

State Budget Submission

2019-2020



For the better

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Advocacy and Members
advocacy@rac.com.au

About RAC

RAC represents the interests of more than one million Western Australians and is the leading advocate on the mobility issues and challenges facing our State. RAC works collaboratively with Government and other organisations to ensure our members and the community can move around our State safely, easily and in a more sustainable way.

RAC aligns its activities with the following three themes:

- » **Safe** – A safe mobility system can be defined as a system that outperforms national and international safety benchmarks. It encompasses safer drivers in safer cars on safer roads at safer speeds.
- » **Accessible** – A cost efficient, convenient and reliable commuter network is an essential part of personal mobility.
- » **Sustainable** – Sustainable mobility is broader than the environmental aspects of mobility; it encompasses the mobility needs of current and future generations.



Executive summary

The 2019-2020 State Budget is an opportunity for the State Government to fund essential programs and projects which will help to keep road users safe and meet the increasing demands being placed on our transport system, while protecting the environment.

It is evident that to meet the challenges ahead, and to offset the escalating economic and social costs brought on by road trauma, congestion and vehicle emissions, we must step-up rather than scale back our investment in infrastructure and initiatives.

RAC considers the key priorities for the 2019-2020 State Budget to be:

- » A renewed and improved commitment to reduce deaths and serious injuries on our roads;
- » Sustained and widespread investment in public transport;
- » Investment in projects to improve the daily operation of the existing road network;
- » A commitment to keep the cost of motoring and transport down;
- » Support to prepare for emerging vehicle technologies, most notably electric and automated vehicles; and
- » The accelerated delivery of safe and connected infrastructure for pedestrians and cyclists.



Funded by the State Government, the RAC Rescue helicopters are managed by the Department of Fire and Emergency Services (DFES).

Safe

1. The safe system

1.1 Delivering on 'Vision Zero'

There is an urgent need to strategically plan and support the State's Road Safety Strategy, *Towards Zero*, by planning and committing to an action plan which includes measurable targets and milestones with accountability measures to evaluate the current performance against long term *Towards Zero* goals.

In 2017, Western Australia (WA) recorded 161 road fatalities, at a rate of one life lost every two days. Fifty people were killed in speed related crashes, and 28 people were killed in crashes related to inattention. Of equal concern is that nearly 1,500 people suffered serious injuries as a result of a road crash. With WA being in an unenviable position of having the poorest road safety performance of all Australian states, it is important, now more than ever, to refocus on the targets and deliverables of *Towards Zero*. Together, we need to bring WA's road fatality and injury rate down.

RAC calls on the Government to:

- » Reflect a whole of government commitment to road safety by adopting performance measures for senior leadership within government agencies / departments, linked to frequent and regular reporting by Directors General and Chief Executive Officers on outcomes;
- » Establish metrics and formal reporting to measure progress of road safety strategies as well as a metric for measuring serious injuries caused by road crashes;
- » Allocate all Road Trauma Trust Account (RTTA) funds (closing balance as at 1 July 2018 was \$53 million) each financial year to evidence-based road safety projects supported by cost benefit analyses;
- » Prioritise road safety in all infrastructure delivery and roll out programs at the scale necessary to make a tangible impact;
- » Trial innovative approaches in designing, or re-designing, intersections, particularly on local roads and in relation to better speed management, to enhance safety and amenity for vulnerable road users;
- » Release a complete list of RTTA funded projects and their outcomes for transparency and accountability; and
- » Develop, fund and implement a road safety plan for regional WA, which includes a program to ensure all roads have a minimum Australian Road Assessment Program (AusRAP) rating of 3 stars.

1.2 Safer roads

In 2017, 91 fatalities (or 56 per cent of all fatalities) occurred on regional roads and 58 fatalities occurred on roads with a posted speed limit of 110km/h. This is despite only 21 per cent of the population living in regional WA. In the five years to end-2017, around two in three regional fatal crashes were the result of a single vehicle running off the road.

In the Western Australian Auditor General's 2016 follow up report on the maintenance of WA's roads, it was identified that the State was still facing a maintenance backlog of over \$845 million, up from \$820 million in 2009. It is widely recognised that across the State, the condition of the regional road network is in decline. Narrow sealed shoulders, poor surface condition and hazardous roadsides are common complaints from road users. Over two thirds (68 per cent) of the roads that run through both state and local areas in the regions remain unsealed.

The biomechanical tolerances of humans for different crash types are between 20 and 30 km/h for pedestrians and cyclists. As a result, the fatality risk for pedestrians being hit at 50 km/h becomes double that of being hit at 40 km/h and five times as great as being hit at 30 km/h. Similarly, the biomechanical tolerances for vehicle occupants are up to 70 km/h for head-on car crashes. In line with the Safe System approach, speed limit setting must take into account the threshold of physical resistance of the human body to the energy released during a crash (which is related to the impact speed).

The 2016/17 RAC Risky Roads campaign also received more than 6,000 nominations from across the State highlighting the poor condition of metropolitan and regional roads. To protect and meet the expectations of the community, the Government must signal its commitment to embark on a major long-term effort to maintain and improve the road network.

RAC welcomed the State Government's 2018/19 funding commitments to the planning stages of Bunbury Outer Ring Road (\$93.8 million) and Albany Ring Road (\$34 million).



RAC calls on the Government to:

- » Fund a dedicated program to reduce the road maintenance backlog by at least 30 per cent in the first term of Government;
- » Commit further funding towards a rolling program of grade separations and associated upgrades on the Reid, Roe and Tonkin highways to bring nationally significant corridors up to freeway standard, delivering safety benefits;
- » Commit further funding for the completion of Bunbury Outer Ring Road (\$800 million in total project costs) to provide a safe and efficient road network in the vicinity of WA's second city (\$560 million Federal Government funding committed for construction);
- » Commit further funding towards the completion of Albany Ring Road to provide an efficient and safe road network around Albany;
- » Commit funding towards a rolling program to proactively rate the safety of strategic arterial roads across the State to inform the development of a Safer Road Investment Plan(s) of essential safety treatments; and
- » Continue to expand investment from the State's Royalties for Regions program and commit funding for a rolling Regional Road Safety program to deliver regional road improvements and address single vehicle run-off crashes.

1.3 Safer cars

RAC supports the Australasian New Car Assessment Program (ANCAP). ANCAP is an independent vehicle safety advocate which crash tests and rates new vehicles to provide consumers with transparent advice on vehicle safety. According to ANCAP, in a crash, vehicle occupants have twice the chance of being killed or seriously injured in a vehicle rated 3 stars compared to a 5-star rated vehicle.

By supporting ANCAP, RAC encourages vehicle manufacturers to incorporate safety features into new car design through educating consumers to prioritise safety when they are purchasing a new car and to take full advantage of safety improvements made in vehicles in recent years.

To demonstrate our own commitment to vehicle safety, RAC will not insure or finance any vehicles manufactured in 2012 or later (i.e. since the policy was introduced) which have been rated by ANCAP and do not achieve safety ratings of 4 or 5 stars.

With recent advances in technology, connected, automated vehicles are no longer a thing of the distant future and the

wider adoption of this technology will have significant implications for the planning, operation and management of our road and transport networks.

The United States' National Highway Traffic Safety Administration identified that approximately 94 per cent of crashes are due to human error and automated vehicle technology such as automatic emergency braking, rear automatic braking, lane departure warning, lane centering assist and blind spot detection can assist drivers and reduce crash risk.

Main Roads WA has started considering these implications and released two publications in early 2015 (Automated Vehicles: Are we ready? and Connected Vehicles: Are we ready?) but further work is required in preparing for a future with such technologies.

Since early 2016, RAC has been undertaking research to understand and track changes in community perceptions and sentiment towards automated vehicles. Wave 3 of RAC's AV Community Perceptions Monitor revealed that 62 per cent of Western Australians believe the Government should be investing to ensure WA is ready for automated vehicles by 2025 and one in five have confidence Government will be ready within this timeframe.

RAC's Automated Vehicle Trial, supported by the State Government and the City of South Perth, is a purposeful trial to improve the understanding of how automated vehicles operate and the potential impacts and opportunities. This, and RAC's broader automated vehicle program (which includes the recently announced Intellicar Trial), will help further prepare a roadmap for changes to support and safely transition to the technology.

RAC calls on the Government to:

- » Invest in and support trials of new vehicle and driver-assist technologies, which can reduce the occurrence of fatalities and severity of injuries;
- » Allocate funding to explore and identify appropriate responses in planning for a future with connected, automated vehicles, as part of a safer, more efficient and integrated transport system;
- » Introduce initiatives to encourage the uptake of safer and newer vehicles to reduce the age of the fleet;
- » Introduce the mandatory display of ANCAP vehicle safety ratings at the point of sale; and
- » Ensure only ANCAP 5-star rated vehicles are purchased for Government fleets.

1.4 Safer road users

Drivers

WA's 2017 preliminary fatality rate was 6.2 fatalities per 100,000 persons and the national fatality rate was 4.98.

Various factors contribute to the number of serious crashes. Of note, the impact of driver inattention is now comparable to that of speed and alcohol. Speed related crashes account for the largest proportion of fatal crashes both in WA and nationally. In 2017, 21 per cent of fatalities were as a result of an alcohol related crash, while a recent study showed that of the crashes resulting in a driver fatality from 2000-2012, approximately 23 per cent tested positive for one or more illicit drugs¹.

In October 2018, RAC launched the *Look Up* road safety campaign focussed on distracted driving associated with mobile phone use. The campaign is calling on Western Australians to focus on what's most important and Look Up when driving.

RAC also welcomed the 2018/19 budget allocation of \$734 million to the Impaired (Alcohol and Drug) Driving Detection program. Given almost half of fatally injured drivers in WA have drugs or alcohol in their system, it is important that the WA Police Force are adequately resourced to carry out these duties.

For every fatality, there are on average 30 injuries requiring hospitalisation. Following a crash, those injured need the best possible care as quickly as possible. The RAC Rescue helicopters fly critical care paramedics to an emergency incident and then transport injured people directly to a hospital.

Having completed 610 missions in the 12 months to 30 September 2018, 319 of which were in response to road crashes, it remains pivotal to continue to provide a service which can deliver patients to care in the shortest time possible.

RAC calls on the Government to:

- » Publish the number of hours spent on traffic enforcement by the WA Police Force on a quarterly basis;
- » Adequately resource the WA Police Force to test a minimum of 1.5 random breath tests per licensed driver per year;
- » Adequately resource the WA Police Force to significantly increase the volume of random drug testing;
- » Continue to fund the expansion of the red light and speed camera program;
- » Fund and urgently expand the implementation of point-to-point cameras;

- » Establish and continue to fund the Regional Enforcement Unit of the WA Police Force to target factors contributing to the disproportionate regional road toll;
- » Fund regular high-profile community awareness campaigns and school programs on road safety;
- » Commit funding, from consolidated revenue, for the Bunbury based RAC Rescue Helicopter across the forward estimates; and
- » Continue to provide funding for additional rest stops and roadside amenities.

Motorcycle and scooter riders

WA has the highest proportion of motorcycles per head at 49 per 1,000 people. There are currently approximately 130,000 registered motorcycles in WA².

Motorcyclists are one of the most vulnerable of road user groups. Motorcycles account for approximately six per cent of licensed motorised vehicles, however on average they account for 19 per cent of the State's fatalities. Improving safety outcomes for motorcyclists must be a major road safety priority.

RAC's 2017 Motorcycle Survey was a large-scale online survey of both motorcycle riders and drivers aimed at capturing the attitudes and perceptions from both road user groups. Results show that the legislation on lane splitting and lane filtering is confusing for both road users alike. When asked to select initiatives which would improve the safety of motorcyclists, 63 per cent of drivers and 72 per cent of motorcycle riders indicated that clarifying the legality of lane splitting / filtering was a top initiative.

Motorcycle riders also said that they would be influenced in their purchase choice by a safety rating system for motorcycle helmets (71 per cent) and clothing (57 per cent).

RAC calls on the Government to:

- » Allocate funding to tighten and mandate standards relating to motorcycle safety features, helmets and clothing; and
- » Fund public awareness and education campaigns to clarify legislation relating to lane splitting and lane filtering.

¹P. Palamara (2016), "The incidence and characteristics of illicit drug related driver fatalities in Western Australia, 2000-2012", *Proceedings of the 2015 Australasian Road Safety Conference, Australia*.
²ABS (2017), "Motor Vehicle Census, Australia", *Cat No. 9309.0.55.003, Canberra, ACT*.

Cyclists

In 2017 alone there were seven fatalities involving cyclists and from 2010 to 2016 there were 32 cyclist fatalities in total.

According to the 2017 Austroads National Cycling Participation Survey, nearly a quarter of the WA population rides a bicycle in a typical month compared to the national average of 21.8 per cent. For more people to choose cycling as a transport option and to help riders stay safe, accelerated investment in infrastructure and behavioural programs are vital.

RAC calls on the Government to:

- » Increase funding for further public awareness and education campaigns on sharing the road to highlight cycling safety, as well as promote the benefits of cycling for all road users, to foster a culture of mutual respect; and
- » Increase funding to expand active transport initiatives delivered by the Department of Transport, to facilitate and support safe cycling.

Improvements to cycling infrastructure are also critical to improve cycling safety (refer to section 3.4 *A Better Cycling Network*).

Pedestrians

Tragically, 15 people died whilst walking in 2017. This number represents nine per cent of all fatalities. There were four further pedestrian deaths in the 'other' category, which can involve gopher users and skateboard riders.

RAC calls on the Government to:

- » Make the continued rollout of pedestrian countdown timers at intersections a higher priority in areas of high pedestrian demand;
- » Fund a trial of well designed, self-explaining / self-enforcing 30km/hr speed zones in appropriate areas; and
- » Fund public awareness and education campaigns related to pedestrian safety.

Improvements to walking infrastructure are also critical to improve pedestrian safety (refer to section 3.5 *A Better Walking Network*).



Accessible

2. The cost of transport

In addition to other transport modes, motoring is and will remain integral to the mobility of Western Australians and not surprisingly, the cost of motoring is a high priority issue for the community. Overall, taking into account costs including depreciation, licensing, vehicle registration and insurance, fuel and servicing, an average medium sized car costs consumers \$10,107 per year to own and run in 2018³, an increase of almost \$200 compared to 2017.

Likewise, the cost of public transport is an important consideration for the mobility of Western Australians, not only because of the impact it has on household budgets but also to encourage an increase in demand for public transport services.

RAC calls on the Government to:

- » Cap any increase in passenger vehicle registration and license fees at or below the rate of inflation;
- » Cap any further increase to Compulsory Third Party (CTP) premium rate at or below the rate of inflation;
- » Guarantee that Stamp Duty or other fees will not be placed on top of any increase in CTP premiums;
- » Guarantee that additional no-fault CTP premiums will only be used in relation to the payment of catastrophic injury claims;
- » Guarantee that CTP premium surpluses will not be paid as cash dividends to Government;
- » Guarantee the Insurance Commission of WA remains Government owned and that CTP insurance is not privatised; and
- » Cap any increase in public transport fares at or below the rate of inflation.

3. Reducing the cost of congestion

It has been forecast that congestion will cost the WA economy \$2.1 billion by 2020, rising to \$16 billion by 2031. By 2031, without action seven of the nation's 10 most congested roads, including the top four, will be in Perth⁴. Congestion is harming the State's productivity and is taking a toll on commuters and families.

A recent RAC survey on Road User Charging revealed congestion continues to be viewed as a significant issue facing WA motorists. Eight in 10 agree it requires immediate attention but only two in 10 are confident that government has adequate plans in place to address it.

There is no single solution to fix congestion and a suite of measures is needed – sustained and widespread investment in public transport, better cycling and walking infrastructure and travel behaviour change programs, targeted investment in the operation of our road network and the evolution of a more compact, consolidated and connected city.

3.1 Delivering a robust transport system

Over many years, a number of strategic transport plans have been prepared and either released in draft and never finalised, or not released at all.

While *Transport@3.5 million* was adopted, it has subsequently been replaced by *Perth and Peel@3.5million - The Transport Network*, which was developed and adopted with little public or stakeholder consultation.

This plan sets out the current and future transport networks with limited information about proposed transport projects, many of which require further development and evaluation to determine their feasibility. Policies and strategies, and supporting initiatives, underpinning the future transport system are required to provide clearer strategic direction and give clarity to all agencies involved in planning the State's spatial development and transport networks, as well as industry and the community.

Moving forward, it is critical that the transport network plan be accompanied by a strategy, as well as a costed and funded implementation program to demonstrate the Government's commitment to delivering the robust and integrated transport system our State desperately needs.

RAC welcomed the funding allocation for the establishment of Infrastructure WA (IWA), which will help to ensure rigour and increased transparency around the development and prioritisation of transport projects.



³ RAC (2018), 'Vehicle Operating Costs', <https://rac.com.au/runningcosts>.

⁴ Infrastructure Australia (2015), 'Australian Infrastructure Audit'.

RAC calls on the Government to:

- » Develop a robust transport strategy, building on *Perth and Peel@3.5million – Transport Network* and considering the long-term infrastructure strategy to be prepared by IWA, to provide a clear strategic direction for WA's transport system and land use integration;
- » Allocate further funding to establish and effectively resource IWA;
- » Prepare the next iteration of the Central Area Transport Plan and allocate sufficient funding from the Perth Parking Levy, and additional funding sources as necessary, to ensure effective delivery and monitoring; and
- » Continue to explore more innovative funding and financing approaches to support the delivery of major transport projects such as value capture and development contributions.

3.2 A smarter road network

Our road network will always be critical to facilitating mobility in the State. However, the reality is that it alone cannot accommodate the demands being placed on it. It is well understood that all transport needs cannot be met by expanding roads.

To manage congestion, more needs to be done to utilise emerging technology solutions. This, as well as better coordinated traffic management and road works planning, and improved real-time travel information will help to improve traffic flows and reduce delays.

In March 2015, the Auditor General released a report which backed moves to focus on the management, rather than construction, of the road network.

A two-year study initiated by RAC, in partnership with Main Roads WA, successfully demonstrated that significant efficiencies could be achieved through an alternative approach to traffic signal retiming, without the need for costly civil works. Optimisation of the signal timings along Orrong Road, between Francisco Street and Oats Street, delivered efficiencies such as improving journey times by up to 20 per cent.

RAC also welcomed the release of the positive outcomes from the State Government's traffic signal timing improvement project and its subsequent expansion, which delivered further efficiencies, improving the journey experience for motorists travelling along main arterials and key corridors across the road network.

RAC calls on the Government to:

- » Allocate further funding to enable the ongoing implementation of initiatives under the Main Roads' Traffic Congestion Management Program, including the deployment of Intelligent Transport System (ITS) technologies, preparing for connected and automated vehicles and improving real-time travel information;
- » Resource the development of road network operations plans, informed by the Movement and Place Framework, which specify service goals for all road user groups (pedestrians, cyclists, public transport, vehicular traffic) to guide decision-making around traffic signal optimisation;
- » Increase funding to better resource traffic signal operations, including to enable increased active traffic management;
- » Commit funding to develop and deliver targeted upgrades to address Perth's most congested intersections, including Leach Highway / Welshpool Road; Manning Road / Leach Highway; Tonkin Highway / Kelvin Road, South Street / Stock Road (many of which have been allocated Federal Government funding); and
- » Commit funding towards a rolling program of road / rail grade separations to remove level crossings (including Caledonian Avenue in Maylands, Oats Street in Carlisle and Wharf Street in Cannington) and deliver associated urban realm enhancements, improving safety, road and public transport efficiency and amenity.

Improvements to regional roads are also critical (refer to Section 1.2 *Safer Roads*).

3.3 A better public transport network

Great cities need effective public transport. It allows people to interact, work, study and play, all of which directly impact on health and wellbeing, the economy and the environment.

An RAC report released in late-2016 highlighted that 13 of Perth's 34 strategic activity centres (important hubs for employment, retail and education activities, as well as residential development, which will support the evolution of a compact and connected city form) exhibit low accessibility by public transport.

Investment in public transport has been demonstrated to create jobs and business opportunities; as well as help manage the impacts of congestion. The associated near-station regeneration also has the potential to leave a legacy of economic sustainability.

Light rail

Perth's long-standing light rail proposal would provide high frequency services through Perth's central area, connecting the University of Western Australia / QEII and Curtin University /

Bentley precinct in Stage One and on to Canning Bridge in Stage Two⁵. Total project costs are estimated to be \$1.8 billion. This project has for many years been one of RAC's top priorities for Federal Government funding.

Other 'high-frequency public transit' and 'proposed high-priority transit corridors' have and are being investigated by Government and the private sector for light rail to provide a step-change in public transport access to major activity centres. This includes Scarborough Beach and Stirling to the CBD, and on to the Curtin University / Bentley precinct, which is also an RAC priority for further investigation.

The introduction of light rail to Perth would add a new dimension to the public transport system and by connecting with the heavy rail network at several locations it would facilitate enhanced cross-city mobility in the inner areas. These projects would also unlock significant development opportunities, supporting and enabling increased urban infill.

Light rail in Perth would be 'transformational' and significantly improve the economic productivity of WA. RAC believes such city-shaping infrastructure projects are critical for the future of Perth.

Given the long lead and delivery time for major public transport projects the decisions we make now are crucial.

RAC calls on the Government to:

- » Commit funding towards the long-standing Perth Light Rail proposal UWA/QEII - Curtin/Bentley);
- » Commit funding towards project development activities for light rail to connect Scarborough Beach / Stirling to Glendalough and the Perth CBD; and
- » Plan a wider light rail network (including undertaking feasibility studies) to identify priority projects to enhance accessibility to activity centres and progress its delivery.

Heavy rail

Heavy rail is an integral component of the public transport system and expansion of the network is vital.

For several years, two of RAC's top five infrastructure priorities for Federal funding have been heavy rail schemes – the Thornlie Line extension and rail for Perth's northern suburbs to connect Perth City Centre and Morley Strategic Centre. RAC welcomed the State and Federal Government's funding commitment to the Thornlie Line extension, as part of the \$2.3 billion WA road and rail infrastructure package announced in May 2017.

In addition to expanding the network, it will also be essential to make best use of the existing rail assets and investment in appropriate optimisation measures should be prioritised.

RAC calls on the Government to:

- » Allocate further funding to expand the heavy rail network to improve access to suburban activity centres', after the Thornlie Line extension to Cockburn Central via Canning Vale, prioritise rail for Perth's northern corridor (including a connection to, and station within, the Morley Strategic Centre);
- » Fund a program of ongoing upgrades and capacity improvements at existing stations (including planning for platform extensions on the heritage lines, as well as to improve access, amenity and security);
- » Resource and fund the Route Utilisation Strategy (RUS) to make best use of existing rail assets and help guide future investment; and
- » Ensure business cases are developed for future heavy rail projects to secure investment from the \$10 billion Federal Government Rail Program.

Bus

In urban areas, bus services connect local centres and perform an important feeder service function to the rail network. On another level, Bus Rapid Transit (BRT) has the potential to meet the growing demand for high-frequency, high-capacity public transport services particularly as suburban activity centres, beyond the CBD develop.

In regional WA there are fewer public transport options and a greater bus network coverage and increase in services are required.

RAC calls on the Government to:

- » Develop and fund a BRT program, focussing on major activity centres as a priority;
- » Fund a new bus station and improve pedestrian access at Canning Bridge Station, and other transport hubs as identified;
- » Develop and fund a bus priority plan to define a network of bus lanes and other facilities such as queue jumps;
- » Following successful trialling of the next generation Transperth App which enables users to track bus services in real-time, allocate sufficient funding for its roll-out, and ongoing maintenance and upgrades of this and the bus GPS tracking system; and
- » Investigate and implement new funding models that will support the introduction of additional public transport services in regional centres.

⁵Department of Transport (2017), "Transport@3.5 million Perth and Peel Transport Plan".

3.4 A better cycling network

Cycling has been undergoing a resurgence in WA, and for several years increased well above the rate of population growth.

Increasing cycling participation has wide-ranging benefits applicable to many Government sectors, including health and of course transport.

The availability of high quality cycling infrastructure providing enhanced amenity, connectivity and safety is of vital importance in encouraging more people to cycle.

Over 5,500 cyclists and non-cyclists from across Western Australia responded to RAC's 2015 Cycling Survey, highlighting the importance of cycling to the community. Investment in on-road and off-road cycling infrastructure was viewed as the top priority for Government investment to encourage more people to cycle.

RAC's Cycling Business Case, released in 2012, highlighted that up to \$388 million was needed over 10 years to create continuous, convenient and comprehensive cycle networks in WA's cities and towns. It also showed the economic, social, health and environmental returns for the community on investment in cycling projects are between 3.4 and 5.4 times the costs incurred, higher than for many other urban transport investments.

In late-2017 RAC initiated a project, with support from the State Government, to investigate lighting quality along four popular sections of Perth's Principal Shared Path (PSP) and Recreational Shared Path (RSP) networks to understand opportunities to enhance amenity and safety for people using the paths, encouraging more walking and cycling. A total of 67km of shared path network was surveyed, with 59 per cent being deemed to be non-compliant with the relevant lighting standard.

RAC is supportive of the Safe Active Streets program, which incorporates the Bike Boulevards concept, and welcomed the Government's ongoing \$9 million funding allocation to extend the program; as well as the funding commitment of \$157 million over the next four years towards cycling infrastructure, as included in the 2018-19 Budget.

RAC calls on the Government to:

- » Fund and deliver an audit of all on-road cycle routes;
- » Fund the completion and upgrade of on-road cycle routes, particularly to and through activity centres and providing connections to PSPs, considering physical separation from general traffic where necessary;
- » Continue to fund the expansion of the Safe Active Streets program and allocate funding to trial innovative approaches to the provision and design of on-road cycling infrastructure;
- » Plan and progress the delivery of a network of new green mode bridges (bus, cycle and pedestrian);

- » Maintain the funding commitment to advance completion of the remaining planned, but unconstructed, high standard shared use paths (i.e. PSPs) - delivering at least 95km of PSP by 2020-21;
- » Resource audits of lighting and surfacing quality along the PSP and RSP networks, to supplement the findings of RAC's Shared Path Lighting Review, to identify maintenance and upgrade priorities;
- » Increase the funding allocation for maintenance and upgrade of existing PSP and RSPs;
- » Allocate sufficient funding to enhance connections to stations within reasonable cycling and walking catchments, beyond the immediate station precinct, and fund bicycle parking and end-of-trip facilities; and
- » Update planning policies to provide for the integration of cycling infrastructure in new major developments and redevelopments.

3.5 A better walking network

Walking is a critical part of an integrated transport system. All trips start and end with walking. Increased investment is required to enhance the quality of the walking network, and create more pedestrian-friendly streets and places to provide for increased priority, amenity and safety.

RAC's 2016 Walking Survey revealed that the community believes better planning to create more walkable communities, investment in public transport and investment in shared paths should be the Government's top priorities to encourage more people to walk.

Until 2015, the Department of Transport had resources dedicated to championing the needs of pedestrians. Without this, there is a risk of insufficient focus being placed on this mode as a critical part of a balanced transport system.

The lack of current strategic direction relating to the walking network was evident in *Transport 3.5 million - Perth & Peel Transport Plan* and this remains the case in *Perth and Peel@3.5million - The Transport Network*, which only addresses walking in the context of shared paths.

An increased commitment is required in recognition of the important role walking in supporting liveable and thriving cities and communities.

RAC calls on the Government to:

- » Increase funding to expand the capacity of the Department of Transport to deliver programs to benefit pedestrians;
- » Plan and deliver a network of high quality pedestrian routes, building on work undertaken to date for the State Government's Transpriority project and Safe Active Streets program;
- » Fund small-scale demonstrations of innovative, low cost and quick win solutions (aligned with the Movement and Place concept and using 'tactical urbanism' principles) to temporarily (or permanently) change the function streets and places to encourage increased levels of walking, cycling and social interaction; and
- » Develop and fund standardised, robust and regular collection of pedestrian data to support informed decision-making.

3.6 Travel demand management

Meeting the pressures placed on the network at peak times is challenging and we must get the most out of the State's existing infrastructure. Influencing when and how people use our transport system is an important strategy to help manage congestion, while improving mobility.

In 2011, an evaluation of the State Government's Workplace TravelSmart Program (of which RAC was a participant) over the prior five-year period demonstrated a five per cent reduction in single occupancy car travel for commuting and a \$4.50 return in community benefits for each \$1 spent.

In early 2017, the TravelSmart programs were refreshed and rebranded to align with the State Government's Your Move program.

More recent evaluation of Your Move Cockburn demonstrated the program achieved a five per cent reduction in car driver trips per participant (in total 410,000 fewer trips) and a six per cent reduction in car driver minutes per participant (in total 8.6 million fewer minutes travelled).

RAC calls on the Government to:

- » Provide funding to expand the Your Move programs, particularly initiatives which complement investment in the public transport network, to support increased patronage.

3.7 Shared mobility options

Shared mobility options, such as car sharing, legal ride sharing and bike sharing, can supplement existing transport networks, providing improved travel choices, as well as reducing personal costs of travel and number of vehicles on our roads.

There is already community appetite for such options, as is evident from the increasing popularity of ride sharing services. Over recent years, RAC has also been exploring the role of car sharing in helping to offset mobility and cost of living pressures, and its potential to work in Perth. An RAC survey highlighted that the concept is appealing to many people residing in inner Perth areas. Almost half found it appealing, and one in four said they would actually use a service if one was available.

RAC calls on the Government to:

- » Investigate and implement changes to the Perth Parking Policy to allow the levy to be waived for the provision of dedicated car sharing bays; and
- » Resource a review of Government fleet leasing and management arrangements to explore potential efficiencies using car sharing and alike.

3.8 Land use planning

To curb continued urban sprawl, more effective integration of land use and transport modes is required to reduce the need for people to travel so far and so often and ensure good access to a range of transport options. This will be aided through the current reform of the WA planning system.

According to the ABS, Perth residents currently commute significant distances to access their place of employment / education. In fact, the average commuting distance is over 15km⁶.

RAC calls on the Government to:

- » Guarantee funding to complete the review and development of a strategic land use and transport model for Perth; and
- » Continue to adequately resource the works to reform the WA planning system, to ensure it is strategically-led, enables the delivery of a compact, connected city and appropriately empowers an engaged community.

⁶ ABS, (2016), 'Census of Population and Housing: Commuting to Work - More Stories from the Census, 2016', 20710.55.001. Canberra, ACT.

Sustainable

4. Lowering vehicle emissions

4.1 Delivering on emissions reduction targets

As part of a global response to climate change, Australia has committed to reducing the nation's greenhouse gas emissions by 26 to 28 per cent below 2005 levels by 2030⁷. Transport is responsible for 18 per cent of Australia's total greenhouse gas emissions – and on a per capita basis is 50 per cent above the Organisation for Economic Co-operation and Development (OECD) average⁸. It is also the fastest growing emissions creating sector, growing by almost 60 per cent since 1991⁹, and is projected to continue to substantially increase¹⁰.

According to the Australian Government, even with the current trend of improvement in vehicle efficiency, the growth in the light vehicle fleet will add an estimated eight million tonnes of greenhouse gas emissions and an estimated \$5 billion in energy costs to the economy per annum by 2030.

Air pollution has been linked to numerous serious illnesses including cardiovascular diseases, lung cancer, and cardiopulmonary disorders¹¹. In 2011, approximately 2,549 Australian fatalities were caused by air pollution; with 1.3 per cent of deaths and a further 0.6 per cent of all injury and disease attributable to air pollution¹². The OECD states that deaths from air pollution across Europe reduced between 2005 and 2010, while Australian deaths rose over the same period¹³.

RAC calls on the Government to:

- » Develop a robust Transport Energy Strategy to deliver emissions reduction initiatives and plan for a future with electric vehicles; and
- » Review current approaches to monitor vehicle emissions in WA.

4.2 Low emissions vehicles

In 2017, the average Australian passenger car carbon dioxide (CO₂) emissions intensity was 171.5g/km, 45 per cent higher than average of 118.5g/km¹⁴. The average CO₂ emissions from

vehicles sold in Australia had been decreasing at rates of between one and four per cent, however in recent years the reductions achieved has stagnated. This modest reduction has mainly been attributed to international emissions regulation and related technological developments, rather than a much needed shift within the Australian marketplace.

Australia is the only developed nation without an effective standard for CO₂ emissions for the new light vehicle fleet and it is widely recognised that Australia is falling behind other developed nations. Europe, for example, has a mandated CO₂ emissions target of 95 g/km to be phased in from 2020, in full effect from 2021. They also have a proposal to reduce emissions by a further 15 per cent by 2025 and then an additional 15 per cent by 2030.

A growing chorus of nations have also announced bans on the sales of new Internal Combustion Engines (ICEs), including Norway (2022), India (2030), Germany (2030), Scotland (2032), France (2040) and England (2040); with France and England indicating a full ban on ICEs by 2050¹⁵.

While some overseas markets offer a wide choice of electric vehicles (EVs) and hybrid vehicles, there are currently only a limited number of pure EVs and a small number of plug-in hybrids available to buy new in Australia.

The limited availability of public charging stations is also an impediment to the uptake of EVs. The RAC Electric Highway[®], the first of its kind in Australia, was opened in June 2015. It comprises 11 strategically located electric vehicle DC fast charging stations across a 520-kilometre route between Perth and the South West of WA. The primary goal of the RAC Electric Highway[®] is to open the road to the south west to EVs and in doing so help reduce CO₂ emissions from cars.

Currently, there is a unique opportunity for WA to lead the country on low and zero emissions vehicle policy.

The WA State Government oversees a fleet of more than 11,000 passenger and light commercial vehicles. It is estimated the average emissions intensity for the WA Government fleet is over 200g/km, well over the national average and the CO₂ benchmark set by the Fleet Policy and Guidelines.

⁷ Australian Government (2015). 'Australia's 2030 climate change target', <http://www.environment.gov.au/climate-change/publications/factsheet-australias-2030-climate-change-target>.

⁸ Australian Government (2018). 'National Greenhouse Gas Inventory', 2016, <http://ageis.climatechange.gov.au/>

⁹ Ibid

¹⁰ Department of Environment and Energy (2017). Australia's emissions projections 2017, <http://www.environment.gov.au/system/files/resources/eb62f30f-3e0f-4bfa-bb7a-c87818160c1f/files/australia-emissions-projections-2017.pdf>

¹¹ AIHW (Australian Institute of Health and Welfare) (2007). 'Australian burden of disease study: impact and causes of illness and death in Australia 2003', AIHW, Canberra, www.aihw.gov.au/getmedia/f81b92b3-18a2-4669-aad3-653aa3a9f0f2/bodaia03.pdf.aspx?inline=true

¹² 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.

¹³ OECD (2014). 'The Cost of Air Pollution: Health Impacts of Road Transport', OECD Publishing, http://www.keepeek.com/Digital-Asset-Management/oced/environment/the-cost-of-air-pollution_9789264210448-en#page54.

¹⁴ National Transport Commission (2018). 'Carbon Dioxide Emissions Intensity for New Australian Light Vehicles 2017', pg 24, [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)

¹⁵ Energeia (2018). 'Australian Electric Vehicle Market Study Prepared by Energeia for ARENA and CEFC', May 2018, <https://www.cefc.com.au/media/401923/australian-ev-market-study-full-report-jun2018.pdf>

RAC calls on the Government to:

- » Investigate and trial a range of incentives which seek to reduce the price differential in favour of low and zero emissions vehicles;
- » As a priority, investigate, cost and implement state tax exemptions such as stamp duty and vehicle registration concessions and/or exemptions for low and zero emissions vehicles, with the discount reflective of level of emissions;
- » Plan for, and support, the provision of infrastructure to service electric and hybrid vehicles including the expansion of public electric vehicle charging facilities;
- » Ensure only low emissions vehicles (aligned to international good practice) are purchased for Government fleets; and
- » Advocate for the introduction of an appropriate mandatory national light vehicle CO₂ emissions intensity standard.



4.3 Public transport fleet

There are currently 1,483 buses in operation across the metro area public transport fleet. Of those, only 54 per cent are compliant with the Euro V and VI emissions standards and 33 per cent are Euro IV. The remaining 17 per cent are rated Euro II¹⁶. Euro II standards allow for over 17 times the level of oxides of nitrogen (NOx); 25 times the level of particulate matter; over eight times the level of hydrocarbons, and more than twice the emission levels of carbon monoxide, than permitted under Euro VI standards.

Upon decommissioning, current arrangements allow the highest polluting buses to be sold at public auction.

RAC calls on the Government to:

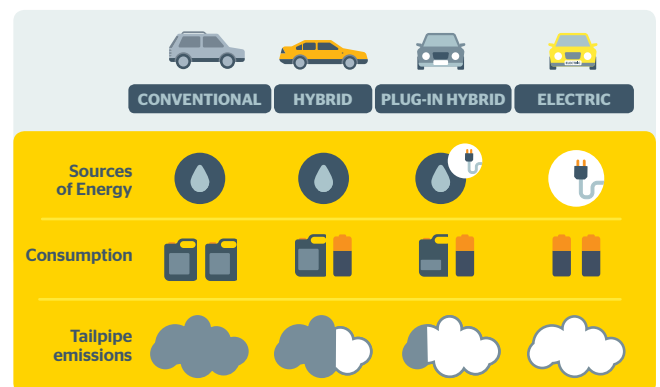
- » Continue to retire high emissions buses, accelerating the uptake of Euro VI or above standard buses, and increasing the focus on cleaner-alternative fuelled buses, such as fully electric and hydrogen fuel cell;
- » Operate a public transport fleet that uses the most environmentally sustainable energy sources; and
- » Ensure the future Transport Energy Plan includes cleaner alternatively powered buses, including hybrid, all-electric and hydrogen, while not hindering future technological advances.

4.4 Driver behaviour

The way a vehicle is driven has a significant impact on the vehicle's fuel consumption and exhaust emissions. Educating drivers to drive in ways which minimise tailpipe emissions and saves them money is recommended. These include modifying driving styles, reducing the amount of driving through journey planning, ensuring vehicle maintenance is up to date and ensuring any excess cargo in the vehicle is minimised. All of these actions have potential to optimise the number of kilometres travelled per litre of fuel and reduce vehicle emissions.

RAC calls on the Government to:

- » Fund a public awareness and education campaign to inform consumers of the options available to them to reduce their vehicles' emissions and save money at the same time; and
- » Ensure Government fleet vehicles are maintained and loaded in ways which minimise fuel consumption and exhaust emissions.



¹⁶ Public Transport Authority WA (2017), 'Annual Report 2017-18'; <http://www.ptawa.gov.au/Portals/28/AnnualReport/PTA-2017-18-AnnualReport-online.pdf>

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

