**Queensland Guide to Road Safety** 

Part 4: Safe People (2021)

November 2022



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#### **Feedback**

Please send your feedback regarding this document to: tmr.techdocs@tmr.gld.gov.au

## About this document

Austroads' *Guide to Road Safety* Part 4: *Safe People* considers the human factors and behavioural considerations that impact safety outcomes on the road network.

#### How to use this document

The Department of Transport and Main Roads has agreed to adopt the standards published in Austroads Guides as part of national harmonisation. The department seeks to avoid duplicating information addressed in national guidance and has developed documents instead that provide Queensland-specific advice while following the structure established in Austroads Guides.

Queensland-specific advice includes practices which vary from national practice because of local environmental conditions (such as geography, soil types, climate); different funding practices; local research; local legislation requirements; and to expand instruction on particular issues.

As such, this Part of the *Queensland Guide to Road Safety* (QGRS) takes precedence over the <u>Austroads Guide to Road Safety</u> Part 4: Safe People except where the Austroads Guide is accepted without changes.

This Part is designed to be read and applied together with Austroads *Guide to Road Safety* Part 4: *Safe People*. Readers must have access to the Austroads *Guide* to understand its application in Queensland.

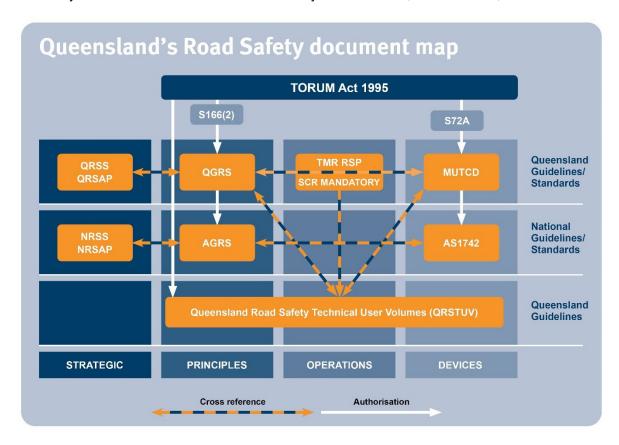
#### This document:

- sets out how the Austroads Guide to Road Safety Part 4: Safe People applies in Queensland
- has precedence over the Austroads Guide to Road Safety Part 4: Safe People when applied in Queensland, and
- has the same section numbering and headings as the Austroads *Guide to Road Safety* Part 4: Safe People.

The following table summarises the relationship between the Austroads *Guide to Road Safety* Part 4: *Safe People* and this document:

| Applicability             | Meaning   |
|---------------------------|---|
| Accepted                  | The Austroads <i>Guide</i> section is accepted.   |
| Accepted, with amendments | Part or all of the Austroads <i>Guide</i> section has been accepted with additions, deletions or differences. |
| New                       | There is no equivalent section in the Austroads <i>Guide</i> .  |
| Not accepted              | The Austroads <i>Guide</i> section is not accepted and does not apply in Queensland.                          |

A summary of the documents relevant to road safety in Queensland, and their links, follows:



## **Definitions**

The following general amended definitions apply when reading the Queensland *Guide to Road Safety* Part 4: *Safe People*.

| Term        | Definition   |
|-------------|--|
| AGRS Part 4 | Austroads <i>Guide to Road Safety</i> Part 4: <i>Safe People</i> , as amended by this document; for example, a reference to AGRS Part 4 means the reader must refer to the Austroads <i>Guide to Road Safety</i> Part 4: <i>Safe People</i> , and the <i>Queensland Guide to Road Safety</i> Part 4: <i>Safe People</i> (QGRS Part 4). |
|             | Throughout AGRS Part 4, references are made to other Parts of the AGRS (for example, when reading AGRS Part 4, the reader may be referred to AGRS Part 3 for further information.)   |
|             | In such cases, the reader must refer to the equivalent Part within the<br>Queensland Guide to Road Safety first. Check the applicability of the<br>equivalent QGRS Part before referring to the referenced AGRS Part.  |
|             | Similarly, references may be made to other Austroads Guides (for example, when reading AGRS Part 4, the reader may be referred to the <i>Guide to Road Traffic Management</i> Part 3: <i>Transport studies and analysis methods</i> ).   |
|             | In such cases, the reader must refer to the equivalent Queensland Guide first, where such exist. Check the applicability of the equivalent Queensland Guide before referring to the referenced Austroads Guide Part.   |
| AGRS        | Austroads Guide to Road Safety   |
| AS 1742     | Australian Standard AS 1742 Manual of Uniform Traffic Control Devices  |
| NRSS        | National Road Safety Strategy  |

| Term           | Definition   |  |
|----------------|--|--|
| NRSAP          | National Road Safety Action Plan   |  |
| QGRS           | Queensland Guide to Road Safety  |  |
| QRSS           | Queensland Road Safety Strategy  |  |
| QRSAP          | Queensland Road Safety Action Plan   |  |
| QRSTUV         | Queensland Road Safety Technical User Volumes  |  |
| RSP            | Queensland Department of Transport and Main Roads Road Safety Policy   |  |
| TORUM Act 1995 | Transport Operations (Road Use Management) Act 1995 (Qld)  |  |
| TRUM           | Volume 2 of the <u>Traffic and Road Use Management manual</u> preceded this Part of the Queensland Guide to Road Safety and was withdrawn on publication of the corresponding QGRS Part. |  |

# References

| QGRS section                          | Reference |  |
|---------------------------------------|-----------|--|
| All <u>www.legislation.qld.gov.au</u> |           |  |

## Relationship table

| Section |                                   | Title  | Queensland application   | Dept<br>contact* |
|---------|-----------------------------------|--|--------------------------|------------------|
| 1.      | Introduction                      |  | Accepted with amendments | LTSR             |
|         | 1.1                               | Purpose of the Guide                         | Accepted                 | LTSR             |
| 2.      | High Risk Road User Demographics  |  | Accepted                 | LTSR             |
|         | 2.1                               | Youth  | Accepted with amendments | LTSR             |
|         | 2.2                               | Older Road Users                             | Accepted                 | LTSR             |
|         | 2.3                               | Motorcyclists                                | Accepted with amendments | LTSR             |
|         | 2.4                               | Rural Residents                              | Accepted                 | LTSR             |
|         | 2.5                               | International Drivers                        | Accepted                 | LTSR             |
|         | 2.6                               | Aboriginal People                            | Accepted with amendments | LTSR             |
|         | 2.7                               | Heavy Vehicle Drivers                        | Accepted                 | LTSR             |
| 3.      | Inforn                            | nation Processing                            | Accepted with amendments | LTSR             |
|         | 3.1                               | Receiving Information                        | Accepted with amendments | LTSR             |
|         | 3.1.1                             | Implicit information – self-explaining roads | Accepted                 | Safer Roads      |
|         | 3.1.2                             | Explicit information                         | Accepted                 | Safer Roads      |
|         | 3.2                               | Accuracy / Clarity                           | Accepted                 | Safer Roads      |
|         | 3.3                               | Timeliness                                   | Accepted                 | Safer Roads      |
|         | 3.4                               | Complexity                                   | Accepted                 | Safer Roads      |
|         | 3.5                               | Cognitive Loading                            | Accepted                 | Safer Roads      |
| 4.      | Road                              | User Error                                   | Accepted                 | LTSR             |
| 5.      | Educa                             | ation  | Accepted with amendments | LTSR             |
| 6.      | Use o                             | f Facilities                                 | Not accepted             | Safer Roads      |
| 7       | Alcohol and Illicit Drug Use      |  | Accepted with amendments | LTSR             |
| 8.      | Seat Belt and Child Restraint Use |  | Accepted                 | LTSR             |
| 9.      | Distractions                      |  | Accepted with amendments | LTSR             |
| 10.     | Skill / Ability                   |  | Accepted                 | LTSR             |
| 11.     | Fatigue                           |  | Accepted with amendments | LTSR             |
| 12.     | 2. Post-Crash Factors Accepted    |  | LTSR                     |                  |
| Refe    | References                        |  |                          |                  |

## Departmental contacts:

- Safer Roads: Safer Roads Infrastructure, Engineering and Technology, Transport and Main Roads email <u>SaferRoads@tmr.qld.gov.au</u>.
- LTSR: Land Transport Safety and Regulation, Transport and Main Roads email <a href="mailto:ltsr.correspondence@tmr.qld.gov.au">ltsr.correspondence@tmr.qld.gov.au</a>.

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## 1 Introduction

#### Difference

Replace Table 1.1 with:

Table 1.1 – Parts of the Guide to Road Safety

| Part   | Title                               | Content   |
|--------|-------------------------------------|---|
| Part 1 | Introduction and The Safe System    | An overview of the Austroads <i>Guide to Road Safety</i> and the Safe System philosophy.        |
| Part 2 | Safe Roads                          | Guidance on assessing and treating roads to reduce the risk of fatal or serious injury crashes. |
| Part 3 | Safe Speed                          | Guidance on the management of vehicle speeds for improved road safety.                          |
| Part 4 | Safe People                         | Guidance on influencing behaviours for safe people and communities.                             |
| Part 5 | Safe Vehicles                       | Guidance on safe vehicles and vehicle safety features.  |
| Part 6 | Road Safety Audit                   | Practical guidance on the procurement, management and implementation of road safety audits.     |
| Part 7 | Road Safety Strategy and Management | Guidance on road safety strategies and road safety management.                                  |

## 2 High Risk Road User Demographics

#### 2.1 Youth

#### Deletion

Delete the last paragraph as this does not apply in Queensland.

#### Addition

Young and inexperienced drivers are a priority focus area in road safety, as they have poorer skills relating to scanning their environment, evaluating the relative location of other road users and predicting the behaviour of other road users. They also have greater difficulty in managing their attention and prioritising competing tasks, and are less likely to moderate their driving according to their capabilities and the demands of the driving situation.

For this cohort, in addition to practical driving skills and road rules, road safety education should target awareness of road safety hazards, and an understanding of the risks of speeding, distraction, fatigue, not wearing a seatbelt, and driving under the influence of alcohol or drugs (the 'Fatal Five' factors).

Education for this age group should also emphasise cognitive-behavioural skills within the driver context, including specific focuses on risk-taking and resisting external pressures.

## 2.3 Motorcyclists

## **Difference**

Where 'motorcyclist' (and/or 'motorcyclists') occurs, please replace with 'motorcycle rider' (and/or 'motorcycle riders').

#### Addition

Motorbike registrations continue to increase over time. Between June 2019 and June 2021, there was a 6.1% increase in registered motorbikes in Queensland; however, the number of registered motorbikes is only an indicator of the number of riders on the roads. As at 30 April 2021, there were over 700,000 motorcycle licence holders in Queensland, reflecting that not all licence holders are owners or active riders.

Motorcyclists comprise around one-quarter of annual road fatalities. Analysis of motorcyclists involved in fatal crashes reveals a mixture of contributing factors, including disobeying one or more road rules, speeding, being affected by drugs or alcohol and/or being unlicensed. The majority of riders were male and aged between 21 and 59 years old.

Drivers also need to be rider aware, by always scanning traffic for riders and checking their blind spots especially when changing lanes and at intersections.

## 2.6 Aboriginal People

## Addition

All references to Aboriginal people refer to Aboriginal and Torres Strait Island Peoples.

#### Addition

In 2019-20, the Department of Transport and Main Roads, Queensland undertook a review of the Indigenous Driver Licensing Program (IDLP). Through significant stakeholder engagement, across all sectors and rural and remote communities, the review mapped the current state of initiatives in Indigenous communities; identified gaps and future directions to ensure evidence-based strategies provide value for money and community 'buy in'; and developed a framework to guide a holistic approach to support opportunities for people to access high quality road safety education and licensing that will help them and their communities to stay safe and healthy and improve their economic participation.

## 3 Information Processing

## Addition

All references to information processing refer to the cognitive ability of road users.

## 3.1 Receiving Information

## **Addition**

Driving is a complex, cognitive-behavioural task that many of us undertake daily. In our everyday lives, we typically drive, ride, and walk in familiar environments. It is well established that repetition and familiarity affect cognition, which, in turn, can lead to automaticity. Automaticity reduces the attentional and memory demands required for automatised tasks or process, allowing drivers and other road users to devote attentional resources to other objects or tasks (that is, driver distraction) or to engage in mind-wandering behaviour (that is, driver inattention).

Distracted driving is characterised by four key elements:

- 1. attention is diverted away from the driving task
- 2. towards a competing activity inside or outside of the vehicle which may or may not be related to the driving task
- 3. the competing activity may compel the driver to divert attention towards it, and
- 4. there is an implicit or explicit assumption that safe driving is adversely affected.

In contrast, driver inattention is comprised of five subcategories including:

- 1. driver restricted attention
- 2. driver mis-prioritised attention
- 3. driver neglect attention
- 4. driver cursory attention, and
- 5. driver diverted attention.

Driver diverted attention, which occurs when a driver's attention is diverted away from safe driving behaviour towards a competing activity, can be differentiated into driving and non-driving related categories. Non-driving related inattention is described as diverted attention to internalised thoughts and daydreams.

#### 5 Education

#### Difference

Replace this section with the following:

Road safety communication and education can encompass a broad range of initiatives and programs delivered at both a macro and micro level. In Queensland, population-wide measures include public campaigns while, at an individual level, there are opportunities to educate through interactions with the licensing system.

The <u>Queensland Road Safety Education Blueprint: Guiding Queensland's Approach to Road Safety Education from Birth to Young Adulthood</u> (the Blueprint) supports a vision of zero road deaths and serious injuries by creating a whole-of-life approach to road safety education across childhood and into adulthood.

The Blueprint was designed to create an evidence-based approach to road safety education that will be applied to youth from birth to 24 years of age. The Blueprint contains six key pillars that represent separate but equally important areas of focus for the delivery and coordination of road safety education.

These pillars guide the Queensland's approach to road safety education for children and young adults, ensuring they are equipped with the skills they need to become safer pedestrians, cyclists and drivers.

By targeting children aged 16 through to adulthood, Queensland is testing new opportunities to deliver road safety education beyond the traditional school setting, including through the development of road safety-related toolbox talks for QBuild that will be delivered onsite to young apprentices.

The Queensland Government also provides funding for not-for-profit community organisations to deliver road safety education and awareness initiatives through the <u>Community Road Safety Grants</u> (CRSG) scheme. Streams within the scheme are tailored to support initiatives at both a statewide and local level, and support a whole-of-life approach that underpins Transport and Main Roads' efforts for a broader positive community culture towards improving road safety.

At an individual level, Queensland introduced the <u>Graduated Licensing System</u> (GLS) as a staged approach to developing driving skills. The GLS is based on research that shows young drivers benefit most from mandatory hours of driving practice, supervised driving and use of professional on-road driving instruction. As novice drivers enter the graduated licensing system, non-licence holders must first complete PrepL. In addition to road rules, PrepL shifts the focus of driver education towards safer driving behaviours and attitudes, the importance of driving to the road conditions and hazard perception.

Results from two GLS evaluations undertaken since 2007 have shown very positive results. These changes were associated with a 31% reduction in fatal crashes involving young novice drivers, confirming the value of comprehensive graduated licensing systems in reducing novice driver road trauma.

Additionally, a <u>PrepL Supervisor Course</u> has been developed for parents of children who are in the process of obtaining their learner licence to assist them to teach their children to drive safely. The course assists supervisors by providing guidance on their role and responsibilities in shaping new safe drivers and refreshes knowledge on the road rules.

Finally, <u>StreetSmarts</u> is the Queensland Government's road safety public education program to positively influence behaviour and culture on Queensland roads. StreetSmarts aims to improve road safety by impacting the attitudes and behaviours of Queenslanders through strategic, targeted campaigns and activities to encourage safer road use. The media landscape is in a rapid state of change, and any form of communication and public education needs to be evidence-based. StreetSmarts social media channels including Facebook, Instagram, Twitter, YouTube and Snapchat, with over 160,000 followers and reaches up to 1.5 million people every month.

All campaigns are thoroughly evaluated. Queenslanders are surveyed to measure whether campaigns changed their behaviour or made them take action. Reach, views and social media engagement figures also help track awareness and relevance of messages for the community.

Research into the effectiveness of road safety campaigns clearly shows they have a strong potential for behavioural change when complemented by enforcement and other road safety initiatives. This is the approach taken in Queensland.

## 6 Use of Facilities

#### Not accepted

This section is not accepted and does not apply in Queensland.

## 7 Alcohol and Illicit Drug Use

## Difference

Replace 'illicit drug use' with 'drug use'.

#### Addition

Drink driving is one of the Fatal Five behaviours. It accounts for approximately one-fifth of all lives lost on Queensland roads.

The Queensland Government takes the offence of drink driving seriously, as drink drivers are significantly overrepresented in crash statistics. Drink driving is responsible for approximately one in five deaths (20 per cent) on Queensland's roads each year. Besides the human cost, death and serious injuries involving drink drivers cost the Queensland community an average of \$741 million per year.

Many initiatives have been introduced in Queensland to stop drink driving, including a highly-visible breath testing program, court-imposed fines, licence disqualification, and a performance-based alcohol ignition interlock program.

Research has shown that education programs reduce the rate of reoffending. As part of a suite of drink driving reforms, Queensland has introduced two drink driving education courses.

<u>Plan.Drive.Survive</u>. Foundations is an online course that applies to all drivers who are convicted of a drink driving offence.

*Plan.Drive.Survive.* Comprehensive is a multi-session course that applies to any drivers who are convicted of two or more drink driving offences within five years. These repeat offenders need to complete the course to finish the Alcohol Ignition Interlock Program.

Repeat offenders present a particular challenge as their behaviour is often ingrained; however, programs such as multi-session, face-to-face comprehensive courses have proven successful at encouraging participants to reduce hazardous drinking as well as drink driving.

There is a body of evidence demonstrating the disruptive effects that illicit drugs can have on safe driving performance. Drugs can affect driving, causing negative side effects such as reduced ability to judge distance and speed, reduced coordination and concentration, and blurred vision. Queensland works with other Australian jurisdictions through the National Drug Driving Working Group to look into drug driving and investigate best practice models for roadside drug testing.

#### 9 Distractions

#### **Deletion**

Delete the first three paragraphs and replace with the following:

Research shows mobile phone distraction quadruples the risk of crashing and is just as dangerous and the consequences as deadly, as drink driving. Using mobile phones can cause drivers to take their eyes off the road, their hands off the steering wheel, and their minds off the road and the surrounding situation. It is this last type of distraction, known as cognitive distraction, which appears to have the biggest impact on driving behaviour.

Evidence shows that mobile phone distraction can lead to riskier decision making, impaired reaction times, speed and vehicle control variations, decreased controlled braking, increased tendency to take risks and reduced awareness of the surroundings.

Following a National Driver Distraction Summit in 2019, Transport and Main Roads worked with stakeholders to develop the <u>National Roadmap on Driver Distraction</u> which outlines all the initiatives under five strategy areas – designing for a safer interaction, mapping out the adoption of in-vehicle distraction mitigation technology, vehicle as a workplace, encouraging greater compliance through enforcement, and driver change programs.

The Roadmap was endorsed by the Infrastructure and Transport Ministers on 5 June 2020.

## 10 Fatigue

#### Addition

For further guidance refer to Section 11.2 of the QGRS Part 2 Safer Roads.