RAC State Budget Submission 2024-25

Priorities for a safer, sustainable and connected WA



RAC is a voice for over 1.3 million Western Australians. Since our foundation in 1905, 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.

Purpose

The driving force for a better WA.

Vision

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

Mission

Delivering great member services and experiences, while inspiring positive community change that makes life better in WA. The 2024-25 State Budget presents an opportunity to fund critically important programs and projects to save thousands of lives and serious injuries, reduce harmful vehicle emissions and better connect Western Australians. These initiatives will also create thousands of jobs and help safeguard WA's productivity and liveability into the future.

RAC has six key priorities for funding in the 2024-25 State Budget. We also have longstanding strategic infrastructure and policy priorities which remain important for ensuring a safe, sustainable and connected future for WA. These are set out at the end of this submission.







2022 road deaths per 100,000 people. Source: Australian Automobile Association

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 nearly 2,900 seriously injured on WA's regional roads¹.
- » Of the 175 fatalities on WA's roads in 2022, over two thirds (or 120 deaths) occurred on regional roads, despite only 21 per cent² of the population living there. This translates to a fatality rate of 18.7 road deaths per 100,000 population in regional WA, which is significantly higher than in other States and Territories (except Northern Territory) as well as the regional national average of 10.6 road deaths per 100,000 people in 2022³.
- » Much of the regional road network is unforgiving of mistakes, with high-speed two-way traffic, roadside hazards such as trees and a lack of safety features. Over two thirds 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.
- » Infrastructure Australia has prioritised poor quality parts of Australia's regional road network⁴ and more specifically single vehicle, run-off road crashes in WA⁵, as issues of national significance. These issues have also been recognised within the State Infrastructure Strategy, and road safety strategies at both the state and federal levels.

The opportunity:

The Regional Road Safety Program (RRSP) is a landmark State Government initiative delivering 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 the state regional road network.

The program, announced by the State Government in August 2019⁶, was originally costed at \$900 million and modelling by Main Roads WA estimated it would:

- » 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 1.82⁷, and the Morley-Ellenbrook Line which was endorsed by Infrastructure Australia in May 2020 has a BCR of 1.1⁸).

Importantly, the RRSP also assists with the delivery of *Driving Change: A Road Safety Strategy for Western Australia 2020-2030 (Driving Change)*, and the *National Road Safety Strategy 2021-30* which commits to implementing staged risk-reduction treatments for roads with moderate to high traffic volumes, including audio tactile linemarking (rumble strips), median treatments, targeted stretches of barrier treatment, shoulder widening and sealing, intersection treatments and protection on curves and from roadside hazards.



To date, over \$1 billion has been committed by state and federal governments, with (as of September 2023) over 7,000 kilometres (km) of road treated since 2020-21. Early evidence indicates that the program is having a positive impact on state road fatal or serious injuries in regional WA: In the five years prior to the commencement of this program, there were on average 367 fatal or serious injuries on state roads in regional WA compared with 305 on local roads. In the three years since the program commenced, there has been an average of 307 fatal or serious injuries on local roads, which is unchanged from the 2015-2019 average. However, the average number of fatal or serious injuries on state roads has fallen by 12 per cent to 323, and in 2022 there were actually fewer fatal or serious injuries on state roads than on local roads⁹.

While program costs have increased since the program was announced in 2019, it is critical that the program is is still rolled out in full so that the safety benefits are realised across more of the state regional road network. The faster the program can be fully funded and rolled out, the more deaths and serious injuries will be prevented.

RAC calls on the State Government to:

» Commit funding to roll out the Regional Road Safety Program.

- Road Safety Commission (2023). Western Australian Road Fatalities and Serious Injuries 2022. Retrieved from: 1
- https://www.wa.gov.au/government/publications/western-australian-road-fatalities-and-serious-injuries-2022 (accessed 7 November 2023). 2
- Australian Bureau of Statistics (2022). Population estimates by selected Non-ABS Structures, 2001 to 2021. Retrieved from: https://www.abs.gov.au/statistics/people/population/regional-population/latest-release#data-download (accessed 26 October 2022).
- 3 Australian Automobile Association (2023). New analysis reveals regional road trauma challenge. Retrieved from: https://www.aaa.asnau/newsroom/new-analysis-reveals-regional-road-trauma-challenge/ (accessed 7 November 2023).
- 4
- Infrastructure Australia (2022). Regional road network safety improvements. Retrieved from: https://www.infrastructureaustralia.gov.au/map/regional-road-network-safety-improvements (accessed 7 November 2023).
- Infrastructure Australia (2020). Regional and rural WA road network safety improvements. Retrieved from:
- https://www.infrastructureaustralia.gov.au/map/regional-and-rural-wa-road-network-safety-improvements (accessed 7 November 2023). 6
- WA Government (2019, August 1). Federal backing sought for WA road safety initiative [Media statement]. Retrieved from: https://www.wa.gov.au/government/media-statements/McGowan-Labor-Government/Federal-backing-sought-for-WA-road-safety-initiative-20190801 7
- Bureau of Infrastructure and Transport Research Economics (2018). Ex-post Economic Evaluation of National Road Investment Projects. Retrieved from: https://www.bitre.gov.au/publications/2018/rr_145 (accessed 28 October 2022).
- 8
- Infrastructure Australia (2020). METRONET: Morley-Ellenbrook Line Project evaluation summary. Retrieved from: https://www.infrastructureaustralia.gov.au/projects/metronet-morley-ellenbrook-line-project (accessed 28 October 2022).
- 9 Based on analysis of WA crash data provided by Main Roads WA.

2. Safety improvements on high speed local government roads

The challenge:

- As outlined under the first priority, regional WA presents a significant challenge to saving lives and reducing serious injuries on our roads, with an unforgiving road network and a high fatality rate.
- The Regional Road Safety Program is helping to address this challenge through low-cost safety upgrades, but it is almost entirely focused on the state road network, with just \$35 million invested through the program in local government managed roads.
- Around half of deaths and serious injuries in regional WA occur on local government managed roads (accounting for approximately 300 deaths and serious injuries each year)¹⁰, meaning that these roads also need to be improved in order to deliver national and state road safety targets.
- Local governments manage approximately 113,000km of regional road, only around 26,000km of which is sealed¹¹. Many of these roads have low traffic volumes when compared to state roads, and would not be eligible for Regional Road Safety Program treatments due to them being unsealed or having a narrow road seal and/or lack of line marking¹². There is therefore a need for a new lowcost program tailored to local government roads.
- Due to the nature of local road networks in regional and remote areas, crashes are spread across large areas such that there are fewer 'black spot' locations with a significant crash history

 improving safety will require a widespread approach. In addition, many of these roads have lower traffic volumes, attract less funding and may never be prioritised to receive the treatment necessary to improve safety.

The opportunity:

A new program to apply low-cost treatments to 8,208km of road that forms over one third of WA's high-speed sealed local road network, is critical to reduce road trauma on our local roads.

In late 2022, RAC commissioned the National Transport Research Organisation (formerly the Australian Road Research Board) to review up to 10,000km of sealed, high-speed WA roads managed by local governments and develop a business case to seek funding to improve road safety on these roads by applying (mainly) low-cost treatments. The WA Local Government Association and Main Roads WA were project partners, supporting the project through: a funding contribution; active participation in the project working group; and a joint commitment to use the project deliverables to improve road safety outcomes.



Map of roads prioritised for the business case. Source: NTRO

The business case responds to Infrastructure Australia's priority listing: *Regional Road Network Safety Improvements,* and also strongly aligns with other priority listings including *Regional and Rural WA Road Network Safety Improvements,* and *Road Access Improvements to Remote WA Communities.*

439 local government roads in WA have been prioritised for treatments using a number of criteria: high-speed limit (90km/h or more) sealed roads; routes providing a regionally significant function¹³; roads with a 'high' crash rate¹⁴; and high-speed peri-urban roads identified by Main Roads WA. The proposed treatments are as follows:

Countermeasure	Treatment length (km)
Lane widening	3,388
Centreline	5,651
Edge lines	4,892
Sealed shoulder	4,359
Audio tactile linemarking	4,159
Wide centreline treatment	39
Hazard removal/protection	38

The program's impact has been assessed in the following two ways, utilising:

- 1. The Australian Roads Assessment Program¹⁵ (AusRAP)
 - > The average Star Rating Score¹⁶ across the 8,208km of road assessed was 38.4 before the countermeasures, and this reduced to 29.1 after the countermeasures, which is an average reduction of 24 per cent. A Star Rating improvement was demonstrated for 950km of road and the number of km of road rated 2 stars or above increased from 1,230km to 2,002km, an increase of approximately 771km (63 per cent).
- 2. Main Roads WA crash reduction factors¹⁷.
 - > Most importantly, the investment will realise an estimated reduction of 138 fatalities and 489 serious injuries over a 30-year lifespan. The conservative benefit-cost ratio resulting from this is 0.91 and does not account for minor injury or property damage only crashes.

All 97 local governments who own the roads identified for treatments were consulted and to date, 69 local governments have responded to the consultation, all in support of the initiative.

RAC calls on the State Government to:

» Co-fund with the Australian Government a new \$552 million program applying low cost safety treatments to over 8,200km of high speed sealed local government roads in WA to save hundreds of lives and serious injuries.



- Based on analysis of WA crash data provided by Main Roads WA.
 Western Australian Local Government Association (2022). Report on Local Government Road Assets & Expenditure 2020-2021. Retrieved from:
- https://walga.asn.au/policy-advice-and-advocacy/infrastructure/roads/report-on-local-government-road-assets-and-expendiaspx (accessed 7 November 2023). 2 Shoulder sealing and audible line treatments can only be applied to roads that already have centre lines and edge lines.
- As identified in Roads 2040. See: https://walga.asn.au/policy/advocacy/our-policy-areas/infrastructure/roads/roads/2040-regional-road-development-strategies
 Two or more mid-block KSI crashes or one or more mid-block KSI crashes and 5 or more mid-block crashes in total. Only mid-block crashes were considered since the mass-action nature of the treatments targeted mid-block crash types, predominantly run-off-road and head-on crashes. AusRAP measures the level of safety built into a road based on its existing design and features.
- Is adjusted the case of salecy of the salecy of the salecy of more than 50 attributes.
 Each road is given a Star Rating Score (SRS) based on an assessment of more than 50 attributes. Each SRS fits into one of five star rating bands, where one star is the lowest safety rating and five stars is the highest safety rating. For example, a 3-star road has an SRS of at least 5 but less than 12.5.
- 17 A Crash Reduction Factor (CRF) is the percentage reduction in crashes resulting from the implementation of a treatment or countermeasure.

3. Safer Speeds Trial

The challenge:

- Travel speed affects reaction time and braking distance: With less time to react to hazards, driving at higher speeds increases both the likelihood of a crash and the impact speed if there is a crash. The human body is fragile and can only tolerate a certain amount of force, meaning that impact speed is arguably the most influential factor determining crash outcomes.
- » WA speed limits have historically been set based on typical travel speeds rather than to reflect the threshold of physical resistance of the human body to the energy released during a crash. This means that most of them do not align well with the Safe System principles committed to by the State Government in its state road safety strategy 2021-2030: Driving Change.
- » Speed limit reductions have traditionally been ad-hoc and considered at the road rather than network level, which limits opportunities to achieve safer speeds using a holistic approach.
- » Driving Change identifies safe travel speeds as a priority and the strategy's targets (50-70 per cent reduction in KSI by 2030) are largely predicated on speed limit reductions¹⁸. However, the safer speed actions within the 2021-2023 action plan are limited and progress has been modest we need to scale up action now in order to meet the 2030 targets.

The opportunity:

In June 2022, RAC entered into a Heads of Agreement with both the City of Busselton and the Shire of Augusta-Margaret River to collaborate on a Safer Speeds Trial Project (the Trial) across these two local government areas. According to feedback from these local governments, their communities are increasingly asking for safer speeds, having had more requests for speed limit reductions in recent years than the decades before. The population and tourism growth in the South West, exacerbated by the pandemic, has led to increased traffic volumes and when combined with its poor road safety record (242 people killed and seriously injured each year, (far more than any other region), these areas offer a significant opportunity to make an impact. The Trial is being supported by Main Roads WA, through representation and involvement on the Trial Working Group.

The trial will:

- > take a holistic and coordinated approach to planning and rolling out appropriate speed limit reductions to encourage safer speeds across this region of the South West; and
- accelerate action to save lives and reduce serious injuries on these roads, lessening the devastating and often life-long impacts of road trauma that ripple through local communities.

The design of the Trial has involved a consultant reviewing a range of network data including traffic, speed, crash history, movement and place, and community nominations (collected in November 2022) alongside a literature review of best practice speed limit setting. A set of principles for speed zoning within the Trial area, prioritising harm minimisation, was agreed to in-principle by the Trial Working Group and is being used to develop proposed speed limit reductions. As the reductions will likely cover a large proportion of the local government networks, they will need to be staged to accommodate the existing Trial budget and several areas prioritised to form Stage 1. It is anticipated Stage 1 will commence in mid-2024 following Main Roads WA approvals, further engagement with the councils and the community, and the collection of baseline evaluation data. The Trial is expected to last for three years.

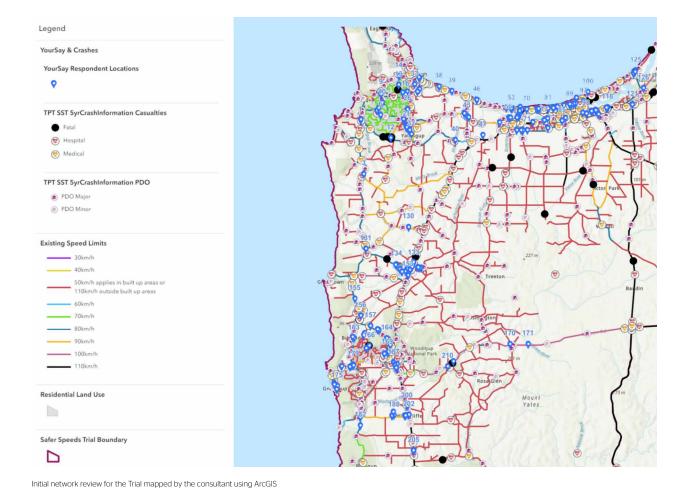


The Trial provides a unique opportunity to create a safer system for all road users travelling through the City of Busselton and Shire of Augusta-Margaret River. The expected success of this trial will both inspire other local governments to engage with their communities and achieve similar outcomes and significantly assist the state to deliver *Driving Change*. *Driving Change* recognises that supporting and implementing speed reforms is a key priority and identifies actions for 2021-23 relating to working with local governments to identify and implement safer speeds in local areas (Action 27).

In order to maximise the road safety benefits of the Trial, and to deliver a consistent network wide approach, area wide speed limit reductions covering a large number of both urban and rural roads are being considered.

RAC calls on the State Government to:

Contribute towards implementation and resourcing costs for the next stages of the Safer Speeds Trial in the City of Busselton and Shire of Augusta-Margaret River so that it can be rolled out in full.



18 Road Safety Commission (2019). Imagine Zero: Consultation Paper. Retrieved from: https://communityconnect.rsc.wa.gov.au/driving-change (accessed 7 November 2023).

4. Safe and connected active transport program

The challenge:

- The greater Perth population is forecast to grow by approximately 30 per cent, to just over 2.6 million by 2031. This will place a significant additional burden on the transport network, with over 7 million daily trips forecast and modelling indicating that the annualised cost of road congestion will more than double from \$1.5 billion in 2016 to \$3.6 billion in 2031. Alongside growing road congestion, the annualised cost of public transport crowding is also expected to increase almost tenfold, from \$17 million in 2016 to \$159 million in 2031¹⁹.
- Mode shift from private vehicles to active and public transport remains limited, with an estimated 4.2 million private car trips made each day in Perth and 2.8 million of these trips being under 5km²⁰. Most people can cycle 5km in about 20 minutes²¹, so these shorter vehicle trips are the most easily replaced by cycling or eRideables.
- » Approximately one-third of Perth's strategic, secondary and specialised activity centres²², including several within Perth's inner area, currently exhibit low accessibility by public transport²³, increasing the importance of active transport connections.
- Dissatisfaction with existing active transport 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 off-road/shared path cycling infrastructure and projects to make local streets safer for people riding a bike²⁴.
- Currently, insufficient priority and support is given to the reallocation of road space for active (and public) transport, critical gaps remain in the cycle network²⁵, and there is a need to maintain existing infrastructure²⁶ to enhance amenity and safety. In 2020, the government released the Long-Term Cycle Network for Perth and Peel, identifying more than 5,500km of primary, secondary, and local routes across Perth and Peel – just 38 per cent of this network currently exists²⁷.

The opportunity:

Of high importance to reducing the cost of transport and 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.

Making it easier for people to travel by active modes has wide ranging benefits related to addressing climate change, reducing transport costs, managing congestion, improving air quality, increasing physical activity, and reducing social isolation. To do this, we need to not only consider infrastructure solutions, but also broader social-ecological factors including policy and regulation, individual attitudes and beliefs, and our social norms and shared values.

Australian Transport Assessment and Planning have established that every kilometre walked or cycled has an economic benefit by reducing vehicle operating costs, mitigating traffic congestion, improving air quality and health, and saving on road building and maintenance costs²⁸ In 2020, the 'Australian Cycling Economy' was estimated to have directly generated \$6.3 billion in direct industry output (\$3.4 billion in direct value add)²⁹ and the Oueensland Government Department of Transport and Main Roads has found that the strongest funding scenario to realise the greatest net benefit of investing in cycling infrastructure is full delivery of the highest priority (primary) cycle network routes³⁰, which would result in a return of almost \$5 in economic benefits for every \$1 invested. This is a significant return on investment that supports additional funding for active transport infrastructure.

A continuous, low-stress network is essential for people of all ages and abilities to be able to travel safely, comfortably, and conveniently by active and non-motorised modes. A complete network should not only be made up of paths and other off-road facilities, but also needs to reallocate and prioritise space on existing roads and streets to make them more comfortable for active travel.

Infrastructure Australia has recognised the essential role of active transport in reducing car reliance and emphasised the need to bring forward the completion of cross-boundary local government transport networks and importance of maintenance and upgrade programs for pathways³¹.



The WA Bicycle Network Plan outlines that the expansion of the Principle Shared Path (PSP) network is a key action with the intention for the 2023-2031 program to focus on areas beyond the 15km radius of the Perth central area. Given the PSP network forms the 'spine' of the active transport network across metropolitan Perth, accelerated completion ahead of 2031 will ensure more people have access to the broader network while a dedicated maintenance and improvement fund would increase the accessibility and convenience of routes.

The State Government is completing long-term cycle network strategies for WA and most local governments have comprehensive local plans for walking and cycling. Dedicated long-term funding to deliver these plans will ensure achievement of complete active transport networks, connecting people from where they live to stations, schools, workplaces and neighbourhood centres. Increased state funding for local networks will also support the significant investment in METRONET by making stations more accessible by foot and bike.



Funding should be directed to:

- » Accelerate delivery of critical routes in the Long-Term Cycle Network for WA, with a focus on completing primary routes, and strategic secondary and local routes that connect key local destinations (including schools, stations and neighbourhood centres) and activity centres across metropolitan Perth and regional urban centres
- » Optimise the existing shared path network to make it safe and available to everyone by providing secure bike parking at strategic locations and by maintaining and upgrading existing shared paths, to improve surface and lighting quality (including trialling smart path lighting solutions).
- » Incentivise local governments to deliver strategic, regionally significant active transport infrastructure routes and projects that are planned but require increased state funding and alternatives to the matched funding model currently in place.
- » Enable cost-effective wide scale trials of innovative approaches to rapidly reallocate road space, expand provision for pedestrians and cyclists and create safer streets (including measures such as pop-up bike lanes and slower speeds).
- » Build capacity and skill in active travel through delivering travel behaviour change programs in parallel with major transport investment in public infrastructure and services (e.g. Your Move) to encourage active travel.
- » Get more children riding safely to school by accelerating investment in the Active Travel to School Roadmap 2023-2030 initiatives.

RAC calls on the State Government to:

- » Commit funding towards a program of safe and connected active transport infrastructure and programs in WA (a minimum of \$40 million each year in addition to existing funding spent on active travel) to grow participation in active modes.
- 19 Infrastructure Australia (2019). Urban Transport Crowding and Congestion. Retrieved from:
- https://www.infrastructureaustralia.gov.au/publications/urban-transport-crowding-and-congestion (accessed 30 August 2023). 20 Infrastructure Australia (2022). Perth Active Transport Improvements. Retrieved from: https://www.infrastructureaustralia.gov.au/map/perth-active-transport-improvements (accessed 30 August 2023).
- 21 Based on average values for journey to work for Victorian Integrated Survey of Transport and Activity (VISTA) participants. Retrieved from:
- https://transport.vic.gov.au/about/data-and-research/vista (accessed 30 August 2023).
 As defined by Department of Planning, Lands and Heritage in SPP 4.2 Activity Centres (2023) as community focal points that include activities such as commercial, retail, higher density housing, entertainment, tourism, civic/community, higher education, and medical services. Retrieved from: https://www.wagovau/system/files/2023-07/spp_4.2-activity-centres.pdf (accessed 30 August 2023).
- 23 RAC (2016). Transport Accessibility of Perth's Activity Centres. Retrieved from: https://rac.com.au/about-rac/advocating-change/reports (accessed 30 August 2023).
- 24 RAC (2022). RAC Member Priorities Tracker: Cycling. Retrieved from: https://rac.com.au/about-rac/advocating-change/reports/member-priorities-tracker (accessed 6 October 2023). 25 As identified in the Department of Transport's Long-term Cycle Network for Perth and Peel, as well as several regional cycle strategies. Note: while titled the 'cycle' network it is accepted this network will service other active transport modes, including walking, eRideables, etc. Retrieved from: https://www.transport.wa.gov.au/activetransport/long-term-cycle-network.asp accessed 30 August 2023)
- 26 RAC (2018). Shared Path Lighting Review. Retrieved from: https://rac.com.au/about-rac/advocating-change/reports (accessed 30 August 2023).
- 27 Calculation based on data provided by Department of Transport, Western Australia (2023). 28 Commonwealth Department of Infrastructure and Regional Development (2016). Australian Transport Assessment and Planning Guidelines: M4 Active Travel. Retrieved from:
- https://www.atap.gov.au/mode-specific-guidance/active-travel/5-estimation-of-benefits (accessed 30 August 2023)
- 29 We Ride Australia (2021). The Australian Cycling Economy Report Estimating the size and scope of the Australian Cycling Economy in 2020. Retrieved from: https://bicyclingaustralia.com.au/wp-content/uploads/2021/10/The-Australian-Cycling-Economy_October-2021-Updated.pdf (accessed 6 October 2023). Direct contribution is the market value of goods and services (i.e. gross revenue) produced by each segment of the cycling industry, after accounting for intra-industry sales (to avoid double counting). Value Add is the market value of goods and services produced by the cycling industry, after deducting the cost of goods and services used. That is, Value Add is a subset of Gross Output and represents the marginal/additional economic value generated by the cycling industry
- 30 Queensland Government (2023). Queensland Cycling Strategy 2017 2027. Retrieved from: https://www.publications.qld.govau/dataset/queensland-cycling.strategy.2017-2027 (accessed 6 October 2023).
- 31 Infrastructure Australia (2021). Australian Infrastructure Plan. Retrieved from: https://www.infrastructureaustralia.gov.au/2021-australian-infrastructure-plan (accessed 30 August 2023).

5. Taking action to make the cost of transport more affordable

The challenge:

- » Perth households spend around 14.5 per cent of their income on transport, which equates to over \$21,500 per year. Bunbury households spend 15 per cent, representing over \$20,500 per year³².
- » The cost of transport is rapidly growing, with the Australian Bureau of Statistics reporting a 27 per cent increase in Perth from June 2020 to June 202333.
- » People have indicated that rising costs have affected them personally with more than six in ten RAC members saying they have taken action in the last year to try to reduce their motoring costs³⁴.
- » Motor vehicle registration fees have increased by around 70 per cent in the past 10 years - around three times the rate of inflation³⁵. These fees were increased again by almost four percent in the most recent State Budget³⁶. A single car household would have saved more than \$1,100 over the past decade if registration fees had increased at the rate of inflation³⁷ and more could have been saved had fee increases been kept below inflation.
- » In the last five years the typical Perth household has paid nearly \$15,500 for public transport. This is at least \$4,300 more than the average figure within Australian capital cities³⁸.

The opportunity:

Ensuring that transport remains affordable is one of the highest priorities for RAC members. More than seven in ten say it is very or extremely important for the government to take action to keep the cost of motoring down (less than one in six say they have confidence³⁹ in government to do this). And, almost eight in ten say government action to ensure public transport is affordable is very or extremely important (around one in four have confidence in the government to do this)40.

RAC welcomed the decision by the WA Government to freeze motor vehicle related fees in 2020-21 and public transport fares from 2020-21 to 2021-22 - proving it can be done.

Given the projected \$3.3 billion operating surplus for 2023-24 reported in the latest WA State Budget, there is an opportunity for the State Government to take action to ensure transport remains affordable by not only facilitating greater access to low-cost modes such as active travel (see budget priority number 4 above), but by also implementing a three-year freeze on increases to motor vehicle registration fees and public transport fares. This would help to alleviate the growing financial burden of transport on households and bring registration costs back in line with inflation⁴¹.

RAC calls on the State Government to:

» Commit to making transport in Western Australia more affordable by implementing a three-year freeze on increases to motor vehicle registration fees and public transport fares to help bring them back in line with inflation.



- 32 Australian Automobile Association (2023). Transport Affordability Index Q2 2023. Retrieved from: https://data.aaa.asn.au/transport-affordability (accessed 21 October 2023).
- 33 Australian Bureau of Statistics (2023). Consumer Price Index, Australia Transport component of CPI for Perth June 2023. Retrieved from: https://www.abs.govau/statistics/economy/price-indexes-and-inflation/consumer-price-index-australia/latest-release (accessed 8 August 2023).
- 34 RAC (2023). Member Priorities Tracker: Cost of Transport (unpublished). 408 respondents from the Perth and Peel region, 101 from regional WA, and 3 from outside WA. Age, gender, and location sampling quotas were applied, and data has been post-weighted to be representative of RAC's membership (which is broadly consistent with the WA population profile) the
- margin of error at total sample level is +/4.3% at the 95% confidence level. 35 RAC analysis of registration fees in WA based on previous State Budget papers, assuming a sedan with tare weight of 1,600kg. The analysis excludes motor Injury Insurance, recording and driver's licence fees
- 36 WA Government (2023). WA State Budget 2023-24 Budget Paper no. 3. Retrieved from: https://www.ourstatebudget.wa.gov.au/budget-papers.html (accessed 1 October 2023).
- 37 Based on the analysis referenced in footnote 35. 38 Analysis based on the Australian Automobile Association (2023). Transport Affordability Index Q2 2023. Retrieved from: https://data.aaa.asn.au/transport-affordability (accessed 21 October 2023).
- 39 Members who said they were very or extremely confident in government plans to do this.
- 40 RAC (2023). Member Priorities Tracker: Transport choices and priorities data. Retrieved from: https://rac.com.au/about-rac/advocating-change/reports/member-priorities-tracker (accessed 6 October 2023).
- 41 With reference to increases made from the commencement of the first term of the current government, including the 2017-18 State Budget.



6. Accelerating the transition to clean vehicles

The challenge:

- » New modelling based on a New Zealand study by climate researchers estimates more than 11,100 Australian adults die prematurely each year due to exposure to traffic emissions⁴².
- In Australia, in 2021, more than 19 per cent of carbon dioxide equivalent (CO₂-e) emissions were from transport. Road transport contributed to over 87 per cent of transport emissions, with 51 per cent of road transport emissions coming from cars alone⁴³.
- In 2021, per person, Australia's carbon dioxide (CO₂) emissions were almost double the Organisation for Economic Co-operation and Development (OECD) average⁴⁴.
- In 2020, Australia recorded the highest total oxides of nitrogen (NOx) emissions per capita – almost 116 kilograms – of all OECD countries; this is over three and a half times New Zealand's NOx emissions per capita, almost six and a half times the OECD figure, and almost ten times the OECD Europe average⁴⁵.
- » As at June 2023, Australia's gasoline fuel quality was ranked 94th in the world, down from 89th in 2022. Currently Australia's fuel ranks worse than Argentina (93rd), Bosnia & Herzegovina (92nd), and Seychelles (91st)⁴⁶.
- In 2022, battery electric vehicle (BEV) and plug-in hybrid electric vehicle (PHEV) sales represented only 5.1 per cent of new vehicle sales in Australia (with BEVs representing only 3.04 per cent and PHEVs only 0.41 per cent in WA⁴⁷), and while this is a sizeable increase of over 180 per cent from the previous year, it still lags far behind the global average of 14 per cent⁴⁸.
- According to our members⁴⁹ who aren't considering an electric or hybrid for their next vehicle, the top barriers⁵⁰ are cost and access to charging infrastructure.

The opportunity:

According to RAC members⁵¹ the most effective ways for government to reduce vehicle emissions are: providing incentives for purchasing low emissions vehicles; investing in electric vehicle (EV) charging infrastructure; regulating emissions through national standards for new vehicles; increasing investment in alternative fuel sources; transitioning the public transport fleet to low emissions vehicles; and increasing the quality of fuel.

Transport decarbonisation is a critical part of our transition towards a zero-emissions future and State Government has committed to working with all sectors of the economy to achieve net zero greenhouse gas emissions by 2050 and a whole-of government 2030 reduction target of 80 per cent below 2020 levels. Modelling by Aurecon⁵² shows only BEVs and fuel cell electric vehicles (FCEVs) have the potential to come close to the magnitude of life cycle⁵³ CO₂-e reductions needed to meet Paris Agreement commitments⁵⁴. Operating on WA's existing mixed grid⁵⁵, the life cycle emissions of BEVs are already lower than a comparable petrol vehicle by 55 per cent, and as the electricity mix continues to decarbonise, this gap will increase - on a fully renewable grid, the emissions of a BEV would be 86 per cent lower. The life cycle emissions of a FCEV powered by green⁵⁶ or grey⁵⁷ hydrogen would be 83 per cent or 50 per cent lower on a petrol equivalent, respectively.

According to Commonwealth Scientific and Industrial Research Organisation (CSIRO) EV projections for WA's Wholesale Electricity Market⁵⁸, the likely scenario⁵⁹ is that in 2030 there will be approximately 287,000 passenger BEVs within the SWIS area⁶⁰. International Council on Clean Transport research⁶¹ indicates that to service this many vehicles, at minimum, 14,500 workplace, 1,900 DC fast chargers and 9,800 public AC chargers would be required - and this would need to be scaled up to service the whole of WA. At a national level, CSIRO's modelling suggests that EVs⁶² could account for around 52 per cent of new passenger vehicle sales and almost 15 per cent of the total vehicle fleet in Australia in 203063. Given the uptake anticipated in the near-team, urgent action and additional investment is needed to fill network gaps and install charging infrastructure in the areas where it is, and will be needed, most.



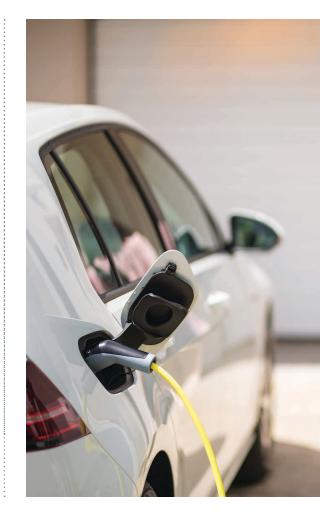
In 2020 RAC welcomed the State Government's State Electric Vehicle Strategy for Western Australia and accompanying \$21 million Electric Vehicle Fund⁶⁴. RAC also welcomed the allocation of almost \$60 million in the 2022-23 State Budget to accelerate the use of zero emission vehicles⁶⁵, which included \$23 million to expand WA's EV charging network.

While it was pleasing to see these commitments, further investment to accelerate and enable the uptake of low and zero emissions vehicles is required. Such funding should be directed to:

- » continuing to scale up investment to enable and support the wider roll out of charging infrastructure - identified by Infrastructure Australia as an issue of national significance66;
- » scaling up tax and other financial incentives and subsidies, informed by willingness to pay and consumer choice modelling, that further accelerate the uptake of low and zero emissions vehicles; and
- » community education campaigns and programs that improve consumer access to EV information covering topics such as ownership, charging and energy consumption, and the impact of vehicle emissions on health and the environment.

RAC calls on the State Government to:

» Commit to scaling up funding for infrastructure and initiatives that will significantly accelerate and support the transition to clean transport.



- 42 University of Melbourne (Melbourne Climate Futures) (2023). Health Impacts Associated With Traffic Emissions In Australia. Retrieved from: https://www.unimelb.edu.au/_data/assets/pdf_file/0006/4498161/Expert-Position-Statement_Vehicle-emissions_FINAL.pdf (accessed 4 August 2023).
- 43 Department of Climate Charge, Energy, the Environment and Water (2023). Australia's National Greenhouse Accounts. Retrieved from: https://ageis.climatechange.gov.au/ (accessed 31 October 2023).
- 44 Organisation for Economic Co-operation and Development (2023). Air and GHG emissions. Retrieved from: https://data.oecd.org/air/air-and-ghg-emissions.htm#indicator-chart (accessed 4 August 2023).
- 45 Ibid.
- 46 Stratas Advisers (2023). Six Countries Move Up in Top 100 Ranking on Gasoline Sulfur Limits, Retrieved from:
- https://www.stratasadvisors.com/insights/six-countries-move-up-in-top-10O-ranking-on-gasoline-sulfur-limits/2023-06-22t010102-0400 (accessed 4 August 2023). 47 Federal Chamber of Automotive Industries (2023). VFACTs WA Report New Vehicle Sales December 2022 [subscription].
- 48 International Energy Agency (2023). Global EV Data Explorer. Retrieved from: https://www.iea.org/data-and-statistics/data-tools/global-ev-data-explorer (accessed 4 August 2023).
- 49 RAC (2022). RAC Member Priorities Tracker: Sustainability. Retrieved from: https://rac.com.au/about-rac/advocating-change/reports/member-priorities-tracker (accessed 4 August 2023). 50 Key barries identified by respondents who said that they would not consider purchasing an electric or hybrid vehicle next or did not know what vehicle they would purchase next 51 Supra note 49.
- 52 Modifying the International Council on Clean Transport research/modelling for the Western Australia context in 2023. Using average vehicle characteristics and fuel and electricity consumption in real-world driving conditions. Scenarios considered the South West Interconnected System emission factors for 2021 grid mix (which is 0.68kg CO2-e/kWh) sourced from Clean Energy Regulator EERS release, and a potential future where only renewable energy is used for electricity supply and hydrogen production
- 53 Accounting for the tailpipe emissions, fuel and electricity production, and vehicle manufacturing Assumptions include average vehicle lifetime of 240,000km; fuel economy, and
- emissions. Inputs include: fuel/electricity production; fuel/electricity consumption; maintenance; and vehicle, hydrogen tank and battery manufacturing. 54 Limiting global warming to below 2°C, preferably below 15°C, pre-industrial levels. United Nations Climate Change (2023). The Paris Agreement. Retrieved from:
- https://unfcccint/process-and-meetings/the-paris-agreement (accessed 11 August 2023).
 Assumptions based on 2021 grid mix (which is 0.68kg CO2-e/kWh). Clean Energy Regulator (2023). EERS release 2021-22. Retrieved
- from: https://www.cleanenergyregulator.gov.au/OSR/EERS/Archived-EERS-releases/EERS-release-2021-22 (accessed 11 August 2023), 56 Green hydrogen is extracted using a method that does not produce GHG emissions.
- 57 Grey hydrogen is extracted from natural gas, or methane, typically using steam reformation. Emissions during this process are not captured or stored, and are released into the atmosphere.

58 Australian Energy Market Operator (2022). WEM Electricity Statement of Opportunities. Retrieved from: https://aemo.com.au/en/energy-systems/electricity/wholesale-electricity-market-wem/wem-forecasting-and-planning/wem-electricity-statement-of-opportunities-wem-esoo (accessed 11 August 2023).

59 CSIRO has modelled four scenarios: Exploring Alternatives: Progressive Change; Step Change; and Hydrogen export. It has been noted that the tentative mappings for the 2023 WEM Electricity Statement of Opportunities indicate that Step Change is the expected scenario. 60 Modelling covers the South-West Interconnected System project area, and does not include the North-West Interconnected System or regional power.

- 61 The International Council on Clean Transportation (2021). Charging Up America: Assessing the Growing Need for U.S. Charging Infrastructure Through 2050. Retrieved from: https://theicct.org/publication/charging-up-america-assessing-the-growing-need-for-u-s-charging-infrastructure-through-2030/ (accessed 9 October 2023).
- 62 Includes battery electric vehicles; plug-in hybrid vehicles; and fuel-cell electric vehicles. 63 Commonwealth Scientific and Industrial Research Organisation (2023). Electric vehicle projections 2022. Retrieved from: https://aemo.com.au/-/media/files/stakeholder_consultation/
- consultations/nem-consultations/2022/2023-inputs-assumptions-and-scenarios-consultation/supporting-materials-for-2023/csiro-2022-electric-vehicles-projections-report.pdf?la=en (accessed 11 August 2023).
 - 64 Department of Water and Environmental Regulation (2020). State Electric Vehicle Strategy for Western Australia. Retrieved from: https://www.agov.au/system/files/2020-11/State_Electric_Vehicle_Strategy_for_Western_Australia_O.pdf (accessed 2 October 2023).
 65 WA Government (2022, May 10). WA's climate action efforts accelerate with \$60 million EV package [Press release]. Retrieved from:
 - https://www.agov.au/government/media-statements/McGowan-Labor-Government/WA's-climate-action-efforts-accelerate-with-\$60-million-EV-package-20220510 (accessed 2 October 2023). 66 Infrastructure Australia (2019). National highway electric vehicle fast charging. Retrieved from:
 - https://www.infrastructureaustralia.gov.au/map/national-highway-electric-vehicle-fast-charging (accessed 2 October 2023).

Other strategically important priorities

In addition to these six crucially important priorities, 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:

- Continue to commit funding towards the rolling program of intersection grade separations and upgrades to improve safety on WA's major highways and strategically important corridors to bring these up to freeway standard. This should prioritise the Reid Highway/Erindale Road intersection (pending the outcome of the current business case) and the remaining signalised and non-signalised intersections along Tonkin Highway such as Armadale Road (estimated at \$50-100 million per separation).
- Commit funding towards cross-agency development and deployment of standard architecture for Intelligent Transport Systems across WA to set the foundations for implementing sensors and digital systems to improve real-time management and reliability of the transport network, and support greater prioritisation of public and active transport (approximately \$8-10 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 (\$150 million). This could include planning and delivery of a Perth-based transport-focused test bed for automated vehicles and Cooperative-Intelligent Transport Systems.
- Commit to allocating unspent Perth Parking Levy funds towards key active and public transport initiatives outlined in the CBD Transport Plan (2022-23 account balance stated at \$202 million in the WA State Budget 2023-24 and forecast to remain \$174 million in surplus for 2023-24). Only \$23 million is currently planned to be spent in 2024-25.

- Commit funding to implement a program of measures to optimise Perth's heavy rail system (including lengthening of remaining platforms on the Midland/ Fremantle/Armadale lines to accommodate 6-car train operations) to make the best use of existing rail assets and cater for increasing demands. A business case identifying program costs was underway in 2022⁶⁷ however has not been released.
- Commit funding towards a rolling program of road/rail grade separations and other solutions to remove level crossings, while maintaining connectivity for pedestrians and cyclists. This should prioritise Collier Road and Meadow Street 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 (approximately \$2 billion to remove remaining crossings on the Perth Metropolitan passenger network).
- Commit funding towards planning and delivery of a mid-tier 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 (required funding is mode dependent).



67 Department of Infrastructure, Transport, Regional Development, Communications and the Arts (2021). Platform and Signalling Upgrade Program Business Case | Infrastructure Investment Program Retrieved from: https://investment.infrastructure.gov.au/projects/108598-20wa-mrl (accessed November 2023).



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