

Australian Infrastructure Audit 2019

RAC Response to Infrastructure Australia

October 2019



For the better

RAC thank Infrastructure Australia (IA) for the opportunity to provide feedback on the Australian Infrastructure Audit (the Audit), for consideration in informing future Audits as well as updating the Australian Infrastructure Plan, planned to be published in 2021.

RAC is a voice for more than one million Western Australians and speaks out on the road safety, transport, land use and air quality challenges facing WA. Since our foundation almost 115 years ago, RAC has existed to be a driving force for a Better WA by championing change that will deliver safe, easier and more sustainable transport. Our submission is structured in line with these three themes.

Safe mobility

RAC is pleased to note that the Audit prominently identifies the challenges associated with governance of, and ensuring adequate funding for, maintenance and essential safety upgrades of road networks. We strongly support the opportunity identified in the Audit to focus investments and policies on improving the safety performance of regional, rural and remote road networks.

As outlined in RAC's recent submission on the 2020 Infrastructure Priority List, immediate action is required to address the escalating economic and social costs of road trauma. Of the highest importance is the establishment of a funding partnership between the Australian and WA governments to deliver a long-term road safety program for regional WA. This State-Government-backed strategic program requires funding of \$100 million each year over nine-years to deliver low-cost solutions such as sealed shoulders and audible edge lining along more than 17,000 kilometres of WA's regional road network.

Critically, State Government modelling has demonstrated that if implemented in full, the program is expected to deliver a reduction in regional killed and serious injury (KSI) crashes of 60 per cent, or over 2,100 KSI crashes at a Benefit Cost Ratio (BCR) of 4.05. By any standard, the program represents a step change in saving lives and preventing serious injuries to reduce the unacceptable social and economic impact of road trauma in WA. More broadly, Infrastructure Australia must give greater consideration to lower-cost approaches which could be applied at scale to meet the challenges identified in the Audit.

Easier mobility

RAC welcomes IA's recognition of the importance of effective land use planning in improving transport and mobility outcomes. More effective integration of transport and land use planning presents a long-standing opportunity to optimise the use of existing infrastructure and manage the additional travel demand to be generated by growth (for example as the Perth and Peel regions continue to grow towards a population of 3.5 million people by 2050¹).

IA's Media Release on the Audit characterised development in Perth as dominated by greenfield development, and the Audit itself notes that this accounts for as much as 70 per cent of development. While this approximates the long-term trend observed in Perth, the average net infill rate between December 2013 and December 2017 was 36 per cent² and in 2017 it was 42 per cent. This demonstrates some progress towards achieving the State Government's policy target of a 47 per cent infill rate² and should be acknowledged in the Audit.

¹ Over the lifetime of Perth and Peel@3.5 million, 800,000 new homes will be needed to accommodate this population growth.

² Department of Planning, Lands and Heritage (2019). Urban Growth Monitor 10, <https://www.dplh.wa.gov.au/information-and-services/land-supply-and-demography/land-supply-analysis>

The importance of effective land use planning and integration with transport, through greater infill development, is not lost on the community. In a recent RAC survey exploring community views on the challenges and opportunities in planning for growth³, over half of Perth and Peel residents agreed a greater amount of infill development should be built to better manage congestion and accommodate growth. Further, when it comes to managing the additional travel demand created, the top three priorities for government action were expansion of the public transport system (67 per cent identified this as a top three priority), investment in higher frequency public transport corridors (66 per cent) and decentralisation of employment from the Perth Central Business District (CBD) to suburban activity centres to improve access to local jobs (64 per cent).

The mixed-track record of delivering urban infill development and its impact on transport outcomes was also reflected in the survey, with the top concern being the potential for increased traffic and congestion on local roads (86 per cent), while the main benefit was viewed as improved access to a range of transport options (78 per cent). This highlights the mixed experiences residents have had with infill development, and the benefits that they see if density is done well.

Transport infrastructure planning and provision in Perth has historically been delivered based on an outdated 'predict and provide' philosophy. That is, predicting the potential future traffic demand based on expected urban development and extrapolated travel behaviour and then seeking to cater for it, rather than manage it in the first instance. It is increasingly well known that we cannot continue to expand the supply of road space to combat congestion and given the known challenges in predicting future travel demand (as highlighted by the differences in the Audit forecasts from 2015 to 2019), planning our future infrastructure provision on a worse-case situation is highly undesirable. It is essential that there be greater consideration of the management of travel demand in helping to inform the recommendations in the next iteration of the Australian Infrastructure Plan.

Further, given these challenges, RAC would like to see IA consider adopting a range of scenarios for analysis in future versions of the Audit to account for the inherent uncertainties around the assumptions being made and to enable a greater depth of discussion regarding the likely impact of future population growth on transport networks.

In regard to funding and maintaining our transport assets, the Audit recognises the challenge associated with the lack of clear linkage between expenditure on roads and usage, meaning "road expenditure is inequitable, inefficient, unsustainable and lacks transparency", noting that without reform "revenue from fuel excise will decline, drivers will not be charged fairly and people will be incentivised to drive, contributing to congestion". RAC's recent Road User Charging Survey revealed that nearly two in three Western Australians know little or nothing at all about how motorists current pay for road use, reinforcing the limitation of the current system in influencing travel behaviour.

The Audit identifies an "opportunity for emerging revenue streams to improve the financial sustainability of our transport networks", with little discussion around what these are and how these could be explored and leveraged. RAC is calling on the Australian Government to hold an inquiry into road-user pricing as part of a broader reform of motorist taxation that would remove revenue raising fees and charges, and / or hypothecate money collected for the provision of

³ RAC (2019). Urban planning and connected communities survey. https://www-cdn.rac.com.au/-/media/files/rac-website/about-rac/public-policy/urban-planning-and-connected-communities-_final-_ebook-_02072019.pdf?la=en&modified=20190718021442&hash=1520B6EDCFE85CB195A2B644600AE5A6FA8A6757&_ga=2.97706719.1541481296.1572231579-660728825.1571740063

transport infrastructure and services (RAC is not supportive of the use of blunt instruments like tolls and area cordon charges, imposed on top of existing fees and charges). RAC's aforementioned survey confirmed community views are mixed and there are several matters that will need to be explored and managed in considering any changes to the way in which motorists pay for road use. While just under half (45 per cent) are opposed to the idea of introducing a 'pay-as-you-go' type system in Australia, there is a higher level of support if it were to replace the current-motoring-related charges (58 per cent support) or it was introduced with equivalent reductions in public transport fares (52 per cent).

Further, in a previous response to the Australian Government's *'The Value Capture Discussion Paper'* in February 2017, RAC also considered the potential role for government in supporting value capture mechanisms as part of the funding mix for major transport projects. This could include the Australian Government developing a consistent approach for value capture across Australia to support State Government agencies and a specific funding program for projects with a value capture element.

Sustainable mobility

RAC welcomes the consideration of challenges presented by increasing transport sector emissions and the importance of meeting Australia's international commitments to reduce total greenhouse gas emissions by at least 26 – 28 per cent of 2005 levels by 2030.

While the average carbon dioxide (CO₂) emissions intensity of light vehicles in the Australian fleet has been improving at rates of between one and four per cent in the 10 years from 2002 to 2012, since then the rate of CO₂ emissions intensity reduction has been steadily worsening. In 2017, there was a reduction of only 0.3 per cent. Furthermore, the average emissions intensity for passenger vehicles in Australia in 2017 was 171.5g/km, whereas in Europe it was 118.5g/km⁴.

Despite this minimal decrease, even with the current trend in vehicle efficiency improvement, transport sector emissions are expected to increase by 15 per cent or add approximately 14 million tonnes of greenhouse gas emissions by 2030⁵. Alarming, as it stands Australia is the only developed nation without a national standard regulating CO₂ emissions from new light vehicles.

RAC believes a clear strategic direction for Australia and WA transport energy policy, backed by appropriate investments, is essential to deliver emissions reductions associated with vehicle use. The introduction of an impactful national mandatory vehicle emissions standard for light vehicles, to align Australia with the rest of the developed world and provide the Australian market with better access to a greater range of low and zero emissions vehicles, has been a long-standing RAC priority.

RAC notes that leveraging technologies such as hybrid electric, plug-in electric, hydrogen fuel cell and automated vehicles, partnered with low carbon intensity fuels, is recognised as an opportunity in the Audit, but the primary focus seems to be reducing carbon emissions. RAC believes that the influence of harmful vehicle emissions on air quality and the associated impacts on human health warrants consideration as a separate challenge to address.

⁴ National Transport Commission (NTC) (2018), Carbon Dioxide Emissions Intensity for New Australian Light Vehicles 2017. Accessed at [https://www.ntc.gov.au/Media/Reports/\(F4FA79EA-9A15-11F3-67D8-582BF9D39780\).pdf](https://www.ntc.gov.au/Media/Reports/(F4FA79EA-9A15-11F3-67D8-582BF9D39780).pdf)

⁵ Department of Environment and Energy (2017), Australia's emissions projections 2017. Accessed at <https://www.environment.gov.au/climate-change/publications/emissions-projections-2017>.

In addition to CO₂, vehicles emit oxides of nitrogen (NO_x), hydrocarbon emissions (including methane, benzene, toluene, xylene, and benzo[a]pyrene), carbon monoxide (CO), oxides of sulfur (SO_x), particulate matter (PM) and ozone (O₃) which collectively impact negatively on human health and the environment. In 2015, approximately 2,566 deaths in Australia were attributed to air pollution exposure⁶, more than twice the national number of road deaths in 2017⁷; with an estimated cost of as much as \$11 billion⁸. Further, the OECD confirms that while deaths from air pollution across Europe declined, Australian deaths rose over the same period⁹.

While policy measures to reduce total emissions will also improve air quality, consideration of transport emissions through the lens of reducing CO₂ risks overlooking other potential policy measures to improve air quality and deliver public health outcomes. Fuel quality standards heavily influence the potential health impacts associated with vehicle emissions. Australia lags well behind other nations in fuel quality rankings coming in at 70th in the world and the lowest of all OECD countries¹⁰. With up to 150ppm allowable sulfur content in Australian unleaded petrol currently, Australian fuel standards permit up to 15 times the 'international standard'¹¹. While the Australian Government has committed to decreasing the maximum allowable sulfur content in fuel from 150ppm to 10ppm, this should be implemented earlier than the anticipated start date of 2027.

It is essential that the Australian and State governments take a leading role in facilitating the uptake of low and zero emissions vehicles, as well as in reducing vehicle kilometres travelled to address the impacts of transport on the environment and public health. This should include incentives and/or tax concessions for low and zero emission vehicles and delivery of an effective rating system to ensure consumers have access to emissions and fuel consumption information when purchasing a new car.

Summary

IA has an opportunity to lead by example in demonstrating increased transparency in investment decision making and ensuring funding is directed to infrastructure that will save lives, lessen the burden of congestion and improve public health

We welcome Infrastructure Australia's consideration of the challenges and opportunities in delivering safe, easier and more sustainable transport for Western Australians.

⁶ AIHW (2019), Australian Burden of Disease Study: Impact and causes of illness and death in Australia 2015.

⁷ BITRE (2017), Road deaths Australia, December 2017. Accessed on 16 February 2018, https://bitre.gov.au/publications/ongoing/rda/files/RDA_Dec_2017.pdf

⁸ Department of Environment and Energy, citing Marsden Jacob Associates Pty Ltd (2017). Analysis of AIHW burden of disease data, in Revised fuel quality standards: economic analysis, report prepared for the Department of the Environment and Energy. Accessed on 8 February 2018.

⁹ OECD (2014), The Cost of Air pollution: Health Impacts of road Transport, OECD Publishing. http://www.keepeek.com/Digital-Asset-Management/oecd/environment/the-cost-of-air-pollution_9789264210448-en#page54

¹⁰ Stratas Advisors (2017). Fuel quality standards in Australia. Accessed on 5 February 2018, <https://apfforum.com/wp-content/uploads/2016/03/STRATAS-You-Wei-Aw-publish.pdf>

¹¹ ICCT, (2014) China V gasoline and fuel quality standards, January 2014. Available online: http://theicct.org/sites/default/files/publications/ICCTupdate_ChinaVfuelquality_jan2014.pdf