POLICY WEBINAR

Social and Economic Value of Australian Roads

Wednesday 8 December

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About Roads Australia

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 brings industry, government, and communities together to lead the evolution of Australia's roads, integrated transport and mobility.

Roads Australia's members include all of Australia's transport agencies, road owners, major contractors and consultants, material suppliers, service and technology providers, and other relevant industry groups.

RA's policy focus extends across five activity streams: Safety; Capacity; Transport Reform; Customer Experience; and Sustainability, with Diversity and Inclusion a commitment across each stream.

Visit our website for upcoming policy events to contribute to the debate.

Background

On 8 December 2021, RA released an update to our 2019 study, The Economic Impact of Australia's Roads.

Roads contribute enormously to our economy and play an important role in all our daily lives, shaping how we live and work.

However, it can be challenging to uncover the full extent of their value. To get a broader understanding of just how important our road networks are, and in anticipation of the record levels of infrastructure investment, RA (Roads Australia) commissioned research by BIS Oxford Economics.

In this webinar, the current value of Australian roads and their interconnectedness with other industry sectors is underscored. Following this, key actions that can be taken to maintain and build that value are identified.

Event summary

Over 170 people registered to join the webinar to hear from the following speakers:

- Adrian Hart, Head of Construction and Infrastructure, BIS Oxford Economics
- Peter Colacino, Chief of Policy and Research, Infrastructure Australia

The discussion was hosted by Michael Bushby, RA President.

Policy Insights

Adrian Hart and **Peter Colacino** discussed the findings of the report and its implications on the unprecedented infrastructure pipeline.

Adrian delved into the research that quantifies the current value of our road network, describing the various methods used to complete the valuation. While Peter's presentation provided insights on how we can address arising challenges and maximise the benefits of the upcoming infrastructure investment.

The updated report on Australian roads couldn't have been timelier. Strong population growth and increasing global trade has translated into increased demands on our finite road space for the movement of goods and people. The research highlighted the significance of the road industry's contributions to the economy and community. Importantly, it also emphasises the urgency of securing policy changes, to enable the road industry to deliver integrated transport projects more efficiently, sustainably and in line with changing community expectations.

Current value

The road industry in Australia supports 1.4 million jobs and contributes $236 billion to the Australian economy each year. For every $1 million invested in road construction, $2.9 million in output is contributed to the economy industry along with adding $1.3 million of value to Australian GDP and employing 7 people.

Adrian explained that these figures are calculated by first identifying that the road segment is large, overlapping, and integral to the transport of countless other industry sectors. When people use roads, they use them across all industries in the economy. When we spend money on roads, that money is multiplied throughout the economy and that's what gives us the total impact of the economic investment in roads. When we add up all these investments, we can determine the economic value of roads.

The economic and social valuation of our road networks are completed through several methods because valuing something as intrinsic as roads in an economy is not straightforward.

Adrian confirmed that the research is focused on the economic value of roads which in many cases is different from an account value. To provide an example, Adrian highlighted that while a road might be depreciated, it still serves a purpose, even if it requires maintenance.

Adrian described the various methods that were utilised in the research:

For hire – Road transport as measured by the Australian Bureau of Statistics (ABS)

In house – Other industry sectors completing transport as part of their work. For example, construction and mining are big industries in Australia that are using a lot of the roads as part of their output.

Input-output analysis – Every time we use the roads for transport or the construction of roads, we draw on other industries which expands those industries. It is how we can measure the multiplier effect.

Economic welfare approach - Determining how much people are willing to pay for a road and the current price they're paying. Although a lot of Australian roads are funded through government there's still costs to the user (petrol, registration etc).

Through the outlined methods, the report identifies both direct and indirect impacts of roads. For example, when we build a road, it provides a direct impact to the construction company but also has indirect impacts that draws on cement, construction, quarry materials and labour. It affects upstream and downstream industries and then those industries themselves spend money that they receive on a totally unrelated industry sector further boosting the roads economic impact.

Adrian noted that as maintenance is not captured well in our system of national accounts it is more difficult to value. However, road maintenance is roughly $8 billion a year and rising because governments are using maintenance as a tool to help stimulate economic growth.

While the overall valuation in this recent research was very similar to that in the 2019 report, there were a lot of underlying changes.

COVID-19 changed the way we use our road network, affecting some of the values that we ascribe to it. As Australia went into lockdown, there was a dramatic drop in all types of mobility. Where the demand for passenger vehicle use lessened during lockdown, the freight demand on our network skyrocketed.

When we began to emerge from lockdown, all modes of mobility did not bounce back equally. Public transport use did not rise and recover the same way as passenger vehicles. Social distancing made us more likely to commute in private vehicles rather than public transport. This hesitation towards public transport led to a modal shift from rail to roads, resulting in a lot more private vehicles on our roads.

The change in behaviour was so widespread that passenger driving exceeded pre-covid levels between the first and second major lockdowns. While Adrian noted that the data was only captured up until the start of the second lockdown, we were seeing a similar recovery.

All these changes in our use of the road network balanced out, resulting in a similar valuation. Adrian maintained that while he does not anticipate that the value of our roads will ever decrease, people's continued and future behaviour will affect the structure of the benefits ascribed to our road networks.

Adrian then dived deeper into the details of the road construction side of the valuation, which is the investment in roads. We use a lot of roads and our demand for roads is only going to increase in the coming years.

This demand results in government and private sectors delivering a lot more road construction over the next five years. The planned construction is consistent with the findings of Infrastructure Australia's (IA) [2021 Infrastructure Market Capacity report].

There is a huge pipeline of transport investment happening that is dominated by road and rail, with the road investment pipeline twice the size of the rail investment pipeline.

Over the next 4 years with these large amounts of construction, roads will contribute more than $300 billion to the Australian economy and the creation throughout the economy of over 700 thousand jobs.

Road construction will peak in 2024, where we'll see almost $28 billion of work in that year alone. The makeup of the investment is varied with $17 billion in highways, arterials, and tollways and $5 billion each in local roads and subdivision roads. Airports, which for statistical purposes are considered as part of road construction will contribute $1 billion.

All this outlines just how big of an investment is made in roads and not just on big projects but local roads and new subdivision roads also have significant impacts.

Apart from the necessity of Australian roads, they are big multiplier and job generators within the economy, outlining why governments invest in them.

Keeping and building that value

Peter began his presentation by highlighting the enormous pipeline of major project work planned by government, which represents approximately 20% of all construction and engineering activity.

The major pipeline is dominated by transport. Around $4 in every $5 spent on those very large projects in Australia is spent on transport, with roads making up 50% of that spend.

The enormity of road investment was stressed by Peter, stating that over the next 4 years, there's 187 major road projects worth $62 billion in total.

Along with these record levels of infrastructure investment, IA's recent market capacity report outlined that we are facing capacity constraints, including labour in the industry.

These inevitable challenges reinforce the importance of addressing the risks from capacity constraints to make sure industry can deliver the pipeline.

Peter expressed IA's strong belief that better data, methods, and values, that build on established practice and theory, are key to addressing those capacity constraints.

Another vital reform to keep and build the value of our road network is a transformation of how we assess the costs and benefits of projects.

Peter described the definitions of public and private value:

Public value: the benefit derived from the community through the addition of an asset

Private value: the benefit derived from the user of the asset.

Gaining a thorough understanding of public value is critical in the assessment of the long-term value of infrastructure investment.

Peter emphasised Australia's need to increase our focus on public value to justify continued investment in infrastructure. He also went on to note that Australia can learn from leading infrastructure markets like the UK and Canada to move from preferencing and selecting projects that are the lowest cost to projects that attempt to optimise public value.

If we adjust our view of value for money, we have an opportunity to optimise broader benefits in the supply chain and industry development including sustainability, resilience, and place.

A webinar attendee questioned why there is no mention of the safety benefits in terms of the IA assessment because we know that increasing the star rating of roads can increase the social benefits. Peter responded that safety benefits are a driver of many transport projects and were included in many projects considered by IA. He added that there is value in using the STAR/IRAP/AUSRAP systems in terms of understanding the safety of roads but there is also a range of established practices around understanding safety benefits.

These practices should be a part of a road business case because safety should be a component that is considered.

Parting Thoughts

Michael Bushby brought the session to a close by thanking both speakers for their insights and knowledge in their respective areas, noting their presentations helped to provide important context around the research.

He went on to acknowledge how pleased RA is with the research and discuss the important role it will play in helping RA to highlight the value our industry provides to the community.

Event outputs and next steps

An overview of the event and the broad themes addressed during the webinar was circulated via RA's LinkedIn channel.

After the webinar a survey was sent so attendees could provide their thoughts. The survey revealed that industry is taking steps to continue to deliver on the pipeline and that the peak of the work being delivered is still yet to come.