, allowing greater transportation of goods around Australia and spurring future economic growth.

According to the Department of Infrastructure and Regional Development website (2014), the Australian Government has committed to constructing an Inland Railway between Melbourne and Brisbane via central-west NSW and Toowoomba. This includes investigating a 24/7 rail link from the Brisbane end at Acacia Ridge to the Port of Brisbane.

The Government has committed \$300 million to enable Inland Rail to commence in 2014 starting with pre-construction activities such as detailed corridor planning, environmental assessments, community consultation as well as commencing land acquisition. Delivery of



Inland Rail is being guided by the 2010 Inland Rail Alignment Study undertaken by the Australian Rail Track Corporation on behalf of the Australian Government.

Inland Rail is an investment in strategic infrastructure for the future, providing capacity to serve the east coast freight market for the next half century and beyond. Inland Rail will be an important contributor to national productivity by reducing train operating costs and improving service standards.

It must be noted that future investment in the freight rail network must have access to Australia's ports. As noted above, the lack of consideration for complimentary investment in road, rail and ports reduced the benefits of investments for all projects. These transport infrastructure items must be seen as complimentary goods, whereby projects link the road, rail and port systems to achieve an effective and efficient transport freight system.

Furthermore, infrastructure investment must have increased population and economic activity in mind. Rail infrastructure projects must accommodate for future economic and population growth and not for current levels of population and economic activity. In particular, this means construction of larger passing loops on the rail network and efficient and lasting rail tracks. Investment for current levels of population and economic activity rather than future forecasted levels will soon be outdated and will prove inadequate for Australia's growing economic activity and population growth.

It is imperative that the Australian Government stands by its commitments for inter-state freight networks. An increasing population places immense stress on our current inter-state transport networks, a lot of which consist of road. By alleviating the pressure placed on these roads, the Government can avoid the future inevitable problems of increased death tolls on our roads and increased carbon emissions that growth in Australia's population will bring. Most importantly, however, investment in Australia's inter-state freight networks will provide immense economic benefits in the future, and shows an adequate consideration of Australia's infrastructure problems by the government.

In light of forecasted population growth, consideration for Australia's passenger rail networks is also vital. Population growth will have adverse effects such as urban congestion, increased carbon emissions and intensification of Australia's 'urban sprawl'. Sufficient investment in Australia's passenger networks could greatly alleviate all of these problems.

Australia's largest cities number in the millions, and are set to expand rapidly in the following decades. Sydney is projected to reach a population 8 million and similar forecasts have been made for Melbourne. This increase in population will result in crippling congestion problems for these cities, with major economic costs all over Australia. A report into public transport investment (2014) shows that in Brisbane and Perth, rail requires 57% and 38% less in investment than road (respectively) to achieve the same reduction in congestion. If no action is taken to invest in public transport, by 2031 the annual cost of congestion is expected to reach \$5.5 billion per annum in Brisbane (currently \$2 billion) and \$3.8 billion per annum in Perth (currently \$1.4 billion). Most importantly, congestion will retard productivity, which is fundamental to the economic health of not only our cities but also the nation (Synergies 2014, p. 4).

Further, death tolls and carbon emissions from motor vehicles stand to increase immensely with population increases. Currently, a transfer of 1,000 people from cars to rail would reduce the costs of road crashes by between \$650,000 and \$760,000 per year, depending on the city. Rail can also improve the amount of carbon emission released each year. In Sydney, for example, if rail absorbed 30 per cent of the forecast increase in urban travel, then congestion, safety and carbon emissions costs could be reduced by around \$1 billion a year by 2025 (Deloitte Access Economics 2011, p. v).

These costs have tangible effects on the lives of all Australian's and the economy. Congestion eats away at the leisure time and reduces economic productivity as workers and goods take longer to reach their destination and cost more to transport. Carbon pollution creates social costs to be borne by future generations who will face the dual costs of a changed climate and the need to reduce emissions. In addition to deaths caused by vehicle accidents, injuries create ongoing effects in terms of pain, reduced ability to work and the need for care (Deloitte Access Economics 2011, p. 26)

## For governments that are engaging in long term planning for future infrastructure investment, are they taking steps to protect the land and corridors that are needed to deliver those infrastructure projects in the future?

The ARA believes more could be done in the protection of land corridors needed to deliver infrastructure projects in the future.

There are numerous examples of work that has been carried out to protect land corridors such as:

- NSW - a private member's bill has been introduced into the NSW Parliament to keep regional rail corridors in public hands and allow surrounding communities the opportunity to use them for recreation and tourism; and
- Queensland - corridors for rail are being designated for future rail lines which will provide access to key mining regions. In March 2014, the Victorian government announced the multi-billion dollar Cranbourne-Pakenham rail corridor project. Similar corridor investment projects can also be found in South Australia and Western Australia. All projects are designed to protect the land that is needed to deliver future infrastructure projects.

However, the ARA believes that there are a number of transport corridors that are not yet protected or secured including that of the East Coast High Speed Rail. The Labour Government in 2013 has expressed the need to put planning protection over the land corridors that would form a future east coast High Speed Rail network. The government acknowledged that is was an important and logical step that keeps the option on the table for future generations. With the change of government, this process however was abandoned.

## What is industry seeking to reduce the regulatory and other costs that it faces in competing for infrastructure projects?

A major regulatory obstacle that impedes industry procurement processes is the stringent and costly nature of the project tendering process, also referred to as project bidding. A detailed discussion was provided in the recent Productivity Commission's draft report on public infrastructure (2013). Leighton Holdings stated that a project like EastLink in Melbourne would cost a consortium some \$20 million to bid and Airport Link is costing about \$30 million per bid. Although the Productivity Commission has claimed that bid costs can be approximately 1 per

cent of the total project cost, industry claims that bidding costs are more accurately approximated at 1.5 per cent, with outlying projects reporting bidding costs of up to 5 per cent of total project cost.

The financial burden which stringent tendering processes place are not only felt by the successful applicant, but by all bidding organizations. In their submission to the Productivity Commission (2014), Lend Lease claim that the cost imposition to the industry is considerable given that all tenderers are taken on the costly journey over a prolonged period and that in a field of three tenderers, two sets of costs are sunk. This is a substantial amount of resources used even before construction has begun.

The Productivity Commission has been informed that the major cost involved in tendering for infrastructure projects relates to the design component. Information provided to the commission alludes to the fact that design costs alone comprise around 50 per cent of the total tender costs. The remaining half of the bidding cost is made up of both the on-costs of the constructor's staff involvement in the process, along with the costs associated with preparing and submitting the other documentation requirements. For a contractor that has been sent a request for tender, further documentation relating to a number of non-design issues is also required, including plans relating to workplace relations management, health and safety management, project management, construction and earthworks to name a few.<sup>4</sup> The department of Infrastructure and Regional Development found that these requirements add significantly to the bid costs and also indicate that there is a lack of appropriate lead time into the bidding process. Industry claims that this additional material is unnecessary for constructors to cost the project and has the potential to detract from the process of selecting the best value for money bid.

## CONCLUSION

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To conclude, the ARA thanks and commends the Committee for investigating the issue of infrastructure planning and procurement. Efficient public infrastructure such as transport infrastructure plays a key role in a competitive and productive economy. As outlined in this submission, there are a number of reforms much needed in the areas of infrastructure

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<sup>4</sup> A full list is given on page 396 of the Productivity Commission's draft report on public infrastructure (2013).

procurement and planning including reducing the stringent and costly nature of the project tendering process and ensuring the continuation of project pipelines. The ARA is committed to assist the Federal Government in these reforms and would welcome an opportunity to discuss this issue further.

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