**Queensland Guide to Road Safety** 

# Part 7: Road Safety Strategy and Management (2021)

November 2022



# Copyright

© The State of Queensland (Department of Transport and Main Roads) 2022.

#### Licence



This work is licensed by the State of Queensland (Department of Transport and Main Roads) under a Creative Commons Attribution (CC BY) 4.0 International licence.

#### CC BY licence summary statement

In essence, you are free to copy, communicate and adapt this work, as long as you attribute the work to the State of Queensland (Department of Transport and Main Roads). To view a copy of this licence, visit: <u>https://creativecommons.org/licenses/by/4.0/</u>

#### Translating and interpreting assistance



The Queensland Government is committed to providing accessible services to Queenslanders from all cultural and linguistic backgrounds. If you have difficulty understanding this publication and need a translator, please call the Translating and Interpreting Service (TIS National) on 13 14 50 and ask them to telephone the Queensland Department of Transport and Main Roads on 13 74 68.

#### **Disclaime**r

While every care has been taken in preparing this publication, the State of Queensland accepts no responsibility for decisions or actions taken as a result of any data, information, statement or advice, expressed or implied, contained within. To the best of our knowledge, the content was correct at the time of publishing.

#### Feedback

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

# About this document

Austroads' *Guide to Road Safety* Part 7: *Road Strategy and Management* is concerned with the process of road safety strategy development, management, evaluation and risk assessment. It outlines options for strategy development and details the value of a 'vision' in driving strategy development. It covers the stages of a strategy lifecycle, including problem analysis, countermeasure selection, target setting and safety performance indicators, development and implementation. It also details the importance of, and methods for, monitoring and evaluation.

# 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 7: Road Strategy and Management except where the Austroads Guide is accepted without changes.

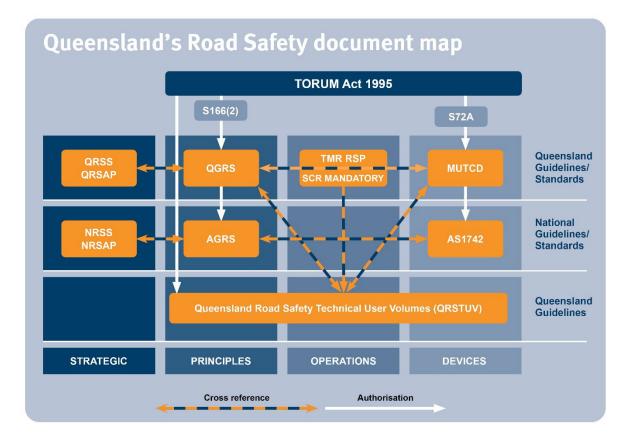
This Part is designed to be read and applied together with Austroads *Guide to Road Safety* Part 7: *Road Strategy and Management*. Readers must have access to the Austroads *Guide* to understand its application in Queensland.

This document:

- sets out how the Austroads *Guide to Road Safety* Part 7: *Road Strategy and Management* applies in Queensland
- has precedence over the Austroads *Guide to Road Safety* Part 7: *Road Strategy and Management* when applied in Queensland, and
- has the same section numbering and headings as the Austroads *Guide to Road Safety* Part 7: *Road Strategy and Management.*

The following table summarises the relationship between the Austroads *Guide to Road Safety* Part 7: *Road Strategy and Management* and this document:

Applicability	Meaning
Accepted	The Austroads Guide 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 Guide.
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 7: *Road Strategy and Management.* 

Term	Definition	
AGRS Part 7	Austroads <i>Guide to Road Safety</i> Part 7: <i>Road Strategy and Management</i> , as amended by this document; for example, a reference to AGRS Part 7 means the reader must refer to the Austroads <i>Guide to Road Safety</i> Part 7: <i>Road Strategy and Management</i> , and the <i>Queensland Guide to Road Safety</i> Part 7: <i>Road Strategy and Management</i> (QGRS Part 7).	
	Throughout AGRS Part 7, references are made to other Parts of the AGRS (for example, when reading AGRS Part 7, 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 <i>Queensland Guide to Road Safety</i> first. Check the applicability of the 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 7, the reader may be referred to the <i>Guide to 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 <u>Road Safety Policy</u>	
TORUM Act 1995	Transport Operations (Road Use Management) Act 1995	
TRUM	Volume 2 of the <u>Traffic and Road Use Management manual preceded this Part</u> of the Queensland Guide to Road Safety and was withdrawn on publication of the corresponding QGRS Part.	

# References

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

# Relationship table

Section		ction Title		Dept contact*
1.	Introduction		Accepted with amendments	LTSR
	1.1	Purpose of the Guide	Accepted	LTSR
	1.2	Road Safety Strategies	Accepted	LTSR
	1.3	Strategies for Different Levels of Government	Accepted	LTSR
	1.4	Character and Benefits of a Road Safety Strategy	Accepted	LTSR
	1.5	Developing a Road Safety Strategy	Accepted	LTSR
	1.6	Guiding Principles	Accepted with amendments	LTSR
	1.7	Critical Success Factors	Accepted	LTSR
2.	Partner	ships and Consultation	Accepted	LTSR
3.	Probler	Problem Analysis		LTSR
	3.1	Problem Definition	Accepted	LTSR
	3.2	Deeper Understanding of the Issues	Accepted	LTSR
	3.3	General Measures	Accepted	LTSR
	3.4	Changes in Population and Travel	Accepted	LTSR
	3.5	Additional Data Sources	Accepted	LTSR
	3.6	Public Opinion	Accepted	LTSR
	3.7	Societal and Technology Changes	Accepted	LTSR
4.	Countermeasure Selection		Accepted	LTSR
	4.1	Conceptual Frameworks for Countermeasure Selection	Accepted	LTSR
	4.2	Selection of Countermeasures	Accepted	LTSR
	4.3	Legal Issues	Accepted	LTSR
	4.4	Social and Economic Appraisals	Accepted	LTSR
	4.5	Other Considerations	Accepted	LTSR
5.	Target	Setting and Safety Performance Indicators	Accepted	LTSR
	5.1	Setting Road Safety Targets	Accepted with amendments	LTSR
	5.2	Safety Performance Indicators	Accepted	LTSR
	5.2.1	Casualty based indicators	Accepted	LTSR
	5.2.2	Intermediate goals	Accepted with amendments	LTSR
6.	Strateg	y and Action Plan Development	Accepted with amendments	LTSR
7	Implem	entation	Accepted	LTSR

Section		ection Title		Dept contact*
	7.1	Stakeholders	Accepted	LTSR
	7.2	Financing the Road Safety Strategy	Accepted	LTSR
	7.3	Implementation Plan	Accepted	LTSR
	7.4	Reporting	Accepted	LTSR
8.	Monitor	ing and Evaluation	Accepted	LTSR
	8.1	Monitoring Actions and Targets	Accepted	LTSR
	8.2	Process Evaluation	Accepted	LTSR
	8.3	Outcome Evaluation	Accepted	LTSR
	8.4	Responsibility for Monitoring and Evaluation	Accepted	LTSR
	8.5	Relation to other Austroads Material Dealing with Evaluation	Accepted	LTSR
9.	Introduo Manage	ction to Risk Assessment and Risk ment	Accepted	Safer Roads
	9.1	Definitions	Accepted	Safer Roads
	9.2	Principles of Risk Assessment and Risk Management	Accepted	Safer Roads
	9.3	Aims and Benefits of Risk Management	Accepted	Safer Roads
	9.4	Perception of Risk	Accepted	Safer Roads
	9.5	Barriers to the Introduction of Risk Management	Accepted	Safer Roads
10.	Principles of Risk Assessment and Risk Management		Accepted	Safer Roads
	10.1	Principles	Accepted	Safer Roads
	10.2	The Risk Management Process	Accepted	Safer Roads
	10.2.1	Communication and consultation	Accepted	Safer Roads
	10.2.2	Scope, context and criteria	Accepted	Safer Roads
	10.2.3	Identify risks	Accepted	Safer Roads
	10.2.4	Analyse risks	Accepted	Safer Roads
	10.2.5	Evaluate risks	Accepted	Safer Roads
	10.2.6	Treat risks	Accepted	Safer Roads
	10.2.7	Monitor and review	Accepted	Safer Roads
11.	Establis	hing the Context	Accepted	Safer Roads
	11.1	Road Trauma	Accepted	Safer Roads
	11.2	Legal Context	Accepted	Safer Roads
	11.2.1	Australia	Accepted	Safer Roads
	11.2.2	New Zealand	Accepted	Safer Roads
	11.3	Public Opinion	Accepted	Safer Roads

Section		on Title		Dept contact*
12.	Identify	ing Risks	Accepted	Safer Roads
	12.1	Road Trauma	Accepted	Safer Roads
	12.2	Legal Risk	Accepted	Safer Roads
	12.3	Risk from Adverse Public Opinion	Accepted	Safer Roads
13.	Analysi	Analysing Risks		Safer Roads
	13.1	Sources of Data	Accepted	Safer Roads
	13.2	Quantitative Approaches	Accepted	Safer Roads
	13.3	Qualitative and Semi-qualitative Analysis	Accepted	Safer Roads
	13.4	Data Quality and Integration	Accepted	Safer Roads
	13.5	Cost Effective Data Collection	Accepted	Safer Roads
14.	Evaluat	ing and Prioritising Risks	Accepted	Safer Roads
	14.1	Prioritising Risks	Accepted	Safer Roads
	14.1.1	Evaluation based on historic data	Accepted	Safer Roads
	14.1.2	Evaluation where there is little historic data	Accepted	Safer Roads
	14.1.3	Comparison between risk types	Accepted	Safer Roads
	14.2	Practical Examples	Accepted	Safer Roads
15.	The Tre	atment of Risk	Accepted	Safer Roads
16.	Monitor	ing and Review	Accepted	Safer Roads
17.	Risk Assessment and Management Case Studies		Accepted	Safer Roads
	17.1	Victorian Safe System Transformation of Top 20 Roads	Accepted	Safer Roads
	17.2	Queensland RISC Software Tool	Accepted	Road Design
	17.2.1	Hazard identification	Accepted	Road Design
	17.2.2	Risk analysis	Accepted	Road Design
	17.2.3	Assessment of remedial measures	Accepted	Road Design
	17.3	New South Wales Network Crash Rates	Accepted	Safer Roads
	17.4	AusRAP – Road Protection Score	Accepted	Safer Roads
	17.5	UK SafeNet	Accepted	Safer Roads
	17.6	Main Roads WA CRASHtool	Accepted	Safer Roads
	17.7	ALCAM	Accepted	Safer Roads
18.	Local G	Local Government Context		LTSR
	18.1	Local Government Road Safety and Community	Accepted with amendments	LTSR
	18.2	Strategic Role of Local Government	Accepted with amendments	LTSR
	18.3	Local Government's Duty of Care as a Road Authority	Accepted	LTSR

Section	Title	Queensland application	Dept contact*
18.4	18.4      Direct Actions to Improve Road Safety through Councils' Operations		LTSR
18.4.1	18.4.1 Action as a road authority		LTSR
18.4.2	18.4.2 Action as a planning authority		LTSR
18.4.3	Action as an employer and fleet operator	Accepted	LTSR
18.5			LTSR
18.6	Objectives of Community Road Safety	Accepted	LTSR
18.7	Requirements for Sustainable Community Action	Accepted	LTSR
18.8	Strategic Partnership and Capacity Building	Accepted	LTSR
18.9	Capacity Building and Social Capital Formation	Accepted	LTSR
18.9.1	The concepts	Accepted	LTSR
18.9.2	Application to social policy	Accepted	LTSR
18.10	Resources for Implementing a Road Safety Plan	Accepted	LTSR
18.11	Sources of Funding	Accepted	LTSR
18.12	Mobilising Resources	Accepted	LTSR
18.13	Implementation	Accepted	LTSR
18.14	Monitoring, Evaluation and Review	Accepted	LTSR
18.14.1	Process evaluation	Accepted	LTSR
18.14.2Outcome evaluation and the challenge of small numbersAcce		Accepted	LTSR
18.14.3	Assessment in the light of the full range of objectives	Accepted	LTSR
18.14.4	Program delivery outcomes	Accepted	LTSR
18.14.5	Human capital outcomes	Accepted	LTSR
18.14.6	Social capital outcomes	Accepted	LTSR
18.14.7	Social network analysis	Accepted	LTSR
18.14.8	Process evaluation	Accepted	LTSR
18.14.9	Towards a comprehensive evaluation process	Accepted	LTSR
18.15	Review	Accepted	LTSR
18.16	Communication and Reporting	Accepted	LTSR
18.16.1	Reports to council and to central authority	Accepted	LTSR
18.16.2	Communication with participants in the road safety program	Accepted	LTSR

Section		on Title		Dept contact*	
	18.16.3	Communication with the general public	Accepted	LTSR	
	18.16.4	Communication with other communities	Accepted	LTSR	
19.	Regional and Remote Areas		Accepted	Data Analysis	
	19.1	The Context	Accepted	Data Analysis	
	19.1.1	Defining regional and remote areas	Accepted	Data Analysis	
	19.1.2	Crashes in regional and remote areas	Accepted	Data Analysis	
	19.1.3	Crashes on regional and remote roads	Accepted	Data Analysis	
	19.1.4	Casualties on regional and remote roads	Accepted	Data Analysis	
	19.1.5	Summary of the regional and remote crash trends	Accepted	Data Analysis	
Refe	erences				
Арр	endices				
A	Haddon Develop	Matrix Conceptual Basis for Countermeasure ment	Accepted	LTSR	
В	Detail of	METS Modelling Approach to Target Setting	Accepted	Data Analysis	
С	Detail of road trac	Swedish system-wide method for modelling uma	Accepted	LTSR	
D	Managing Risk Associated with Road Users		Accepted	LTSR	
	D.1	Entry to the System	Accepted	LTSR	
	D.1.1	Fitness to drive	Accepted	LTSR	
	D.1.2	Driving licences	Accepted	LTSR	
	D.1.3	Licences for other vehicles	Accepted	LTSR	
	D.2	Removal from the System	Accepted	LTSR	
	D.2.1	Fitness to drive	Accepted	LTSR	
	D.2.2	Serious and repeat offenders	Accepted	LTSR	
	D.3	Emerging Possibilities	Accepted	LTSR	
	D.3.1	Controlling access to the road system	Accepted	LTSR	
	D.3.2	Eliminating possibilities for offending	Accepted	LTSR	
Е	Data So	urces	Accepted	Data Analysis	
F	Qualitati	Qualitative and Semi-Qualitative Analysis			
	F.1	Risk Classification	Accepted with amendments	Safer Roads	
	F.2	Fault and Success Trees	Accepted	Safer Roads	
	F.3	F.3 Cause-consequence Diagram		Safer Roads	
G	Benefit Cost Analysis		Accepted	Safer Roads	
Н	Example	Monitoring Databases	Accepted	Safer Roads	
	H.1	New Zealand Crash Analysis System	Accepted	Safer Roads	
	H.2	CMF Clearinghouse	Accepted	Safer Roads	

Departmental contacts:

- Safer Roads, Safer Roads Infrastructure, Engineering and Technology, Transport and Main Roads email <a href="mailto:saferroads@tmr.qld.gov.au">saferroads@tmr.qld.gov.au</a>.
- Road Design: Hydraulics, Design and Spatial, Engineering and Technology, Transport and Main Roads email <u>ET HDS RD Design Services@tmr.qld.gov.au.</u>
- Data Analysis: Data Analysis, Road Safety Programs, Safer Roads Infrastructure, Engineering and Technology, Transport and Main Roads email <u>dataanalysis@tmr.qld.gov.au</u>.
- LTSR: Land Transport Safety and Regulation, Transport and Main Roads email
  <u>ltsr.correspondence@tmr.qld.gov.au</u>.

# Contents

Abo	ut this document	i
How	to use this document	i
Defi	nitions	.ii
Refe	erences	iii
Rela	tionship table	iv
Con	tents	.x
1	Introduction	.1
1.6	Guiding Principles	1
5	Target Setting and Safety Performance Indicators	.1
5.1	Setting Road Safety Targets	1
5.2	Safety Performance Indicators      5.2.2    Intermediate goals	
6	Strategy and Action Plan Development	.3
18	Local Government Context	.3
18.1	Local Government Road Safety and Community	3
18.2	Strategic Role of Local Government	3
18.4	Direct Actions to Improve Road Safety through Councils' Operations18.4.1Action as a road authority	
Арр	endix F – Qualitative and Semi-Qualitative Analysis	.3
F.1	Risk Classification	3

# 1 Introduction

#### <u>Difference</u>

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.

# 1.6 Guiding Principles

#### **Difference**

References to superseded national strategies and action plans shall be replaced with the current national strategies and action plans.

# 5 Target Setting and Safety Performance Indicators

# 5.1 Setting Road Safety Targets

#### Difference

References to superseded national strategies and action plans shall be replaced with the current national strategies and action plans.

# 5.2 Safety Performance Indicators

#### 5.2.2 Intermediate goals

#### **Difference**

Replace Text Box 2: *Safety Performance Indicators (SPIs)* from the Australian National Road Safety Strategy 2011–2021) content with:

Text Box 2: Safety Performance Indicators (SPIs) from the Australian National Road Safety Strategy 2021–2030)

#### Lag indicators

- Number and rate per capita of road crash fatalities.
- Number and rate per capita of road crash serious injuries (measured against the national definition admitted to hospital irrespective of length of stay).

#### Lead indicators

#### Safe roads

- Share of state and territory governments and local councils with a fit-for-purpose road safety risk assessment as an investment plan for its infrastructure.
- Share of travel on all national highways and on the high speed network (≥ 80 km/h) covering 80% of travel recognised as 3 stars (or equivalent risk rating) or better.
- Share of road length on designated motorcycle routes with motorcycle-friendly crash barriers.
- Share of high pedestrian CBD / town centre areas under Movement and Place or equivalent approaches with posted speed limits ≤ 40 km/h.
- Share of roads in urban areas with a posted speed limit ≥ 50 km/h with separated cycle ways, and in urban areas outside of ABS remoteness category 'major cities'.
- Share of signalised intersections with a speed limit < 70 km/h.

# Safe vehicles

• Share of light vehicle fleet that has an ANCAP 5 star rating within a six-year date stamp.

#### Safe road use

- Share of drivers and riders tested who are not over the applicable blood alcohol concentration limit or under the influence of drugs.
- Share of vehicles at or below speed limit.
- Share of drivers and riders observed/photographed not using a mobile phone or device.
- Share of motor vehicle occupants wearing seatbelts.

# 6 Strategy and Action Plan Development

#### Difference

References to superseded national strategies and action plans shall be replaced with the current national strategies and action plans.

# 18 Local Government Context

### 18.1 Local Government Road Safety and Community

#### **Difference**

References to superseded national strategies and action plans shall be replaced with the current national strategies and action plans.

#### 18.2 Strategic Role of Local Government

#### **Difference**

Reference to superseded document references shall be replaced with the current document references.

# 18.4 Direct Actions to Improve Road Safety through Councils' Operations

#### 18.4.1 Action as a road authority

#### **Difference**

References to superseded national strategies and action plans shall be replaced with the current national strategies and action plans.

# Appendix F – Qualitative and Semi-Qualitative Analysis

# F.1 Risk Classification

#### Addition

Whilst this example is acceptable, where possible the preferred risk classification approach is that used in Austroads *Guide to Road Safety Part 6: Road Safety Audit* Section 10.5.1.

**13 QGOV (13 74 68)** www.tmr.qld.gov.au | www.qld.gov.au