

Queensland Guide to Road Safety

Part 3: Safe Speed (2021)

November 2022

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Feedback

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

About this document

Austrroads' *Guide to Road Safety Part 3: Safe Speed* is concerned with speed limits and their application as a speed management tool. The use of appropriate speed limits forms an integral part of a safe road system. They are a speed management tool used to improve road safety, while maintaining the efficiency of the road network.

How to use this document

The Department of Transport and Main Roads has agreed to adopt the standards published in Austrroads *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 Austrroads *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 [Austrroads Guide to Road Safety Part 3: Safe Speed](#) except where the Austrroads *Guide* is accepted without changes.

This Part is designed to be read and applied together with Austrroads *Guide to Road Safety Part 3: Safe Speed*. Readers must have access to the Austrroads *Guide* to understand its application in Queensland.

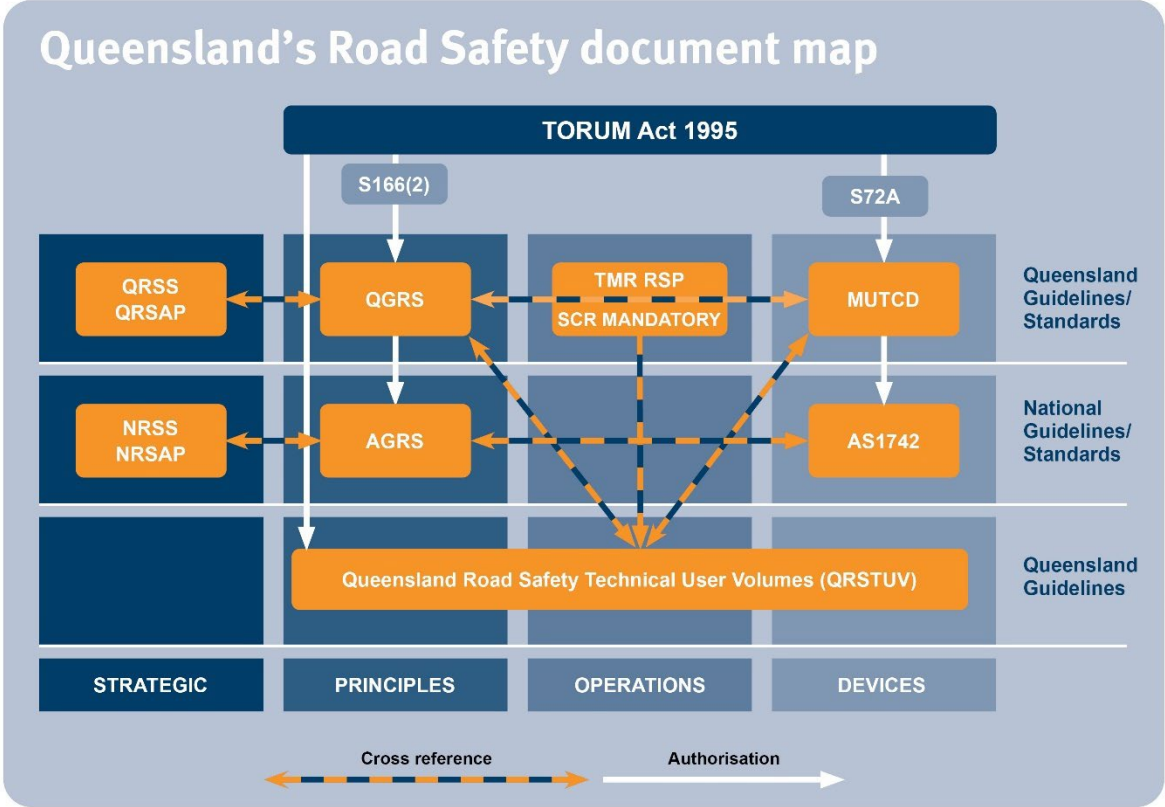
This document:

- sets out how the Austrroads *Guide to Road Safety Part 3: Safe Speed* applies in Queensland
- has precedence over the Austrroads *Guide to Road Safety Part 3: Safe Speed* when applied in Queensland, and
- has the same section numbering and headings as the Austrroads *Guide to Road Safety Part 3: Safe Speed*.

The following table summarises the relationship between the Austrroads *Guide to Road Safety Part 3: Safe Speed* and this document:

Applicability	Meaning
Accepted	The Austrroads <i>Guide</i> section is accepted.
Accepted, with amendments	Part or all of the Austrroads <i>Guide</i> section has been accepted with additions, deletions or differences.
New	There is no equivalent section in the Austrroads <i>Guide</i> .
Not accepted	The Austrroads <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 3: Safe Speed*.

Term	Definition
AGRS Part 3	<p>Austrroads <i>Guide to Road Safety Part 3: Safe Speed</i>, as amended by this document; for example, a reference to AGRS Part 3 means the reader must refer to the Austrroads <i>Guide to Road Safety Part 3: Safe Speed</i>, and the Queensland <i>Guide to Road Safety Part 3: Safe Speed</i> (QGRS Part 3).</p> <p>Throughout AGRS Part 3, references are made to other Parts of the AGRS (for example, when reading AGRS Part 3, the reader may be referred to AGRS Part 7 for further information).</p> <p>In such cases, the reader must refer to the equivalent Part within the Queensland <i>Guide to Road Safety</i> first. Check the applicability of the equivalent QGRS Part before referring to the referenced AGRS Part.</p> <p>Similarly, references may be made to other Austrroads Guides (for example, when reading AGRS Part 3, the reader may be referred to the <i>Guide to Traffic Management Part 3: Transport studies and analysis methods</i>).</p> <p>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 Austrroads Guide Part.</p>
AGRS	Austrroads Guide to Road Safety
AS 1742	Australian Standard AS 1742 <i>Manual of Uniform Traffic Control Devices</i>
NRSS	National Road Safety Strategy

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

References

QGRS section	Reference
All	www.legislation.qld.gov.au

Relationship table

Section	Title	Queensland application	Dept contact*	
1.	Introduction	Accepted with amendments	Safer Roads	
	1.1	Purpose of the Guide	Safer Roads	
	1.2	Why is Speed Management Important?	Accepted	Safer Roads
	1.3	Speed and the Safe System	Accepted	Safer Roads
2.	Speed and Harm	Accepted	Safer Roads	
	2.1	The Association Between Impact Speed and Injury	Accepted	Safer Roads
	2.1.1	<i>Stopping distance</i>	Accepted with amendments	Road Design
	2.1.2	<i>Energy transfer</i>	Accepted	Safer Roads
	2.1.3	<i>Safe System speeds</i>	Accepted with amendments	Safer Roads
	2.1.4	<i>Further insights on speed and injury severity</i>	Accepted	Safer Roads
3.	Speed Behaviour on Roads	Accepted	Safer Roads	
	3.1	Range of Speeds on the Road Network	Accepted	Safer Roads
	3.2	Complications in Perceiving Speed Risk	Accepted	Safer Roads
4.	The Case for Safer Speeds	Accepted	Safer Roads	
	4.1	Nilsson's power mode	Accepted	Safer Roads
	4.2	Kloeden Curves	Accepted	Safer Roads
	4.3	Evidence from Speed Limit Reductions	Accepted	Safer Roads
	4.4	The Case for Addressing Low Level Speeding	Accepted	Safer Roads
	4.5	Travel Time and Productivity	Accepted	Safer Roads
5.	Ways to Manage Speed	Accepted	Safer Roads	
	5.1	Roads and Roadside Infrastructure	Accepted with amendments	Safer Roads
	5.2	Speed Limits and Speed Enforcement	Accepted	Safer Roads
	5.3	People	Accepted	Safer Roads
	5.3.1	<i>Personal factors</i>	Accepted	Safer Roads
	5.3.2	<i>Legal factors</i>	Accepted	Safer Roads
	5.3.3	<i>Situational factors</i>	Accepted	Safer Roads
	5.3.4	<i>Social factors</i>	Accepted	Safer Roads
	5.3.5	<i>Implementation intentions and pledges to counter speeding</i>	Accepted	Safer Roads
	5.3.6	<i>People's attitudes towards speeding</i>	Accepted	Safer Roads
5.3.7	<i>What does the community think about speed risks and speed management</i>	Accepted	Safer Roads	

Section	Title		Queensland application	Dept contact*
6.	Types of Speed Limit		Accepted	Safer Roads
	6.1	Default Speed Limits	Accepted with amendments	Safer Roads
	6.2	Signed Speed Limits	Accepted with amendments	Safer Roads
7	How Do You Choose the Speed Limit		Accepted with amendments	Safer Roads
	7.1	Crash Risk	Accepted	Safer Roads
	7.2	Current Operating Performance	Accepted	Safer Roads
	7.3	Road and Roadside Infrastructure, Geometry and Roadside Development	Accepted	Safer Roads
	7.4	Unsealed Roads	Accepted	Safer Roads
8.	Safe Speed for Regional and Remote Areas		Accepted	Safer Roads
	8.1	Speed Limits	Accepted	Safer Roads
	8.2	Engineering Treatments	Accepted	Safer Roads
	8.3	Enforcing Safe Speeds	Accepted	Safer Roads
	8.4	Vehicle Countermeasures – ISA	Accepted	Safer Roads
References				
Appendices				
A	Meaning of the 85 th Percentile Speed		Accepted	Safer Roads
	A.1	Driver Selection of Safe (or Optimum) Speeds	Accepted	Safer Roads
	A.2	Speed Dispersion	Accepted	Safer Roads

Departmental contacts:

- Safer Roads: Safer Roads Infrastructure, Engineering and Technology, Transport and Main Roads email SaferRoads@tmr.qld.gov.au.
- Road Design: Hydraulics, Design and Spatial, Engineering and Technology, Transport and Main Roads email ET_HDS_RD_Design_Services@tmr.qld.gov.au.

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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.

1.1 Purpose of the Guide

Addition

Second paragraph, add 'education,' after 'including'.

2 Speed and Harm

2.1 The Association Between Impact Speed and Injury

2.1.1 Stopping distance

Addition

Add 'Refer to the [Road Planning and Design Manual](#), Volume 3, Part 3: Geometric Design for more information.'

2.1.3 Safe System speeds

Deletion

Delete fourth dot point.

5 Ways to Manage Speed

5.1 Roads and Roadside Infrastructure

Addition

Consideration should be given to the movement and place function of the road. Speed limits and speed management are essential factors in determining how road space is utilised in respect of Movement and Place. Broadly speaking, speed limits are likely to be higher on roads where movement is the primary function and lower speed limits are likely to be important in creating a sense of 'place'.

6 Types of Speed Limit

6.1 Default Speed Limits

Difference

Replace entire Section 6.1 with:

The default speed limit in Queensland for:

- a road in a built-up area is 50 km/h, and
- a road that is not in a built-up area is 100 km/h.

These speed limits are legally enforceable with or without posted signs, which avoids the need for extensive signing.

A default speed limit is **not** an appropriate process for selecting a speed limit (refer to Section 7).

A default speed limit **is** a method of applying an appropriately determined speed limit.

6.2 Signed Speed Limits

Difference

Replace the sentence of the second dot point:

Speed limits can vary from 110 km/h in the rural areas to 50 km/h in built-up areas.

with

Speed limits can vary from 10 km/h to 110 km/h.

Deletion

In the second dot point, delete from the last sentence:

such as 60, 70 km/h, 80 km/h and 90 km/h.

Deletion

In the third dot point, delete from the last sentence:

generally 40 km/h,

Deletion

In the fourth dot point, delete from the last sentence:

Speed limits generally vary from 25 km/h to 40 km/h.

7 How Do You Choose the Speed Limit?

Addition

Refer to the *Queensland Road Safety Technical User Volumes: Guide to Speed Management* for the prescribed speed limit review / setting process and procedure in Queensland.

