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Tuesday, 10 September 2019

National Transport Commission
Level 3, 600 Bourke St
MELBOURNE VIC 3000

Dear NTC

Re: National Heavy Vehicle Law Review – Issues Papers
Vehicle standards and safety and Safe people and practices

Transurban is pleased to respond to the National Transport Commission's (NTC) consultation process for its review of the National Heavy Vehicle Law (NHVL) and issues papers relating to the safety of vehicles and people, given heavy vehicles account for almost 20 per cent of Australia's road trauma, yet represent only five per cent of the nation's vehicle fleet.

Transurban is committed to the safe operation of our assets and is pursuing a number initiatives in road safety. Our road safety strategic framework is underpinned by the Safe System approach. In this context, Transurban is able to influence a number of elements which have the potential to impact the safety of drivers and passengers on our network through:

- infrastructure design
- maintenance approaches
- signage
- speed management, and
- incident response.

Heavy vehicles are significant users of our networks. Independent crash analysis by Monash University Accident Research Centre (MUARC) shows that despite Transurban's roads having up to 78 per cent fewer crashes than 'like' roads, trucks are the second most common vehicle type involved in injury crashes on parts of our network.

Transurban engages with heavy vehicle road safety in a number of ways, including:

- safe operation of our network
- engagement with the heavy vehicle industry, including regular contact with key freight operators, trucking associations and road authorities
- membership of the Construction Trucks and Vulnerable Road Users Steering Group in Victoria (VRU)
- research and analysis of safety and performance that affect users of our roads to understand and address key issues
- trialling connected and automated vehicles (CAVs), including heavy vehicles, on our network to understand their interaction with our infrastructure.

Each of the above points is reflected in the NTC's issues papers. We believe that our research findings, insights and experience will provide real world examples for the NTC's review.

Safe operation of our network

Transurban builds and operates roads and tunnels in Victoria, New South Wales and Queensland in Australia. Heavy vehicles use our network for the efficient transport of freight and for access to the broader network, ports and industrial parks. Engagement with our freight customers is a key business priority to support the safe use of our roads and facilitate efficient and reliable travel.

Transurban's tunnels are fitted with warning signs and technologies for vehicle height and placard loads to ensure these assets avoid significant safety issues and disruption. Despite these systems, along with broadcast capability to engage with drivers, some overheight heavy vehicle operators drive into tunnels causing safety issues, damage to assets and delays to other road users.

Our managed motorways include intelligent transport systems such as variable speed limit and lane closure (Red X) signs that are utilised during traffic incidents, road works and when congestion occurs to increase the safety of incident response crews and motorists in need, road workers and our customers. In monitoring our roads, we have found that some drivers, including some heavy vehicle drivers, do not slow down to the reduced speed limit causing other road users to feel unsafe. In turn those drivers may speed and/or drive in closed lanes, increasing the risk of crashing.

Some sections of our motorways are unable to accommodate particular heavy vehicle types such as B-double vehicles with high gross vehicle mass (GVM). It is important that operators and drivers are aware of the capacity and capability of routes to ensure the safety and reliability of the network for other users.

Based on the operation of our roads, we recommend that the NHVL should:

- require driver licensing to include specific focus on safe driving in tunnels
- require heavy vehicles to have technology that identifies routes that prohibit particular vehicle weights, heights and dangerous goods, as well existing and emerging technology that will assist in compliance with changed traffic/road conditions, such as reduced speed limits, closed lanes and road works
- require improved driver training and licensing that is critical for compliance with road rules and changed conditions (such as safe driving through road works) and which is consistent across all Australian jurisdictions.

Engagement with the industry and stakeholders

To support our key freight and logistics customers, Transurban provides network briefings on topics such as safety and road operations. Transurban supports national and state-based activities relating to heavy vehicles, such as trucking association conferences and industry events, and meetings hosted by organisations such as Roads Australia. We also facilitate opportunities to share our involvement in road safety research, such as tours of the Transurban Road Safety Centre at Neuroscience Research Australia (NeuRA).

Further, Transurban engages with the roads authorities and other key stakeholders in each of the states in which we operate to understand the key safety and transport issues for the heavy vehicle sector. Examples of this engagement include our involvement in the Construction Truck and Vulnerable Road Users Steering Group, established by VicRoads (and outlined below); working with the Port of Brisbane on heavy vehicle safety issues including route selection, tunnel safety and speed compliance; and support for Transport for NSW's planned installation of average speed cameras on the M7 Motorway, as part of its Road Safety Plan 2021.

Construction Trucks and VRU Steering Group

The Victorian Government identified pedestrians and cyclists' safety as an emerging issue in 2016 due to an increase in construction trucks in urban areas—a result of the large number of infrastructure projects in Melbourne.

Since then, working groups comprising representatives from Transurban and other industry sectors have met regularly to consider truck standards, route selection, traffic management and community engagement. An opportunity was identified to develop and introduce new truck safety standards.

A number of changes have now been made to construction trucks on the West Gate Tunnel Project including underrun barriers added to the side of the trucks to protect cyclists; blind-spot detection devices such as mirrors, cameras and sensors; audible left-turn warning systems; as well as signs to warn road users of the danger of being too close to the vehicle.

The group has also reviewed the Fleet Operator Recognition Scheme (FORS) and Construction, Logistics and Community Safety program (CLOCs) in the United Kingdom, developed and implemented by Transport for

London. These programs provide incentives that aim to improve the safety of the truck fleet, truck drivers and the community.

Based on Transurban's involvement in this group and our experience in major transport construction projects, we recommend that the NHVL should:

- consider the introduction of programs such as FORS and CLOCs to provide a framework for the ongoing management and continuous safety improvement of the heavy vehicle sector across Australia
- encompass the requirement for heavy vehicles in all states to be fitted with technology that enhances the safety of the community, consistent with the requirements for the West Gate Tunnel Project
- ensure driver competency through a consistent national approach to licencing and other industry/workplace programs to ensure the safety of the community as well as drivers.

Research and analysis / CAV trials

In addition to the MUARC analysis of crashes on Transurban's roads, we undertake a range of other research and analysis of our network to understand and develop solutions to improve safety, efficiency and reliability.

Transurban has a comprehensive program trialling automated vehicles on our network to understand the role infrastructure plays in supporting these technologies. This has also extended to trialling a new model prime mover with level 2 autonomous features, the findings of which were consistent with the trials on passenger vehicles. The reports of the passenger vehicle trials can be found on our [website](#).

We also undertake ongoing customer research, with insights used to improve customer experience and inform our road operations. Feedback from our customers on safety shows that their top concerns relate to driving near and around trucks, merging and lane changes, and others' 'reckless' driving behaviours.

We recently undertook market research to understand the views of drivers sharing the road with automated trucks. The key findings include:

- low level of awareness of these types of vehicles and the technology that would ensure safe operation
- almost universal rejection of the idea of a 'driverless' truck
- concerns about safety which are consistent with the above customer feedback for driving alongside trucks
- dedicated lanes and restricted hours could enable automated trucks on the network.

Another example of our investment in research to improve the safety of heavy vehicles was a study by MUARC to inform guidelines for vehicle safety markings. Relating primarily to visibility and conspicuity of incident response, tow trucks and project vehicles of road operators and infrastructure builders in the transport sector, the main objective of the research was to ensure the safety of both vehicle operators and the general public. This research has informed the markings on Transurban's vehicles and has been shared with our partners and key stakeholders.

Based on our research, we recommend that the NHVL should:

- include performance based regulations and rules that accommodate emerging technology to enhance the safety of trucks and other road users, and support efficient route selection, including through road works and changed traffic conditions
- develop a program of community education to support safe driving alongside trucks and to assist in the understanding and adoption of new technologies
- require vehicle safety markings to ensure the safety of vehicle operators and the general public.

Thank you for the opportunity to respond to these issues papers. Please do not hesitate to contact me should you require further information or wish to discuss this submission.

Yours faithfully

A handwritten signature in black ink, appearing to read 'Elizabeth Waller'.

Elizabeth Waller
Road Safety Manager