Queensland Guide to Traffic Management

Part 13: Safe System Approach to Transport Management (2020)

July 2021

Queensland Government

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Feedback

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About this document

Austroads' *Guide to Traffic Management* Part 13: *Safe System Approach to Transport Management* is concerned with traffic management practice under the Safe System philosophy. The Guide emphasises the need for the road system to provide an environment which assists road users to behave effectively and safely. It considers the role of traffic management in influencing road user behaviour and provides guidance for practitioners specifically on road safety aspects of traffic management.

Part 13 defines a safe road environment and the broad approaches for achieving it. It outlines basic human factors as related to users of the road and traffic environment, and how these can be influenced by road design and traffic management practice. It also describes the basic components of road safety engineering and its application in terms of risk engineering concepts, primary strategies and safety management systems, and outlines the principles and practice of managing safety in the road environment, as related to road infrastructure features and the basic tools of traffic engineering and management.

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 Traffic Management* takes precedence over the Austroads *Guide to Traffic Management* Part 13: *Safe System Approach to Transport Management* except where the *Guide* is accepted without changes.

Austroads *Guide to Traffic Management* Part 13: *Safe System Approach to Transport Management* is accepted without exception as applicable in Queensland.

This Part is designed to be read and applied together with Austroads *Guide to Traffic Management* Part 13: *Safe System Approach to Transport Management*. Readers must have access to the Austroads *Guide* to understand its application in Queensland.

This document:

- sets out how the Austroads *Guide to Traffic Management* Part 13: *Safe System Approach to Transport Management* applies in Queensland
- has precedence over the Austroads *Guide to Traffic Management* Part 13: *Safe System Approach to Transport Management* when applied in Queensland, and
- has the same section numbering and headings as the Austroads *Guide to Traffic Management* Part 13: *Safe System Approach to Transport Management*.

The following table summarises the relationship between the Austroads *Guide to Traffic Management* Part 13: *Safe System Approach to Transport Management* and this document:

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

Definitions

The following general amended definitions apply when reading the *Queensland Guide to Traffic Management* Part 13: *Safe System Approach to Transport Management*.

Reference to…	Means
AGTM Part 13	Austroads *Guide to Traffic Management* Part 13: *Safe System Approach to Transport Management*, as amended by this document; for example, a reference to AGTM Part 13 means the reader must refer to the Austroads *Guide to Traffic Management* Part 13: *Safe System Approach to Transport Management*, and the *Queensland Guide to Traffic Management* Part 13: *Safe System Approach to Transport Management* (QGTM Part 13). Throughout AGTM Part 13, references are made to other Parts of the AGTM (for example, when reading AGTM Part 13, the reader may be referred to AGTM Part 3 for further information.) In such cases, the reader must refer to the equivalent Part within the QGTM first. Check the applicability of the equivalent QGTM Part before referring to the referenced AGTM Part. Similarly, references may be made to other Austroads Guides (for example, when reading AGTM Part 13, the reader may be referred to the *Guide to Road Safety* Part 3: *Speed Limits and Speed Management)*. In such cases, the reader must refer to the equivalent Queensland Guide first, where such exists. Check the applicability of the equivalent Queensland Guide before referring to the referenced Austroads Guide Part.
TRUM	The *Traffic and Road Use Management* (TRUM) manual preceded this *Queensland Guide to Traffic Management* and was withdrawn on publication of the corresponding QGTM Part.
MUTCD	Queensland *Manual of Uniform Traffic Control Devices*
TORUM	*Transport Operations (Road Use Management) Act 1995*

References

- www.legislation.qld.gov.au

Relationship table

Austroads *Guide to Traffic Management* Part 13: *Safe System Approach to Transport Management* is **accepted without exception** as applicable in Queensland.

Section		Title	Queensland application
1.	Introduction		
	1.1	Purpose	Accepted
	1.2	Intended User	Accepted
	1.3	How to Use	Accepted
	1.4	Scope	Accepted
	1.5	Out of Scope	Accepted
2.	Link to the National Road Safety Strategies and to Safe System		
	2.1	Link to National Road Safety Strategies	Accepted
	2.2	Link to Safe System	Accepted
3.	Safe Road Environment		
	3.1	Safe System Approach	Accepted
	3.2	Elements, Concepts and Definitions	
	3.2.1	*Road Environment Elements*	Accepted
	3.2.2	*Safety Concepts and Definitions*	Accepted
	3.3	Achieving a Safer Road Environment	Accepted
	3.4	Safe Mobility	Accepted
4.	Human Factors and the Need to Design and Manage Roads to Achieve a Safe System		Accepted
	4.1	Human Factors	Accepted
	4.2	Human Factors and their Role in Road Safety	Accepted
	4.2.1	*Stimuli and the Human Factors Contributing to Crashes*	Accepted
	4.2.2	*Traffic Management and Road Design in the Context of the Driver*	Accepted
	4.2.3	*The Driving Task*	Accepted
	4.2.4	*Driver Characteristics*	Accepted
	4.3	Managing the System	Accepted
	4.4	Technology and its Impact on Human Factors in the Safe System – Safe Vehicles	Accepted
5.	Road Safety Engineering		Accepted
	5.1	Definitions	Accepted
	5.2	Objectives	Accepted
	5.3	Methods and Approaches	
	5.3.1	*Analytical Basis*	Accepted
	5.3.2	*Documented Guidance*	Accepted

Section		Title	Queensland application
	5.3.3	*Strategic Approaches*	Accepted
	5.4	Risk Engineering Concepts and the Safe System Assessment Framework	Accepted
	5.4.1	*Separating Conflicting Elements*	Accepted
	5.4.2	*Maintaining Control*	Accepted
	5.4.3	*Speed Management*	Accepted
	5.4.4	*Protecting Road Users*	Accepted
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	5.5.1	*Ensuring Safety in Planning and Design*	Accepted
	5.5.2	*Treating Known Hazardous Locations*	Accepted
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	5.5.4	*Managing Driver Workload*	Accepted
	5.6	Safety Management Systems	Accepted
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	6.2.2	*Cross-section*	Accepted
	6.2.3	*Pavement Features*	Accepted
	6.2.4	*Roadsides*	Accepted
	6.2.5	*Intersections and Crossings*	Accepted
	6.2.6	*Traffic Controls*	Accepted
	6.2.7	*Traffic Signals*	Accepted
	6.2.8	*Traffic Signs*	Accepted
	6.2.9	*Markings and Delineation*	Accepted
	6.2.10	*Road Lighting*	Accepted
	6.2.11	*Roadworks*	Accepted
	6.2.12	*Non-roadwork incidents*	Accepted
	6.2.13	*On-road Public Transport*	Accepted
	6.2.14	*Vehicle Safety*	Accepted
	6.3	Engineering Treatments to Address Specific Crashes at Specific Locations	Accepted
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B	Safe System Assessment Framework		Accepted
C	Road Fatalities and Serious Injuries		Accepted

Section		Title	Queensland application
D	Human Factors		Accepted
	D.1	Types of Human Factors That May Contribute to Crashes	Accepted
	D.2	Human Factors in the Road System	Accepted
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E	Traffic Management, Road Design and the Driver		Accepted
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	G.1.2	*Perception and Reaction Times (PRT)*	Accepted
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	G.1.5	*Information Processing Capacity*	Accepted
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	G.1.7	*Age Related Factors*	Accepted
Commentaries			
C1	Commentary 1		Accepted

Contents

Austroads guidance applies in Queensland

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