RA Submission to the Productivity Commission - **2022 Productivity Inquiry**

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Background

Roads Australia (RA) is the peak body for roads within an integrated transport system, representing an industry that contributes $236 billion annually to the economy and supports 1.4 million jobs. RA has over 150 members and brings industry, government, and communities together to lead the evolution of Australia's roads, integrated transport and mobility.

RA prides itself on being a leader in the industry. The organisation strives to be at the forefront of setting the industry up for success and pioneering new ways to be able to attract and retain highly skilled people now and into the future. This is iterated in the RA Strategic Plan 2021-2023 which outlines our four strategic values as being:

The leader

To be a leading voice of influence.

RA is recognised by government, industry and the community as driving value and connectedness for the Australian roads and integrated transport sector.

The facilitator

To facilitate contributions to the industry and public policy.

Develop and communicate sound, evidence-based policy solutions encompassing safety, capacity, transport reform, customer experience and sustainability.

The collaborator

To collaborate on the efficiency, development and national priority of Australia's roads and integrated transport systems which underpin the social, economic and cultural fabric of the nation.

Promote recognition by government, industry and the community of the critical importance of Australia's roads and integrated transport in infrastructure assets and networks.

The champion

To champion a diverse, inclusive, sustainable and values-led organisation and industry.

Support our people to be high performing through our culture and systems.

Our main priority in embodying these characteristics is to make positive changes to the integrated transport system and our member organisations – both of which sit within the context of the construction industry.

RA welcomes the opportunity to make this initial submission to the Productivity Commission's periodic inquiry of Australia's productivity performance.

The RA Strategic Plan 2021-2023 outlines RA's four policy themes: Place Making; People; Data & Technology; and Resilience.

Our strategic plan also includes three policy goals:

- Optimise the use of our roads for environmental, social, economic and cultural outcomes.
- Improve the stewardship of our roads for the workers on them and the people who use them.
- Decarbonise the economy through integrated transport and the efficient use of resources and energy.

Infrastructure project procurement and delivery.

1. RA recommends that the Commonwealth, along with state and territory governments, support reforms to the procurement and delivery of transport infrastructure by implementing the many productivity enhancement recommendations outlined by RA and Infrastructure Australia (IA) in our various reports and submissions.

Asset management.

2. RA recommends improved asset management that can deliver increased access to infrastructure and lengthen the useable life cycle of existing infrastructure, reducing the need for new infrastructure.

Data and technology.

3. RA recommends a review of the availability and use of data from public and private sources to create a nationally consistent approach to the management of privacy of individuals, while also ensuring current, emerging and future data pools become available to make informed decisions about productivity enhancing infrastructure and services.

Transport pricing.

4. RA recommends the development of a nationally consistent road funding mechanism that strengthens links between road-related revenue and road-related investment.
    a. To begin this process, RA recommends the commencement of trials of various road user charging models in different Australian environments to ascertain the best model and to build community understanding and support for reform.
5. RA recommends that work continue to reform public transport pricing in line with road pricing to deliver an integrated transport pricing system that is efficient, allows users to understand the impacts of their choices and delivers a more productive integrated transport network for the community.

Transition to Zero Emission Vehicles.

6. RA recommends the transition to Zero Emission Vehicles (ZEVs) should be nationally coordinated and closely aligned with the transition of the energy sector, to ensure the productivity gains are maximised through an effectively planned and implemented rollout.

Development of a sustainable circular economy for transport construction and maintenance.

7. RA supports continued research into the greater inclusion of “waste” streams as a replacement for virgin materials in infrastructure as a means to develop a sustainable circular economy in infrastructure development and maintenance.

Resilient assets.

8. RA recommends that following natural disasters where infrastructure is damaged or destroyed that governments complete assessments to consider the impacts of climate change and decide whether it is more productive to improve the resilience of the infrastructure to future natural disasters.

The rationale behind these recommendations and their potential to enhance the performance of Australia’s integrated transport network is explored in this submission.

INFRASTRUCTURE PROJECT PROCUREMENT AND DELIVERY:

1. **RA recommends that the Commonwealth, state and territory governments support reforms to the procurement and delivery of transport infrastructure by implementing the many productivity enhancement recommendations outlined by RA and Infrastructure Australia (IA) in our various reports and submissions.**

Australia is delivering the largest and most ambitious pipeline of transport projects in history – vital projects that will increase productivity, improve our cities, reduce road injury and trauma and move freight more efficiently.

Now more than ever, it is critical that procurement of this vital infrastructure is undertaken in the most efficient and effective manner to ensure that the maximum value for the investment is realised. It is essential that the government and industry work together effectively to best utilise scarce resources and ensure that taxpayers' funds are invested wisely and efficiently.

Australia is experiencing more mega-projects than ever before with these being planned and delivered across all States. Investment has grown from less than $6 billion in FY2021 to nearly $11 billion in FY2024, for major road projects greater than $2 billion.

In addition to these mega-projects, governments across Australia are investing in road and transport projects at record levels with many new infrastructure development and improvement projects across all states and territories. The pipeline of projects is likely to increase with further project priorities and commitments.

Governments are making these investments in these projects to both deliver improved transport outcomes for the community (particularly with growing populations in major east coast cities) and provide economic stimulus in response to the COVID-19 pandemic. Many of these projects are city-shaping and nationally significant. They will fundamentally improve transport systems, economic productivity, road safety and outcomes for the whole community.

The planning and delivery of this larger pipeline of projects presents significant challenges for government, industry and the whole supply chain. The principal challenges include:

- A constrained workforce and competition for skills;
- More complex and larger projects;
- Accelerated project planning to effect earlier delivery thereby increasing risks
- Competition across State boundaries for specialist skills; and
- Increasingly demanding planning and approval processes.

Efforts so far appear to be constrained to managing the symptoms, rather than effectively mitigating the disease of low productivity growth in infrastructure development.

The challenges involved in the procurement and delivery of government funded infrastructure have been well articulated by industry participants and representative organisations such as ads Australia over many years. Many of the difficulties that the industry faces are detailed in the Roads Australia Procurement Reform report of September 2020.

These challenges may not be new, but the need for solutions that will effectively address them has unquestionably become more urgent since the onset of the COVID-19 pandemic. Governments at every level are relying on the delivery of transport infrastructure projects as a major aspect of their post-COVID economic stimulus recovery. Yet, at the very time when it matters most, there are increasing time delays and cost blowouts on projects, because the work of procurement reform has been too long delayed.

Project delivery is suffering as governments and industry struggle with outdated, inflexible commercial frameworks and as industry struggles to attract the workforce it needs. In some instances, these capacity pressures are forcing governments to defer some projects.

An example of this was the Western Australian State Government's 2021-22 Budget decision to defer more than $500 million in infrastructure investment and smooth it out over the forward estimates.

Unless meaningful procurement reform occurs, this is likely to be repeated in other jurisdictions.

It is critical that procurement of this vital infrastructure is undertaken in the most efficient and effective manner to ensure that the maximum value for the investment is realised.

It is essential that government and industry work together effectively to best utilise scarce resources and ensure taxpayers' funds are invested wisely and efficiently.

There has been little improvement in productivity in the procurement of infrastructure for some years and so innovation is critical to deliver the growing pipeline of projects within the constrained and changing market.

There are real innovation opportunities through the increased use of technology, improved systems and tools, system and product modularisation and more collaborative contract models. Improvement in productivity is a key theme of the recommendations within the RA Procurement Reform Report.

IA has also released a number of reports and recommendations that mirror and enhance the recommendations of the RA Procurement Reform Report.

Along with the report on Market Capacity highlighting significant future constraints on the market to deliver the current planned infrastructure investment, and the 2021 Australian Infrastructure Plan, IA recently released their Delivering Outcomes report.

These reports and recommendations also mirror the more recent RA submission to the House of Representatives Standing Committee on Infrastructure, Transport and Cities inquiry into Procurement Practices for Government-funded Infrastructure.

ASSET MANAGEMENT:

2. **RA recommends improved asset management that can deliver increased access to infrastructure and lengthen the useable life cycle of existing infrastructure, reducing the need for new infrastructure.**

Australia has an ageing infrastructure base. Instead of replacing old or inappropriate infrastructure, there are existing and emerging tools in Structural Health Monitoring and asset management that can allow for improved use of ageing assets and/or increase their usable life.

Sheahan Bridge, northbound on the Hume Highway at Gundagai, was constructed relatively recently to the standards of the day (1977). However, these standards are incompatible with the size and mass of modern High Productivity Freight Vehicles (HPFVs). Recent technological work on the bridge means that Transport for NSW can allow limited access under permit to some HPFVs, pushing back the need to consider either expensive upgrades or replacement efforts.

Automated measurement and predictive maintenance can also provide a common approach to dealing with the status and condition of assets.

A new company which is a partnership between the Victorian Government and Xerox, Eloque, is offering new technology that will allow real-time remote asset management, providing asset owners with improved information about the performance of their asset, while increasing security and safety.

By supporting and taking up current and emerging technology, asset owners may be able to defer expensive rehabilitation and replacement costs for our productive transport assets.

Increasing data collection using low-cost sensors in the delivery and management of new and existing assets can also produce benefits not only for their use, but for new and future assets.

The data pool that could be generated from the monitoring of more transport infrastructure assets would be extensive and could lead to solutions for future and current problems. For example, this new data pool could test whole-of-life assumptions made in the project selection and procurement process under real-world situations.

The outputs from this will ensure improved decision making and better use of scarce capital in future project plans.

DATA & TECHNOLOGY:

3. **RA recommends a review of the availability and use of data from public and private sources to create a nationally consistent approach to the management of privacy of individuals, while also ensuring current, emerging and future data pools become available to make informed decisions about productivity enhancing infrastructure and services.**

The Productivity Commission in 2016 investigated the benefits and costs of improved data availability.

Since then, emerging technology and the use of current and new data streams has only increased the capacity to deliver significant improvements for customers and in the development of transport infrastructure.

Examples of areas requiring attention include data sharing, quality and inaccessibility.

Significant data is increasingly being collected by private and public entities, some of which is being used to provide solutions to productivity sapping issues such as congestion and road safety.

iMOVE, the national centre for collaborative R&D in transport and mobility, with partners the Bureau of Infrastructure and Transport Research Economics (BITRE) and GS1, have found potential improvements from the aggregation of freight data.

Research has indicated that improved information resolution and mobility can improve productivity in engineering, construction and operations by 1-2% per year, while reducing sector risk.

Transport data is already being used globally to reduce emissions and avoid congestion, in high-speed weigh-in-motion and multimodal classification to improve safety and sustainability, and fleet maintenance and performance management to name a few.

TRANSPORT PRICING:

4. **RA recommends the development of a nationally consistent road funding mechanism that strengthens links between road related revenue and road related investment.**
    a. **To begin this process, RA recommends the commencement of trials of various road user charging models in different Australian environments to ascertain the best model and to build community understanding and support for reform.**
5. **RA recommends that work continue to reform public transport pricing in line with road pricing to deliver an integrated transport pricing system that is efficient, allows users to understand the impacts of their choices and delivers a more productive integrated transport network for the community.**

Numerous reports from the Productivity Commission as well as independent economic and infrastructure organisations have consistently called for the introduction of a direct mechanism that links road use and the cost to build and maintain our roads.

As more Australians make the switch to Zero Emission Vehicles (ZEVs) and embrace alternative forms of transport – including rideshare and on-demand services – policy makers are confronted with the challenge of sustaining a revenue base sufficient to maintain and build the transport infrastructure on which our communities rely.

The SA, NSW and Victorian Governments have either announced or implemented plans for road user charging of ZEVs.

RA supports a road user charge for ZEVs, as part of a nationally consistent move to road user charging, while recognising that there need to be measures in place to encourage the uptake of more environmentally sustainable vehicles.

Norway, a global leader in the transition to ZEVs has recently started a trial of a new road user charging system.

The Australian environment is very different to Norway and if we are to ensure a clean and simple transition away from the blunt instruments of fuel and vehicle charges, then we need to run our own pilots across a variety of Australian environments.

There is also a need for consideration of wider transport issues to be reflected in transport pricing, especially economic negatives such as congestion, road safety and public health impacts (from fossil fuel emissions).

Cities face the largest congestion costs. The Productivity Commission has previously found that better utilisation of road assets equates to an increase of 0.7% of GDP over all capital cities. Charging differentially for access to or use of roads is one instrument by which this congestion can be addressed.

Infrastructure Victoria (IV) has investigated transport pricing and improving the way Victorians use the transport system. IV's review revealed the benefits of different ways to pay for roads, public transport and parking. These can deliver reduced congestion on our roads and public transport, greater mode choice and reduced need to build new infrastructure by enabling better transport network management.

Overall, to maintain the confidence of industry and road users, it is essential that road pricing and investment reform models are transparent and equitable for all road users. The methods must be part of a nationally consistent move towards road user charging reform that measurably boosts productivity.

TRANSITION TO ZERO EMISSION VEHICLES:

6. **RA recommends the transition to Zero Emission Vehicles (ZEVs) should be nationally coordinated and closely aligned with the transition of the energy sector, to ensure the productivity gains are maximised through an effectively planned and implemented rollout.**

The need to transition to ZEVs is already well known – but work underway by RA is revealing the necessary interconnectedness of that transition, with changes in the energy generation and distribution system, is currently not optimised.

There is a large risk to Australia's productivity should the uptake of ZEVs run ahead of the changes in the energy sector – restricting the benefits that can be achieved by this important transition.

There is some work to manage this risk by the Australian Energy Market Operator through their strategic view of the development of the National Electricity Market.

Some Australian jurisdictions have also completed strategic reviews of the shift to ZEVs, but there is no nationally consistent plan that combines all the various strands to reduce the possibility of negative consequences from what should be a positive transition.

DEVELOPMENT OF A SUSTAINABLE CIRCULAR ECONOMY FOR TRANSPORT CONSTRUCTION AND MAINTENANCE:

7. **RA supports continued research into the greater inclusion of "waste" streams as a replacement for virgin materials in infrastructure and as a means to develop a sustainable circular economy in infrastructure development and maintenance.**

The construction and operation of transport infrastructure requires inputs that can result in significant greenhouse gas emissions.

As community expectations change and governments set national and global sustainability goals, the transport industry is starting to embrace the circular economy and work towards a net-zero future.

As governments recognise this change, they are pursuing increased levels of waste recycling and the move to a circular economy.

Acceptance of this change in infrastructure construction and maintenance can have the added economic benefit of reducing the use of scarce virgin materials, for example quality rock sources for concrete aggregates.

By shifting away from thinking about used products as "waste" to thinking about how they can be used as a "resource" in the delivery of transport infrastructure, we can create a more resilient and sustainable transport network.

Transport and infrastructure ministers at their meeting of 5 June 2020 noted the opportunity through the increased pipeline of transport projects to re-purpose waste in support of the COAG Waste Export Ban and the National Waste Action Plan. It is critical that there be consistent and national standards and appropriate targets for recycling.

RESILIENT ASSETS:

8. **RA recommends that following natural disasters where infrastructure is damaged or destroyed that governments complete assessments to consider the impacts of climate change and decide whether it is more productive to improve the resilience of the infrastructure to future natural disasters.**

With a growing population and the effects of climate change, more Australians and the infrastructure they rely on, including the transport network, have been impacted by natural disasters.

This has been made evident again by recent deadly floods in Queensland and New South Wales.

Following the 2019 North and Far North Queensland Monsoon Trough, the Queensland and Commonwealth governments invested in a Betterment program that saw destroyed and damaged infrastructure "built back better" and with more resilience.

"Build Back Better" is now a common phrase used in many different fields to highlight the need for broader thinking that ensures we do not simply take the path of replacing like-for-like but consider the impacts in the medium and long-terms (including the impacts of climate change) and explore new and innovative ways of delivering more optimal outcomes for the community.

With transport infrastructure life-cycles of 50-100 years, the principle of "Build Back Better" needs to be a standard consideration in the construction and reconstruction of transport assets.

A nationally coordinated adoption of this approach across jurisdictions would result in greater certainty around funding responses, as well as producing shared reviews and lessons on cause and effect for all jurisdictions to utilise.

CONCLUSION:

RA appreciates the opportunity to make this submission to the Commission's 2022 Productivity Inquiry.

Given the significant scale of the nation's current transport infrastructure pipeline and the role its delivery will play in supporting national economic activity, RA strongly encourages the Commission to adopt the recommendations put forward in this submission.

When the right infrastructure, especially a service supporting infrastructure like transport, is built and maintained properly it can produce significant productivity improvements. But we also need to ensure that the construction and maintenance of that infrastructure is also benefiting from improved productivity measures.

Our recommendations will enable industry to deliver productivity improving projects more efficiently and deliver a wider range of economic and environmental benefits to the community. They will also improve the capacity of our industry's workforce by allowing it to become more skilled and diverse.

RA looks forward to actively engaging with the Productivity Commission throughout the remaining stages of this inquiry.

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