

RAC Federal Budget Submission 2020-21

Stimulating the economy through life-saving infrastructure priorities

May 2020

As a State and nation, we currently find ourselves in a unique and challenging situation, seeking to manage and mitigate the short and potentially longer-lasting implications of the COVID-19 pandemic on the health of our communities and the economy. This year's Federal Budget presents an opportunity to prioritise the funding of programs which will deliver critically important infrastructure projects to not only save thousands of lives and serious injuries, but also significantly reduce the associated economic burden and create thousands of jobs - this will be essential for our recovery and to help safeguard WA's productivity and liveability into the future.

! An unforgivably high number of people continue to be killed and seriously injured every day on WA's roads - with our regional roads and metropolitan intersections being the two biggest road safety issues faced by our State. Apart from the immeasurable personal and social impacts, the financial cost to the nation's economy was estimated to be approximately two per cent of Australia's Gross Domestic Product (or \$33.16 billion) in 2016¹. For WA, it could be as much as \$2 billion per annum².

RAC considers the **key investment priorities for the 2020-2021 Federal Budget** to be:

- 1. a regional road safety package to save thousands of lives and serious injuries on WA's regional roads;**
- 2. a metropolitan intersections program to deliver highly effective, low-cost, life and serious injury-saving treatments across the metropolitan Perth road network; and**
- 3. accelerating the delivery of safe and connected active transport infrastructure.**

These programs comprise lower-cost and smaller-scale projects that can be mobilised to and through construction, quickly. They are scalable and can create significant employment and training opportunities from the outset, many of which would draw on different skillsets to those required for major infrastructure projects, aiding delivery to occur in tandem with other commitments. They will inject much needed investment into communities throughout the State.

1. Regional Road Safety Package

The challenge:

- » Regional WA presents a significant challenge to saving lives and reducing serious injuries on our roads - over five years, more than 500 people have been killed and over 2,700 seriously injured on WA's regional roads.
- » Of the 164 fatalities on WA's roads last year alone, 60 per cent (or 99 deaths) occurred on regional roads, despite only 21 per cent of the population living there.
- » Nearly 70 per cent of all fatal and serious injury crashes in our regions were the result of run-off-road or head on crashes - deaths and serious injuries that could be avoided through implementation of effective low-cost safety treatments.
- » The regional road safety challenge has been recognised as an issue of national significance by Infrastructure Australia, but despite a solution being identified by the State Government no funding has been committed.

The opportunity:

Of highest importance to saving lives and serious injuries on our roads in WA is a strategic regional road safety package - a landmark State Government proposal to deliver effective, low cost safety treatments such as sealing shoulders, installing audible edgelines, medians and/or centrelines to address run-off-road and head on crashes across 17,000km of the State's regional road network.

¹ Litchfield, F. (2017). The cost of road crashes in Australia 2016: An overview of safety strategies. Retrieved from: <https://www.aph.gov.au/DocumentStore.ashx?id=a37c13ee-72d4-47a9-904b-360d3e635caa>.
² Calculated based on an average cost per fatality of \$78 million, and \$310,094 per serious injury (see Litchfield, 2017), and KSI data supplied by Main Roads WA.

The package, announced by the State Government in August 2019, has been costed at \$900 million over nine years. However, in line with delivery timescales for major road projects and given the nature of the works involved, in RAC's view this could be delivered in four years if appropriately prioritised.

State Government modelling has demonstrated the package is expected to:

- » save more than 2,100 people from being killed or seriously injured;
- » reduce regional road trauma by 60 per cent;
- » create more than 500 direct and indirect jobs annually, which would likely result in skilled and non-skilled, as well as regional employment and training opportunities; and
- » yield a strong return on investment with a high Benefit Cost Ratio (BCR) of 4.05 (to put this into context, in a post implementation evaluation of 19 national road investment projects delivered between 2008-09 to 2012-13, the average BCR was 1.82³, and the Morley-Ellenbrook Line which was endorsed by Infrastructure Australia in May 2020 has a BCR of 1.1⁴).

The State Government has outlined its intention to provide 20 per cent of the required funding from the Road Trauma Trust Account (RTTA) and is seeking a funding partnership with the Australian Government for the remaining 80 per cent. Alarmingly, to date, there has been no further commitment by the State or Australian governments to deliver this crucial program.

RAC calls on the Australian Government to:

- » commit funding for the WA State Government-backed strategic program to deliver low-cost treatments across 17,000km of WA's regional road network to save thousands of lives and serious injuries and create significant job and training opportunities (total program cost of \$900 million).

2. Low cost metropolitan intersection program

The challenge:

- » By nature, urban intersections can be particularly risky as they are places where higher volumes of different road users meet, usually at different speeds; travelling from, and in, multiple directions.
- » Nearly one in two of all crashes in the Perth metropolitan area occur at one of its more than 50,000 intersections and they received almost 60 per cent of the more than 6,000 nominations to the 2018/19 RAC Risky Roads campaign.
- » In just the five years to end-2019, 85 people were killed at metropolitan intersections and 2,448 people were seriously injured (including a total of 937 vulnerable road users such as pedestrians, cyclists and motorcyclists) – with the economic cost equating to approximately \$1.42 billion (or around \$284.4 million per annum)⁵.
- » Side-impact and rear-end crashes are the most common crash types at intersections⁶, with the former having the most severe outcomes as crashes at these angles (particularly at 90°) provide the least opportunity for impact forces to be dispersed⁷. The type of control and design of intersections also has a significant influence on crash likelihood and severity.
- » Major grade-separations and other significant infrastructure works (e.g. installation of traffic signals, construction of roundabouts and turn pockets or slip lanes) can greatly enhance safety while maintaining, and even increasing, operational performance when applied in appropriate situations; however, these can be costly with longer lead times, limiting the number of intersections that can be treated and the lives and serious injuries saved each year.

The opportunity:

Of highest importance to saving lives and serious injuries on Perth's roads is to scale up efforts to make intersections safer for all road users through installing effective, low-cost treatments. Treatments, which could be implemented for as little as \$20,000 to \$50,000 per intersection, could include:

- » painted mini-roundabouts and turning lanes where carriageway space permits;
- » minor geometry improvements such as tightening turning radii to slow vehicle speeds and reducing crossing distances;

³ BITRE. (2018). Ex-post economic evaluation of national road investment projects. Retrieved from: https://www.bitre.gov.au/publications/2018/files/rr_145_voll.pdf

⁴ Infrastructure Australia (2020). Project business case evaluation summary, METRONET: Morley-Ellenbrook Line. https://www.infrastructureaustralia.gov.au/sites/default/files/2020-05/morley_ellenbrook_project_evaluation_summary.pdf

⁵ Calculated based on an average cost per fatality of \$7.8 million, and \$310,094 per serious injury (see Litchfield, 2017), and KSI data supplied by Main Roads WA.

⁶ Chow, K., Manners, S. & Meuleners, L. at CMARC. (2017). Risk Factors for Killed and Serious Injury Intersection Crashes in Metropolitan Perth: 2006 - 2015. Retrieved from: <https://www.rsc.wa.gov.au/RSC/media/Documents/Stage-3.pdf>

⁷ Candappa, N., Logan, D., Van Nes, N., & Corben, B. (2015). An exploration of alternative intersection designs in the context of Safe System. *Accident Analysis and Prevention*, 74, 314-323. <http://dx.doi.org/10.1016/j.aap.2014.07.030>.

- » installation of speed cushions and raised platforms;
- » modified signal timings and phasing; and/or
- » other lining, signing and speed management measures.

Over several years, Main Roads WA has been implementing the Metropolitan Intersection Crash Program, delivering targeted improvements at several high-risk intersections across Perth. A recent evaluation of the Program revealed that over the period from 2012-13 to 2018-19, a total of 10 projects were completed at a cost of \$31.9 million. The total budget allocation from 2018-19 to 2022-23 is \$67 million, with most of this accounted for in 2018-19 with an estimated expenditure of \$46.9 million⁸.

Given the limited number of intersections that can be treated due to the scale and nature of works involved, an opportunity exists to take a new approach and do more, with less.

A program to trial and implement more innovative and lower cost treatments could be applied more widely across the network to address common challenges at different intersection types (e.g. rear-end and right turn-through crashes at built-up signalised intersections, right angle crashes at built-up non-signalised intersections and right angle crashes at low speed non-signalised intersections).

Such a program would allow a greater number of intersections to be remedied, more quickly, maximising the safety benefits for all road users and value of investment.

Main Roads WA should be consulted for further information and to discuss a business case for the program.

RAC calls on the Australian Government to:

- » commit funding towards a program to deliver lower cost, network-wide treatments to address common challenges at different intersection types to create a safer road network across metropolitan Perth (total initial program cost of \$50 million over five years).

3. Safe and connected active transport infrastructure program

The challenge:

- » Car is by far the dominant method of travel to work in WA and around half of all car trips are less than 5km⁹, with many being under 1km – most people can ride 5km in around 15-20 minutes or walk 1km in around 10 minutes and there is evidence of latent demand for cycling¹⁰.
- » 13 of Perth's 34 strategic activity centres¹¹, including several within Perth's inner area, currently exhibit low accessibility by public transport¹², increasing the importance of active transport connections.
- » Dissatisfaction with existing cycling infrastructure is high and fear of sharing the roads with motorists is a main reason for not cycling more often – Western Australians want more investment in on and off-road cycling infrastructure¹³.
- » Currently, insufficient priority and support is given to the reallocation of road space for active (and public) transport, critical gaps remain in the Principal Shared Path (PSP) network and there is a need to maintain existing paths (not least lighting quality¹⁴) to enhance amenity and safety.
- » Pre-COVID-19, it was forecast that the cost of congestion in Perth will more than double from \$1.5 billion in 2016 to \$3.6 billion per annum by 2031¹⁵. While traffic volumes on the State road network reduced by as much as a third in April 2020, and much more on key corridors such as the freeway¹⁶, traffic is expected to increase above pre-COVID levels due to reservations about sharing journeys with others.

The opportunity:

Of high importance to reducing the cost of congestion in Perth and supporting thriving, healthy and active communities now and into the future is scaling up action and investment to accelerate the delivery of safe and connected active transport infrastructure.

⁸ 2019-20 Western Australia State Budget (Part 9 – Transport). Retrieved from: <https://www.ourstatebudget.wa.gov.au/2019-20/budget-papers/bp2/2019-20-wa-state-budget-bp2-part9.pdf?>

⁹ Department of Transport (2017). Western Australian Bicycle Network Plan – 2017 Update. Retrieved from: https://www.transport.wa.gov.au/mediaFiles/active-transport/AT_CYC_P_WABN_Plan.pdf

¹⁰ Based on data (yet to be released) from RAC's Member Priorities Tracker, January 2020 – pre-COVID-19, seven per cent of RAC members cycled as their main mode of travel to work / study but it was the preferred mode for 12 per cent.

¹¹ Important hubs for employment, retail, education, as well as residential activity.

¹² RAC (2016). Transport accessibility of Perth's activity centres. <https://www.cdn.rac.com.au/-/media/files/rac-website/about-rac/community-programs/publications/reports/2016/transport-accessibility-of-perth-activity-centresfinal.pdf?la=en&modified=20161003120527&hash=A7845C62E3F36D75E35ECD8E8AC6BB91F09BA277>

¹³ RAC (2015). Cycling Survey. <https://www.cdn.rac.com.au/-/media/files/rac-website/car-and-motoring/survey/cycling-survey-2015.pdf?la=en&modified=20160622120003&hash=68B550A39C10E1032D4AB1846E953651AB01868F>

¹⁴ RAC (2018). Shared path lighting review. <https://www.cdn.rac.com.au/-/media/files/rac-website/about-rac/media/2018/rac-shared-path-lighting-review-2018.pdf>.

¹⁵ Infrastructure Australia (2019). Australian Infrastructure Audit.

¹⁶ Based on RAC analysis of data from the Main Roads WA traffic data API to compare traffic volumes on comparable days during the first weeks of April 2020 and April 2019. Retrieved from (accessed on 24 April): <https://portal-mainroads.opendata.arcgis.com/datasets/ed270d2c2ef649ac99172d14879283fd>.

Increasing cycling participation has wide-ranging benefits applicable to many government sectors, including health and of course transport. RAC's 2012 Cycling Business Case demonstrated that the returns on investment in cycling projects are between 3.4 and 5.4 times the costs incurred, higher than many other urban transport investments.

The creation of safe, active streets and expansion of cycling infrastructure are being seen by many authorities globally as a key opportunity both to manage current risks to human health and limit the spread of infection^{17,18} but also to reimagine their cities and streets, and support economic growth following lockdown.

The New Zealand Government recently announced the expansion of its 'Innovating Streets for People Pilot Fund'¹⁹ in response to COVID-19, inviting local governments to apply for 90 per cent of funding to deliver projects using tactical urbanism techniques such as pilots, pop-ups and interim treatments to make it safer and easier for people to walk and cycle. The New South Wales State Government has also launched a 'Streets as Shared Spaces' grants program²⁰ to support local governments to deliver temporary activation projects within 12 months to improve streets, paths and public spaces. Other cities in Europe and North America have also announced ambitious plans to support reduced car use after lockdown by transforming streets to provide for cycling and walking (e.g. 35km of streets will be transformed in Milan in a rapid, experimental citywide scheme involving low-cost temporary cycle lanes, new and widened pavements, 30km/h speed limits, and pedestrian and cyclist priority streets).

Now, more than ever, there is a need to accelerate the delivery of shovel-ready smaller-scale infrastructure projects and quick-win, temporary treatments to support increased levels of cycling in WA.

! Perth Cycle Network Counters indicates a significant boost in cycling activity spread throughout the day, with some locations along the PSP network showing as much as six times more activity than at the same time of day pre-COVID. The WA's People's Voice Survey also found eight in ten WA residents walked/ran/jogged and three in ten rode their bike at least fortnightly during April 2020, with around 40 per cent of these riding more often than before COVID-19²¹.

Such a package could include funding to:

- » bring forward committed and currently unfunded projects to accelerate completion of gaps in the PSP network, as well as those as part of the Safe Active Streets program;
- » maintain and upgrade existing shared paths, particularly within 15km of the Perth Central Business District, to improve surface and lighting quality (including trialling smart path lighting solutions);
- » enable local governments to deliver active transport infrastructure projects already in the pipeline but which are yet to receive funding through the Western Australian Bicycle Network grants program due to funding constraints, helping to accelerate delivery of the long-term cycling network for WA; and
- » enable trialling of innovative approaches to rapidly reallocate road space, expand provision for pedestrians and cyclists and create safer streets (including temporary measures like pop-up bike lanes).

RAC calls on the Australian Government to:

- » commit funding towards a program to roll out priority projects to accelerate the delivery of safe and connected active transport infrastructure and enhanced streets and places for cycling and walking in WA (total initial program cost of \$80 million over two years).

¹⁷ <https://docs.google.com/spreadsheets/d/1c6OmxkUwNjoajYaRgqEjc14PtyGtushhQY7wNaZdjkK/edit#gid=724539482>

¹⁸ <https://www.citylab.com/transportation/2020/04/coronavirus-city-street-public-transit-bike-lanes-covid-19/609190/>

¹⁹ <https://www.nzta.govt.nz/roads-and-rail/innovating-streets/>

²⁰ <https://www.dpie.nsw.gov.au/premiers-priorities/great-public-spaces/streets/grants-for-councils>

²¹ Data shared by the Department of Transport.

For further information please
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For the better