# QUEENSLAND'S ROAD SAFETY ACTION PLAN 2017 19 Safer Roads, Safer Queensland





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# Foreword

Road safety is everyone's responsibility and all road users should be aware of the Fatal Five risky behavours which are the common causes of road fatalities.

Road trauma is one of the biggest public health issues facing our community. Some of the data tells a positive story though. Despite increases in population, vehicle ownership and traffic volumes, in Queensland we have reduced the annual number of road fatalities from the peak of 638 in 1973 to 251 in 2016. This means that, in just over one generation, Queensland reduced its road fatality rate from 32 to 5 fatalities per 100,000 population. Similar patterns are seen in other Australian states and territories.

However, under our *Queensland Road Safety Strategy* 2015-21, we challenge ourselves to face the 'true' road toll – our serious injuries as well as fatalities. There are far more people taken to hospital after a road crash than die – about 24 for every one fatality. These injuries can have lifelong repercussions. This is an outcome Queensland can neither afford nor tolerate.

Compared to fatalities, crashes that result in hospitalised casualties are less likely to be caused by people deliberately breaking the rules or taking an extreme risk. The majority are the result of simple mistakes. Young adults are over-represented, but serious injuries among middle-aged and older people are increasing too.

This means we need to modify our approaches if we are going to have a meaningful impact on reducing serious injuries on the state's roads. This will involve roads, rules, education, enforcement, policies and programs that all work together to protect road users. We need infrastructure solutions for busy urban streets as well as less built-up areas, and tailored responses for younger, middle aged and older people and vulnerable road users. The solutions for different speed zones should be sensitive to the types of crashes that tend to occur on them. Network-wide solutions must be supplemented with ones that are specific to particular places and routes. We also need to look ahead by investing in our data, research and capability now.

In this action plan, we have committed to four priority areas:

- Delivering safer roads for Queenslanders
- Getting people into safer vehicles
- Encouraging safer road use
- Planning our future and strengthening our partnerships.

This action plan sets out our response to these challenges for the next two years, ensuring that Queensland is on the path to the vision of the road safety strategy – **zero fatalities and serious injuries**.

This is an ambitious vision for all Queenslanders, as we don't want anyone dying on our roads. We encourage everyone to get involved in the plan for the next two years.



### The Honourable Mark Ryan MP

Minister for Police, Fire and Emergency Services and Minister for Corrective Services



### The Honourable Dr Steven Miles MP

Acting Minister for Main Roads, Road Safety and Ports

# The Safe System

# In this action plan, Queensland reaffirms its commitment to the principles of the **Safe System**.

A Safe System means safe road users, safe vehicles, safe speeds and safe roads and roadsides. In a Safe System, everyone involved has a role in reducing road trauma.

### Examples include:

- A driver who wanders into another lane can be alerted by audio-tactile line marking and reminded to get back on track. They might be protected from a head-on crash with another vehicle by a median barrier, or from a run off-road crash by an edge barrier or a clear zone on the side of the road.
- A pedestrian in a busy urban space might be momentarily distracted as they start to cross a road, but the vehicle speeds have been reduced to make it easier for drivers to stop in time.
- A newer vehicle fitted with active safety technology could alert its driver of an impending crash, and then airbags and other features could protect the vehicle occupants if a crash occurs.





# Serious injuries from crashes cost us all

The cost of each person taken to hospital as a result of a crash is estimated to cost Queenslanders about \$500,000<sup>1</sup>.

Each serious brain and spinal injury is estimated to cost the community up to approximately \$4.8 million and \$9.5 million<sup>2</sup> respectively, with lifelong repercussions for individuals, families, workplaces and communities.

Even less serious, shorter term injuries cost us, with time off work, frequent visits to health practitioners and reduced ability to take part in our daily activities.



For every one fatality on the road, there are over 24 people taken to hospital.



Fatalities

Hospitalised Casualties

Figure 1: Proportion of hospitalised casualties versus fatalities from road crashes in Queensland, 2011-2016<sup>3</sup>



# What the data tells us

### We need to take action across the state

Between 2010 and 2015 the highest number of fatalities occurred on regional roads, while the highest number of hospitalised casualties occurred on urban roads.

### Most serious injury crashes are the result of mistakes – not extreme behaviour or risk-taking

Queensland's crash data indicates that the 'Fatal Five' behaviours – distraction, drink driving, fatigue, speeding or not wearing a seatbelt – are a factor in one in two fatalities from crashes. However, only one in three hospitalised casualties were from crashes involving one or more of the Fatal Five (see Figure 2 below).

This means that, along with continuing to encourage safe behaviour, we must ensure we have safer infrastructure, safer speeds and safer vehicles – so when people make a mistake, they survive and are not punished with lifelong injuries.

### It's not just our young people that are at risk

Road crash data indicates that a third of serious casualties are aged between 17 and 29 years. A further third are aged between 30 and 49 years. An upswing in the rate of serious crash involvement in the 70+ age group is also evident (see Figure 3 on the following page).

While we should continue to focus on safe mobility for young adults, we also need to look at what more experienced and mature road users need to reduce their risk on the road.





Figure 3: Queensland drivers and riders involved in serious crashes, 2011-2016 – by age group and rate per 100,000 licences<sup>5</sup>



## Fatalities and serious injuries occur on different roads and speed zones

Figure 4 (on the following page) depicts the speed zones where road crashes occur. According to crash data, about 45 per cent of all fatalities occur on 100km/h roads and just over 20 per cent on 60km/h roads. The opposite is true for hospitalised casualties. Nearly 45 per cent are from crashes on 60km/h roads, and 20 per cent on 100km/h roads.

### Solutions must be fit for their location

Figure 5 (on the following page) illustrates why road safety solutions must be tailored to location. In 100km/h zones, most crashes resulting in someone being taken to hospital happen when a vehicle runs off the road, rolls over or hits an object. In 60km/h zones, crashes occur most commonly at intersections.

This means we need to keep designing solutions that are right for the type of road and speed, and target interventions at key risk points on the network.



Figure 4: Queensland serious casualties 2011-2016 – by speed zone  $^{\rm 6}$ 



Figure 5: Types of road crashes causing hospitalised casualties across speed zones 2011-2016, Queensland 7



# Delivering safer roads for Queenslanders

### Aims:

- Upgrading and improving roads in major centres and regional towns including intersection treatments and township entries.
- Implement measures to improve the safety of vulnerable road users.
- Reduce the likelihood and severity of crashes at high speeds between centres by providing improved roads and roadsides.

### How do we focus our effort on safe infrastructure?

The Targeted Road Safety Program (TRSP) delivers infrastructure safety interventions by monitoring trends in crash data and working in close collaboration with stakeholders.

It aims to reduce road trauma by targeting the delivery of high-benefit, cost-effective treatments on the network in locations that are known for, or have the potential for, high severity crashes. The majority of TRSP funding is sourced from revenue collected from speed and red light offences caught on camera. \_\_\_\_

Key activities administered through the Targeted Road Safety Program include Safer Roads Sooner, the Blackspot Programme, Flashing School Zone Lights, Targeted Safety Interventions and route based treatments such as those delivered through the High Risk Roads package.



Acti	on	Who
1	Through the TRSP, deliver targeted infrastructure safety treatments on state controlled and local government roads. Prioritise delivery of projects that target the protection of vulnerable road users, including motorcyclists, pedestrians and bicycle riders.	TMR
2	Deliver road safety infrastructure programs on our major highways in partnership with the Commonwealth Government.	TMR
3	Work towards a 2022 target of achieving 90% of travel on the national network in Queensland on three star or better roads (as defined by AusRAP) through the investment programs that deliver safety improvements.	TMR
4	Through the TRSP, complete planning and commence construction on our highest risk road sections on the state controlled road network and deliver road safety improvements.	TMR
5	Prioritise the delivery of Township Entry Treatments across Queensland to provide physical measures at the transition from a high speed rural environment to a lower speed environment that coincides with entering a township.	TMR

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# Getting people into safer vehicles

### Aim:

• Encourage safer vehicle choices for all drivers, especially for younger less-experienced drivers, older drivers who are likely to suffer more severe injuries and commercial businesses where drivers have higher crash risk because of their greater exposure to the road environment.

### Making vehicles safer

Safer vehicles can not only prevent crashes in the first place, but can significantly reduce their severity. As a quick guide, safer vehicles are newer vehicles, and have a higher safety rating.

The Australasian New Car Assessment Program (ANCAP) is an independent advocate for vehicle safety, testing and promoting new vehicle safety based on performance in simulated crash tests and vehicle safety features. ANCAP's star ratings inform and encourage consumers to purchase safer vehicles. The requirements to achieve the highest five star rating are raised over time to motivate manufacturers to continue to improve safety.

### For example:

- In 2011, a vehicle with a five star ANCAP rating purchased in the same year was equipped with electronic stability control, three point safety belts and head protecting (side impact) airbags for front seats as a minimum, in addition to meeting crash test requirements.
- In 2017, a five star ANCAP rated vehicle has these features, plus seat belt reminders (front and second row seats), side impact airbags for rear/second row seat passengers, electronic brake assist and top tether anchorages for child restraints. Five star vehicles must also meet the minimum rating for pedestrian protection.

Recent analysis by ANCAP found that passenger cars and SUVs built in 2000 or earlier had a rate of involvement in fatal crashes four times as high as those built in 2011 to 2016<sup>8</sup>.

The Used Car Safety Rating (UCSR) program also provides star ratings to inform buyers of used vehicles. Ratings are informed by analysis of real-world data on crashes involving older vehicles. Cars are rated for driver protection and protection for other road users.

Act	on	Who
6	Continue to pilot cooperative intelligent transport systems (C-ITS) and cooperative and highly automated driving (CHAD) technologies that make our roads safer through delivery of the Cooperative and Automated Vehicles Initiative (CAVI).	TMR
7	Promote Advanced Driver Assistance Systems by:	TMR
	• Releasing and promoting the <i>SafeCars</i> app to encourage consumers to consider safety ratings when purchasing a vehicle and give people a tool to help them easily identify the safest car they can afford.	
	• Providing support for ANCAP.	
8	To aid drivers of older vehicles, promote the use of aftermarket technologies such as lane departure and forward collision warning cameras, blind spot detection systems and reversing cameras.	TMR
9	Investigate ways to encourage the use of safe transport choices, such as public transport, particularly where people are not travelling in the safest vehicle.	TMR



# Encouraging safer road use

### Aim:

• That drivers, riders and pedestrians understand and know how to respond to road risks, follow the road rules and demand action to reduce road trauma and promote liveable cities.

ŀ	Action	Who
1	10 Develop proposals for best practice drink driving offender management reforms, including:	TMR
	• Enhancing the Alcohol Ignition Interlock Program, including introducing performance based criteria that participants must meet before completing the program.	
	<ul> <li>Introducing education programs for all drink driving offenders, such as brief interventions designed to screen and assess an individual's alcohol consumptio and educate them to reduce risky drinking and more intense face-to-face program for high-risk and repeat drink drivers.</li> </ul>	n ms
1	Continue to drive positive change in Queensland's road use culture. Through community engagement and education campaigns we will support key initiatives being implemented, including:	TMR
	<ul> <li>Focusing on high risk behaviours through major campaigns for speeding and driv driving, as well as online campaigns on fatigue and driver distraction.</li> </ul>	nk
	<ul> <li>Focusing on vulnerable road users through key initiatives such as:</li> </ul>	
	- a Co-Lab 2017 youth road safety challenge	
	- campaigns focusing on pedestrians, motorcyclists and young drivers.	
	• Working with other Australian jurisdictions to ensure consistency of road safety messages across states and territories.	
1	Investigate new ways to better support young people in becoming safe and responsible drivers. This may include opportunities in technology, education and training programs, licensing requirements and other influences such as parents ar caregivers.	TMR

Acti	on	Who
13	<ul> <li>Intensify efforts to tackle drug driving, including:</li> <li>Undertaking in-depth research to understand the types and levels of drugs taken by drivers involved in crashes, including analysis of coroner reports and further testing of blood and saliva samples.</li> </ul>	QPS TMR
	• Increasing roadside drug testing enforcement.	
	• Investigating regulatory reforms to improve drug driving enforcement practices.	
	<ul> <li>Working with the Commonwealth Government and other state and territory governments to investigate and examine options to further improve drug driving enforcement.</li> </ul>	
14	Continue to install flashing lights at 200 school zones in the next two years to help warn motorists about the increased risk in these areas at peak times of student movement.	TMR
15	Work with key stakeholders to implement the 21 recommendations in the document Let's change the way we look at speed: a conversation with Queenslanders about staying safe on the road, released in May 2017.	TMR
16	Continue to deploy enforcement strategies on high-risk roads.	QPS
17	Improve safety for motorcycle riders by:	TMR
	• Investigating the viability of introducing a motorcycle specific Hazard Perception Test into the licensing system.	
	<ul> <li>Developing opportunities for motorcyclists to refresh their riding skills and knowledge including road environment scanning, correct positioning and skills to respond to hazards.</li> </ul>	
	• Promoting the benefits of vehicle safety technology (such as anti-lock braking systems) and encourage uptake.	
	• Participating in a national program to develop a star rating system for protective clothing to inform motorcyclist purchasing decisions.	
18	Continue to develop and launch a suite of innovative road safety school curriculum resources for use by teachers and students.	TMR MAIC
19	Develop a technical solution to improve heavy vehicle fatigue management by providing heavy vehicle drivers with easy to access online information to identify rest areas.	TMR
20	Improve safety at roadworks for road workers and road users, including by analysing crash data to identify and take action to mitigate the most common types of crashes at these sites.	TMR
21	Continue to improve safety around unplanned incidents, including breakdowns, on major roads in Queensland, including through improving capability and coordination between incident responders.	TMR

# Planning our future and strengthening our partnerships

### Aims:

- Link data sources and improving analytical capability to better inform the next road safety action plan, and beyond.
- Develop and maintain partnerships with key stakeholders and local organisations who play a critical role in reducing road trauma across Queensland.

Acti	on	Who
22	Investigate and implement short, medium and long term solutions for data sharing, data linkage and definition clarity for serious injuries to enrich current data sources and establish a more accurate understanding of road crash characteristics. This will better inform future policy, program, infrastructure and enforcement actions.	TMR QH QPS
23	Implement a new Crash Analytics and Reporting System within TMR to further support internal and external road safety stakeholders, including local governments.	TMR
24	Work with experts to investigate and develop responses to ongoing road safety challenges, such as:	TMR MAIC
	<ul> <li>driver distraction – investigate a suite of solutions to minimise the risk of distracted drivers causing crashes.</li> </ul>	
	• seatbelt wearing – investigate how engagement, technology and local solutions can target the small group of people who continue to choose not to wear a seatbelt.	
	<ul> <li>road safety for international visitors – research to better understand and develop solutions to improve safety for international visitors driving in Queensland.</li> </ul>	
25	Investigate and improve the reporting of serious injury data for vulnerable road users to support development of tailored interventions.	TMR QH

Acti	on	Who
26	Enable local governments to reduce speed limits where appropriate by:	TMR
	• Reviewing Part 4 of the <i>Manual of Uniform Traffic Control Devices</i> to deliver greater emphasis on safety and opportunities for more appropriate speed limit setting.	
	• Providing assistance to assess risk on highest priority roads so that investment in safety improvements is directed where it is most needed.	
27	Partner with Queensland organisations to promote road safety at a grassroots level through initiatives such as Queensland Road Safety Week, Safer Australian Roads and Highway's Yellow Ribbon National Road Safety Week and others.	TMR QPS
28	Through the Community Road Safety Grants Program, continue to enable community organisations to deliver local road safety projects and programs.	TMR
29	Work with stakeholders to promote safe choices and reduce road trauma through partnerships with local governments, schools, community groups and other stakeholders.	TMR

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# Acronyms

ANCAP - Australasian New Car Assessment Program

MAIC - Motor Accident Insurance Commission

QH - Queensland Health

QPS - Queensland Police Service

TMR - Transport and Main Roads