

RAC State Budget Submission 2021-22

Priorities for a safer, sustainable and connected WA

January 2021

As a State and nation, we continue to manage the impact of COVID-19 on our communities and the economy. This year's State 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 create thousands of jobs - this is essential for our ongoing COVID-19 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 is estimated to be \$2.4 billion per annum².

RAC considers the **top three investment priorities for the 2021-2022 State Budget** to be:

- 1. a regional road safety program 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 significant investment into communities throughout the State.

In addition to these top three priorities for funding in the next State Budget, RAC has several longstanding strategic infrastructure and policy priorities which remain important for ensuring a safe, sustainable and connected future for WA. These are also set out at the end of this submission.

Our key priorities

1. Regional Road Safety Program

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 155 fatalities on WA's roads last year alone, 60 per cent (or 93 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 and despite a solution being identified by the State Government, funding is yet to be committed to deliver it in full.

The opportunity:

Of highest importance to saving lives and serious injuries on our roads in WA is a strategic regional road safety program - a landmark State Government initiative 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.apgh.gov.au/DocumentStore.ashx?id=a37c13ee-72d4-47a9-904b-360d3e635caa>.

² WA Government. 2020. *Driving Change: Road Safety Strategy for Western Australia 2020-2030*. Retrieved from: <https://www.rsc.wa.gov.au/RSC/media/Documents/Road%20Data/Driving-Change-WA-Road-Safety-Strategy-2020-2030-FINAL.pdf>.

The program, 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 program is expected to:

- » save more than 2,100 people from being killed or seriously injured;
- » reduce regional road trauma by 60 per cent;
- » create thousands of direct and indirect jobs over the life of the program, 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 and is due to commence construction this year has a BCR of 11⁴).

To date, a total of \$455 million has been allocated towards the program for the financial years 2020-21 and 2021-22 (\$91 million from the State and \$364 million from the Australian governments). While the existing commitments are welcomed, we are yet to see the State or Australian governments commit full funding to deliver this crucial program. The remaining \$445 million, if committed over two years, would represent approximately 7.5 per cent of the State Budget spending on transport, road and rail⁵.

RAC calls on the State Government to:

- » Commit funding to roll out the \$900 million Regional Road Safety Program in full (\$445 million outstanding). Delivery of the program should be prioritised to maximise the opportunity to secure further funding through the Australian Government's stimulus package. In addition, a review of current funding for public sector programs, including Road Trauma Trust Account funding, should be made with a view to further accelerate this crucial program for delivery within four years.

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.
- » Approximately 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 billion⁶ (or around \$284.4 million per annum).
- » Side-impact and rear-end crashes are the most common crash types at intersections⁷, 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 dispersed⁸. 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, include:

- » painted mini-roundabouts and turning lanes where carriageway space permits;

³ BITRE. (2018). *Ex-post economic evaluation of national road investment projects*. Retrieved from: https://www.bitre.gov.au/publications/2018/rr_145

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

⁵ Based on half the outstanding program cost as a proportion of expenditure towards transport, road and rail in the WA State Budget 2020-21 of \$2,997m. Retrieved from: <https://www.ourstatebudget.wa.gov.au/2020-21/fact-sheets/overview.pdf>

⁶ 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.

⁷ 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>

⁸ 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. Retrieved from: <http://dx.doi.org/10.1016/j.aap.2014.07.030>

- » minor geometry improvements such as tightening turning radii to slow vehicle speeds and reducing crossing distances;
- » 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 2020-21 to 2023-24 is \$32.58 million⁹.

While important to continue investing in such major upgrades, 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.

In the 2020-21 State Budget the State Government committed \$16.1 million towards the roll out of a program targeting 'low cost treatments at metropolitan intersections' which was welcomed. To maximise the safety benefits, it will be important that innovative, low-cost treatments are first applied at intersections identified as high risk.

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

RAC calls on the State Government to:

- » Commit further 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 5km¹⁰, 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 cycling¹¹.
- » 13 of Perth's 34 strategic activity centres¹², including several within Perth's inner area, currently exhibit low accessibility by public transport¹³, 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 infrastructure¹⁴.
- » 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 quality¹⁵) 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 2031¹⁶. 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 freeway¹⁷, in early-December 2020 volumes had increased by 15 per cent above 2019 levels - which is nearly half the predicted growth to 2031.

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.

Increasing levels of cycling and walking 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.

⁹ Department of Treasury. *Western Australia State Budget 2020-21* (Part 9 - Transport). Retrieved from: <https://www.ourstatebudget.wa.gov.au/2020-21/budget-papers/bp2/2020-21-wa-state-budget-bp2-vol2.pdf?>

¹⁰ 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

¹¹ Based on data 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.

¹² Important hubs for employment, retail, education, as well as residential activity.

¹³ RAC (2016). *Transport accessibility of Perth's activity centre*. Retrieved from: <https://www.cdn.rac.com.au/-/media/files/rac-website/about-rac/community-programs/publications/reports/2016/transport-accessibility-of-perth-s-activity-centres-final.pdf?la=en&modified=20161003120527&hash=A7845C62E3F36D75E35ECD8E8AC6BB91F09BA277>

¹⁴ RAC (2015). *Cycling Survey*. Retrieved from: <https://www.cdn.rac.com.au/-/media/files/rac-website/car-and-motoring/survey/cycling-survey-2015.pdf?la=en&modified=20160622120003&hash=68B550A39C10E1032D4AB1846E953651AB01868F>

¹⁵ RAC. (2018). *Shared path lighting review*. Retrieved from: <https://www.cdn.rac.com.au/-/media/files/rac-website/about-rac/media/2018/rac-shared-path-lighting-review-2018.pdf>

¹⁶ Infrastructure Australia (2019). *Australian Infrastructure Audit 2019*. Retrieved from: <https://www.infrastructureaustralia.gov.au/publications/australian-infrastructure-audit-2019>

¹⁷ 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>

The creation of safe, active streets and expansion of cycling infrastructure are being seen by many authorities globally as a key opportunity to reimagine their cities and streets, support economic growth and enhance liveability.

In July 2020, RAC in response to COVID-19, announced its \$1 million Reconnect WA initiative to partner with local governments across WA to deliver lower cost and innovative community-based projects which revitalise streets and public spaces and connect people and places. Safer and more vibrant streets for walking and cycling and pop-up plazas are amongst the projects being funded through the first funding stream - the \$500,000 Reinvigorating Streets and Spaces Fund.

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 and walking in WA.

! Perth Cycle Network Counters indicate that in June 2020 total cycling trips had grown by 62 per cent compared to 2019 levels, with Perth Central Business District (CBD) commuter trips by bike having grown by 42 per cent¹⁸.

Funding for such projects could be used 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 CBD, 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 State 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).

Other strategically important priorities

In addition to these three crucially important infrastructure programs, RAC has several longstanding strategic infrastructure and policy priorities which remain important for ensuring a safe, sustainable and connected future for WA. These are for government to:

- » Commit funding to accelerate the transition to clean transport to reduce harmful vehicle emissions and the impacts on human health and the environment (\$30 million). This should include actions such as:
 - > enabling wider roll out of charging infrastructure in WA;
 - > exploring and implementing tax incentives and subsidies to support uptake of low and zero emissions vehicles;
 - > increasing procurement of low and zero emission vehicles across the State Government fleet (exceeding the target for EVs in its fleet of at least 25 per cent of eligible vehicles by 2025-26);
 - > accelerating the uptake of Euro VI or above standard buses and expand the trial of cleaner alternative-fuelled buses, such as fully electric and hydrogen fuel cell;
 - > working with the Federal Government to ensure the introduction of an impactful national emission standards for new light vehicles (for CO₂ and NO_x); and
 - > working with the Federal Government to deliver an effective rating system to ensure consumers have access to user-friendly emissions and fuel consumption information when purchasing a new vehicle.

! State Government estimates suggest simply 'accelerating the uptake of electric vehicles in Western Australia will provide public health benefits of over \$20 million each year by reducing air pollution'¹⁹.

- » Continue to commit funding towards the rolling program of intersection grade separations and upgrades to improve safety, as well as efficiency, on strategically important corridors, such as WA's major highways to bring these up to freeway standard (\$250 million).
- » Commit funding for green bridges to address severance issues and increase cycling catchments for the Perth CBD and major activity centres, delivering safety, health and productivity benefits (\$250 million).
- » Commit funding to prepare for a future with automated and connected vehicles, helping to position WA and the nation to capitalise on advancements in technology and future proof new infrastructure (\$50 million).

¹⁸ Department of Transport. (2020). Three month data snapshot of COVID-19 impacts on active transport in Perth, WA: April - June 2020.

¹⁹ Department of Water and Environmental Regulation. (2020). *State Electric Vehicle Strategy for Western Australia*. Retrieved from: https://www.wa.gov.au/sites/default/files/2020-11/State_Electric_Vehicle_Strategy_for_Western_Australia_0.pdf

- » Commit funding towards Intelligent Transport Systems, including technologies to enable road and public transport optimisation and real-time traveller information to maximise the value of existing and future transport infrastructure investment (\$250 million).
- » Commit funding to implement a program of measures to optimise Perth's heavy rail system (including signalling system and supporting station upgrades) to make the best use of existing rail assets and cater for increasing demands (\$1 billion).
- » Commit funding towards a rolling program of road/rail grade separations and other solutions to remove level crossings (including William Street, Wharf Street, Kelvin Road and Hamilton Street on the Armadale Line, Caledonian Avenue on the Midland Line, and Victoria Street and Jarrad Street on the Fremantle Line) and deliver associated urban realm enhancements, improving safety, road, and public transport efficiency and amenity (\$1.1 billion).
- » Commit funding towards planning and delivery of a transformational rapid transit network, prioritising connections between the University of Western Australia/ Queen Elizabeth II Medical Centre and Canning Bridge (via the CBD and Bentley/Curtin), and also between Scarborough Beach/Stirling to Glendalough and onto the Perth CBD, to enhance access to strategically important centres for employment, retail and tourism (\$2 billion).

About RAC

RAC is a voice for more than 1.1 million Western Australians. Since our foundation more than 115 years ago, RAC has existed to be a driving force for a Better WA by championing change that will create a safer, sustainable and connected Western Australia. RAC is an active participant in the WA Road Safety Council, as the representative of all road users.

Our purpose

The driving force for a better WA.

Our vision

2030: A safer, sustainable and connected future for Western Australians.

Our mission

Delivering great member services and experiences, while inspiring positive community change that makes life better in WA.



To significantly reduce serious crashes occurring on poor quality roads such as this, the Regional Road Safety Program if fully funded, would treat 17,000km of the State network with effective low-cost safety treatments including sealed shoulders and audible edge lines.

For further information please contact advocacy@rac.com.au

