roads australia

POLICY WEBINAR
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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 $207 billion annually to the economy and supports 1.3 million jobs.

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

The nation's only roads champion, RA's 150+ members includes all of Australia's road agencies, major contractors and consultants, motoring clubs, service providers and other relevant industry groups.

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

Register for upcoming policy events to contribute to the debate.

BACKGROUND

In lieu of the deferred 2020 Study Visit to the UK and Europe announced earlier in the year, RA has introduced an International Insights webinar series. Our first webinar focussed on active transport and the role it plays in a multi-modal transport system, including the opportunities for active transport to play a greater role in the transport mix as we move towards a 'new normal' post-COVID-19 world.

EVENT SUMMARY

Over 100 attendees joined RA's webinar on 15 September 2020 to hear from:

- **Nicoline van Cann**, Senior Policy Officer, Trade and Economic Affairs, Consulate General of the Netherlands, Sydney;
- **Professor Serge Hoogendoorn,** Professor, Delft University of Technology (TU Delft), Professor of Smart Urban Mobility, Monash Institute of Transport Studies;
- **Dr Sascha Hoogendoorn-Lanser**, Director Automated Mobility Valorisation Centre, Delft University of Technology (TU Delft);
- **Matt Faber,** Associate Director - Transport, Australian Infrastructure Plan, Infrastructure Australia (IA)**; and**
- **Will Fooks,** National Transport Planning Lead, GTA Consultants.

Speaker presentations are available on the RA website.

The webinar was moderated by **Aneetha De Silva**, Board Member and Customer Experience Policy Stream Chair, Roads Australia and Managing Director, Government - Australia & New Zealand, Aurecon and sponsored by GTA Consultants.

POLICY INSIGHTS

The webinar brought together experts from the Netherlands and Australia.

Nicoline van Cann, Senior Policy Officer, Trade and Economic Affairs, Consulate General of the Netherlands, Sydney presented a background to cycling in the Netherlands and highlighted some of the possibilities that exist in Australia for cycling to become a part of daily life, as it is in the Netherlands.

Ms Van Cann explained that contrary to popular belief, cycling in the Netherlands wasn't embedded in urban policy in the 1960's and 1970's, viewing the car as the primary mode of the future, with bicycle use decreasing by 6% each year. Fatalities in the Netherlands peaked in 1971, including the deaths of over 400 children. This gave rise to protests by action groups who did not want city centres to adjust to cars, but rather for cars to adjust to the cities.

In the 1980's Dutch towns and cities began to introduce measures to make their streets more cycle friendly. The Hague and Tilburg were the first cities to experiment with official cycle routes through the use of dedicated paths. The city of Delft created a network of cycle paths. One by one other Dutch cities followed, which saw Amsterdam become what it is now – the cycling capital of the world.

According to Ms Van Cann, today around 38% of all trips in Amsterdam are by bicycle, compared to 2% in London, with over 35,000 kilometres of dedicated bicycle path across the Netherlands. Over the years, many Australian councils and cycling organisations have reached out to the Consulate to facilitate connections and learn from the experience in the Netherlands.

Ms Van Cann highlighted the opportunity for development focused on the areas around public transport nodes. This would encourage walking or cycling to the station, and has the potential to increase the catchment area of the train station around 15 times compared to walking alone. She noted that in the Netherlands, around 40% of train passengers arrive at their departure station by bicycle.

Given the current momentum for cycling as a result of the COVID-19 pandemic, she reinforced that now is the time to start planning to convert temporary pop-up lanes to permanent infrastructure and plan, design and execute strategies to make Australian cities cycling friendly.

Professor Serge Hoogendoorn, Professor, Delft University of Technology and Professor of Smart Urban Mobility, Monash Institute of Transport Studies and **Dr Sascha Hoogendoorn-Lanser,** Director Automated Mobility TU Delft Valorisation Centre provided the keynote presentation, focusing on the long term impact of COVID-19 on (active and non-active) mobility.

Professor Hoogendoorn began by explaining that as in Australia, COVID-19 has resulted in significant changes in transport demand across the Netherlands, including an increase in active travel through walking and cycling trips. This is shown in Table 1 below.

T1. Transport changes in the Netherlands as a result of COVID-19

Transport mode	Change as a result of COVID-19
Public transport	-42% (even after the re-opening of schools and universities)
Car use	Similar, but spread throughout the day resulting in less congestion
Car ownership	Increase in urban car ownership
Walking	Slightly less walking trips, +14% increase in distance walking trips
E-bikes & mopeds	+348% increase moped sales, e-bike sales also increased
Bicycle	Increase in the number of bike trips and 54% increase in distances travelled

Professor Hoogendoorn theorised that some of the trends leading to the changes in travel behaviour are current to the pandemic, and others will be lasting. He noted positive changes such as working from home have increased from 32% to 67% with an indication that around 50% of people will keep working from home at least two days per week after the pandemic.

Of those who caught public transport pre-COVID-19, around 12% have indicated they will walk and 20% will cycle rather than return to public transport post-pandemic.
This indicates there will likely be less long-range travel, with more active travel, in the Netherlands, resulting in greener and healthier outcomes.

However, there have also been a number of negative changes including increased car use, with 11% of public transport users switching to car and increased ownership of private mobility, which is likely to be lasting. Professor Hoogendoorn suggested that the relative increase in car traffic reduces or cancels the positive impacts of other trends.

As well as changes to demand, he explained the impact on the supply side, particularly in relation to the 1.5 metre social distancing requirement. This impacts not only public transport, but also active transport with a reduction to 40% of capacity for walking through narrow corridors and a reduction to 20% of capacity at transfer nodes, such as train stations.

Professor Hoogendoorn presented data analysis footage from work being conducted by TU Delft with the national railway company. This study allows the trajectory of pedestrian paths before and during the pandemic to be analysed to determine how people have changed their travel behaviour as they adapted to the situation.

To further study behaviour change by mode, TU Delft is equipping the campus with cameras to monitor behaviour and capacity. This includes, for example, at bus stops and at cycling routes, to see how behaviour has changed because of the crisis.

Dr Hoogendoorn-Lanser highlighted other changes that have occurred to the transport network framework to manage the impact of COVID-19, including:

- Network design – such as Milan turning car infrastructure over to bicycle infrastructure;
- Measures – Brussels providing less green time at traffic signals to cars and more to active modes;
- Regulations – facemasks being required on public transport, allowing for 100% capacity, rather than the earlier 40%, which was deemed to be insufficient; and
- Allocation principles – the introduction of a capacity allocation system through booked seats on the national railways. This started with only vital worker groups allowed to travel and expanded to all customers.

She explained that the TU Delft campus provides a unique opportunity to study mobility in a microcosm, with a number of data sources available, including through sensors installed to monitor movement throughout the campus. This includes standard traffic data and real-time locations of public transport vehicles, as well as some more innovative measures such as: the number of devices with Wi-Fi on in a building; in and out-flow from buildings using installed detectors; as well as crowding notifications from stewards. This last method works via an app that checks if there are situations where overcrowding is occurring, in particular where people see violations of 1.5 metre social distancing.

This has allowed a 3D ‘digital twin’ visualisation of the campus to be created. The ‘digital twin’ allows measures to be tested and their impacts assessed as well as providing short-term predictions (i.e. 15 minutes) of potential bottlenecks to allow action to be taken.

Dr Hoogendoorn-Lanser concluded by indicating that mobility is changing for the better but questioned whether the changes will become the ‘new normal’. Early indications suggest that working from home will become normalised. However, greater active travel needs to be accommodated, but potentially also more car-traffic in the short-term. A reduction in public transport use is likely to continue, but given the subsidy model in the Netherlands, this may lead to reductions in supply and result in a further decrease in ridership – which needs to be avoided.

Matt Faber, Associate Director - Transport, Australian Infrastructure Plan, Infrastructure Australia (IA) presented on the possible place of active transport policy in a national infrastructure plan for Australia. The Australian Infrastructure Plan is produced by IA every 5 years, taking a 15-year forward view, and builds on the 2019 Infrastructure Audit released in 2019.

IA’s 2019 Audit confirmed that active transport remains a challenge for Australian policymakers. The percentage of children walking or riding to school has halved since the mid-1970s.

When compared to the Netherlands, even our busiest bike-riding suburbs have around one-tenth of use of active transport for day-to-day trips. Mr Faber indicated that low urban densities and long distances are only part of the story, as feeling unsafe when walking or riding a bike is the biggest barrier.

Nevertheless, 55% of Australians would like to see more investment in active transport infrastructure.

Mr Faber noted that annual passenger kilometres travelled on public transport has increased 20% in the 10 years since 2005/06 and grown at a rate three times that of the passenger car.

He suggested this indicates that Australia is becoming much more like European cities in terms of public transport use, population density and critically the need to get to and from public transport stops.

Mr Faber highlighted the directions for active transport that are emerging for the 2021 Plan, noting that walking and riding are now seen as more important by Australians as a result of COVID-19.

He pointed out that the pandemic has seen a new role for active transport, specifically in local areas and in connections to local centres. As a result of this and other factors, there is a significant proportion of Australians who expect to travel by foot or bike in the future.

Further, he noted that advances in technology have seen developments in e-bikes, which now allow many of the barriers of cycling (age, distance, terrain etc.) to be overcome. E-bikes, share bikes and other forms of micro-mobility can be integrated into Mobility as Service (MaaS) packages which include traditional and demand-responsive transit packages. MaaS customers then have access to solutions for all travel needs - including gap-filling options for times like wet weather when riding is not attractive.

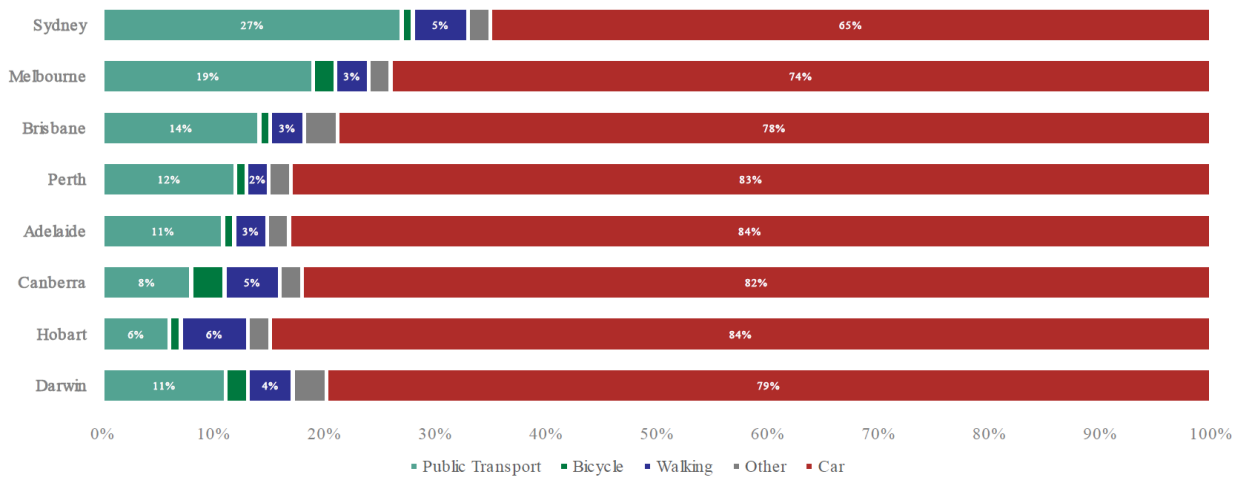
Over the longer term, combining rail, rapid bus and other line-haul public transport modes, with first and last mile walking and cycling access is critical, and is an area that IA is interested.

In closing, Mr Faber indicated that short-term investment in cycling and walking throughout catchments around train and rapid bus stations, and local activity centres, is a no-regrets investment option, as these will become in future first and last mile access routes.

Will Fooks, National Transport Planning Lead, GTA Consultants, highlighted emerging good practice in Australian major transport project planning and development, and the importance of making positive provisions for active transport.

Mr Fooks highlighted that this year has seen a fundamental shift in the way we envisage the transport landscape. The reality is that for most people in Australia, the car has been the dominant mode as shown in Figure 1 below.

F1. Mode choice by Australian capital city



Source: GTA Consultants

Having this narrow perspective on what our roads do, i.e. provide for car access, has influenced design criteria. He highlighted however that we are now seeing a transition to a multi-modal transport journey.

Mr Fooks indicated that community engagement highlights that people want active transport provisions. Active transport has become a selling point for major transport projects such as the West Gate Freeway in Melbourne, Dandenong line level crossing removals in Melbourne and the Veloway in Brisbane.

Mr Fooks also highlighted the health benefits of active transport, noting COVID-19 has resulted in the opportunity for people to walk or ride more often, especially in their local area. This has generated a hype around active transport (as evidenced through the rollout of pop up lanes and tactical urbanism) which, while not new, have been brought to the forefront of discussion as a result of the pandemic.

He suggested that the globalisation and shift in policy is a significant opportunity to learn from others and the innovation happening around the world. Specifically, there is opportunity to learn from New York, London, Paris and to shift the ecosystem around how we manage, plan and deliver projects. This would include moving from specifications around bike lane widths, to decisions on who designs the road and ensuring they have experienced the road as a rider.

Mr Fooks concluded by acknowledging that while we are some way away from the level of active transport seen in Europe, Australia is on a journey to improve this. He suggested that there needs to be incremental steps to improve the quality and connectedness of the network, with corresponding increases in road space allocation and project budgets over time.

EVENT OUTPUTS & NEXT STEPS

A snapshot of the event was promoted through Roads Australia's LinkedIn channel.

A second webinar, focusing on the transition from Internal Combustion Engines (ICE) to Electric Vehicles (EVs) was held on 16 September. The synopsis of that event can be downloaded on the RA website.

Future topics to be discussed in the International Insights series include Road Worker Safety and Hydrogen, which are planned for November and December 2020.

In addition, Roads Australia plans to host further webinars on this and related topics.