

# New Guides from Austroads Consortium



NZ TRANSPORT AGENCY  
WAKA KOTAHI



*Austroads*

New Zealand Government

# The Consortium members

- **Representatives from:**
  - **NZ Transport Agency**
  - **New South Wales**
  - **Victoria**
  - **Queensland**
  - **Western Australia**
  - **South Australia**
  - **Tasmania**
  - **Northern Territory**
  - **Capital Territory**
  - **DOT & Regional Services**
  - **Local Government Association**



# Guides, Codes and Standards

## Pirates of the Caribbean: The Curse of the Black Pearl

### Elizabeth:

Wait! You have to take me to shore. According to the Code of the Order of the Brethren...

### Barbossa:

First, your return to shore was not part of our negotiations nor our agreement so I must do nothing. And secondly, you must be a pirate for the pirate's code to apply and you're not. And thirdly, **the code is more what you'd call "guidelines" than actual rules.** Welcome aboard the Black Pearl, Miss Turner



# *The Guides – Audiences*

- **Policy Makers and Strategic Planners**
  - Road Transport Planning
  - Road Safety
  - Traffic Management
- **Project Managers**
  - Project Delivery
  - Project Evaluation
- **Design Practitioners**
  - Road Design
  - Bridge Technology
  - Road Tunnels
  - Pavement Technology
- **Network and Asset managers**
  - Asset Management

# *The Guides – Positioning (i)*

- **Augment current guides and practices**
  - **Rationalised**
  - **Updated information**
  - **Review of best practice and research**
- **Refer to Jurisdictional variations**
  - **MOTSAM**

# *The Guides – Positioning (ii)*

- **Replace current guides and practices**
  - Rationalised
  - Updated information
  - Review of best practice and research
- **Refer to Jurisdictional variations**
  - MOTSAM
- **Require Jurisdictional Supplements**
- **Phasing out of superseded guides**
  - SHGDM (Draft)

**FEEDBACK**



# *Providing for a Safe System*

... designing, constructing and maintaining a road system (roads, vehicles and operating requirements) so that forces on the human body generated in crashes are generally less than those resulting in fatal or debilitating injury.....

# Providing for a Safe System

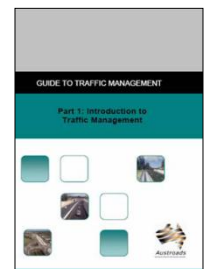
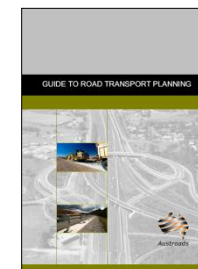
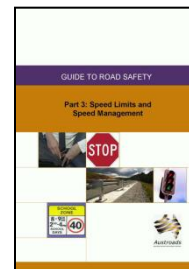
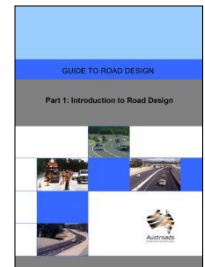
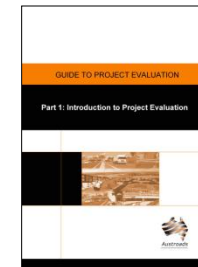
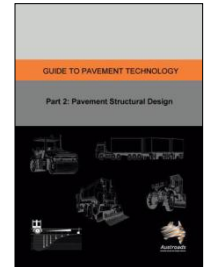
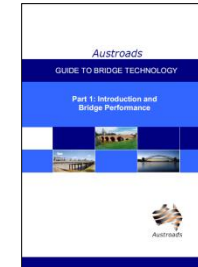
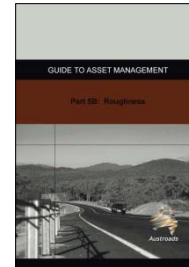




# The Guides – Summary

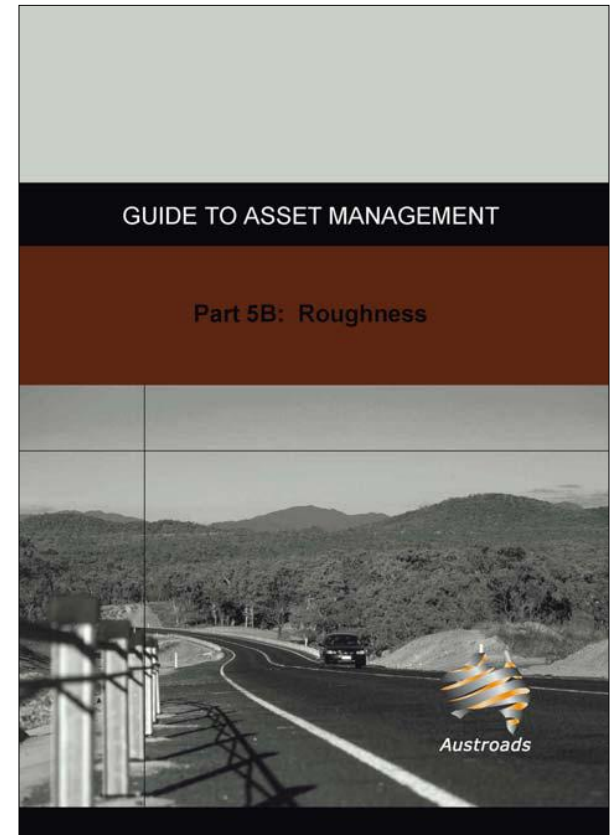
- **Asset Management** - **16 Parts**
- **Bridge Technology** - **7 Parts**
- **Pavement Technology** - **22 Parts**
- **Project Delivery** - **4 Parts**
- **Project Evaluation** - **8 Parts**
- **Road Design** - **13 Parts**
- **Road Safety** - **9 Parts**
- **Road Transport Planning** - **1 Part**
- **Traffic Management** - **13 Parts**
- **Road Tunnels (TBC)** - **3 Parts**

**Total of 96 Parts + Glossary of Terms**



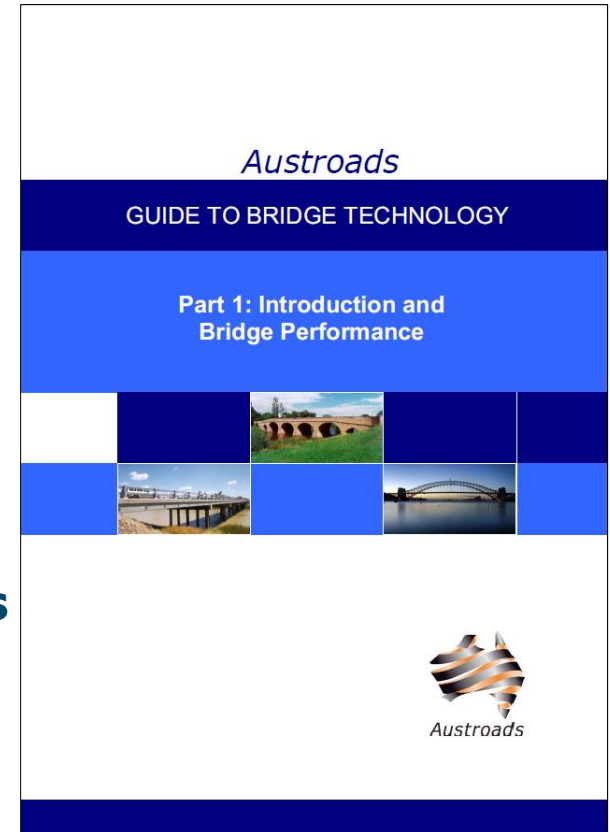
# The Guides – Asset Management

- **Part 1 Introduction to Asset Management**
- **Part 2 Stakeholder/Community Requirements**
- **Part 3 Asset Strategies**
- **Part 4 Program Development and Implementation**
- **Part 5 Pavement Performance**
  - **Part 5A – Inventory**
  - **Part 5B – Roughness**
  - **Part 5C – Rutting**
  - **Part 5D – Strength**
  - **Part 5E – Cracking**
  - **Part 5F – Skid Resistance**
  - **Part 5G – Texture**
  - **Part 5H – Performance Modelling**
- **Part 6 Bridge Performance**
- **Part 7 Road Related Assets Performance**
- **Part 8 Asset Valuation and Audit**



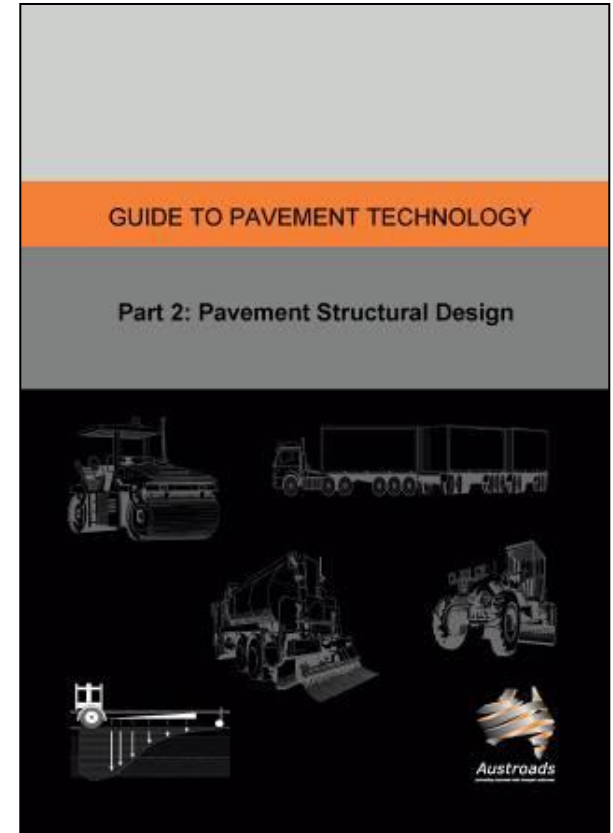
# The Guides – Bridge Technology

- **Part 1 Introduction and Bridge Performance**
- **Part 2 Materials**
- **Part 3 Typical Bridge Superstructures, Substructures and Components**
- **Part 4 Design Procurement and Concept Design**
- **Part 5 Structural Drafting**
- **Part 6 Bridge Construction**
- **Part 7 Maintenance and Management of Existing Bridges**



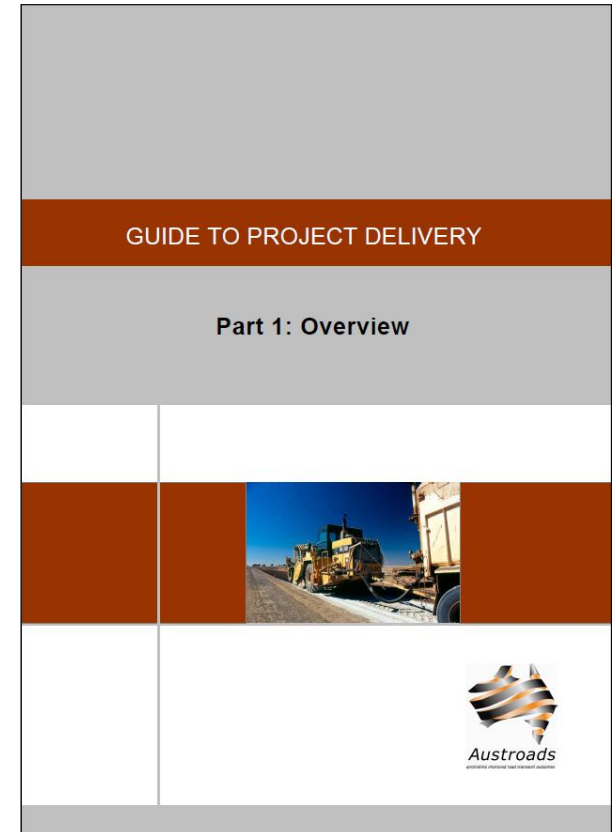
# The Guides – Pavement Technology

- **Part 1 Introduction to Pavement Technology**
- **Part 2 Pavement Structural Design**
- **Part 3 Pavement Surfacing**
- **Part 4 Pavement Materials**
  - **Part 4A – Granular Base and Sub Base Materials**
  - **Part 4B – Asphalt**
  - **Part 4C – Materials for Concrete Road Pavements**
  - **Part 4D – Stabilised Materials**
  - **Part 4E – Recycled Materials**
  - **Part 4F – Bituminous Binders**
  - **Part 4G – Geotextiles and Geogrids**
  - **Part 4H – Test Methods**
  - **Part 4I – Earthworks Materials**
  - **Part 4J – Aggregate and Source Rock**
  - **Part 4K – Seals**
  - **Part 4L – Stabilising Binders**
- **Part 5 Pavement Evaluation and Treatment Design**
- **Part 6 Unsealed Pavements**
- **Part 7 Pavement Maintenance**
- **Part 8 Pavement Construction**
- **Part 9 Pavement Work Practices**
- **Part 10 Sub-Surface Drainage**



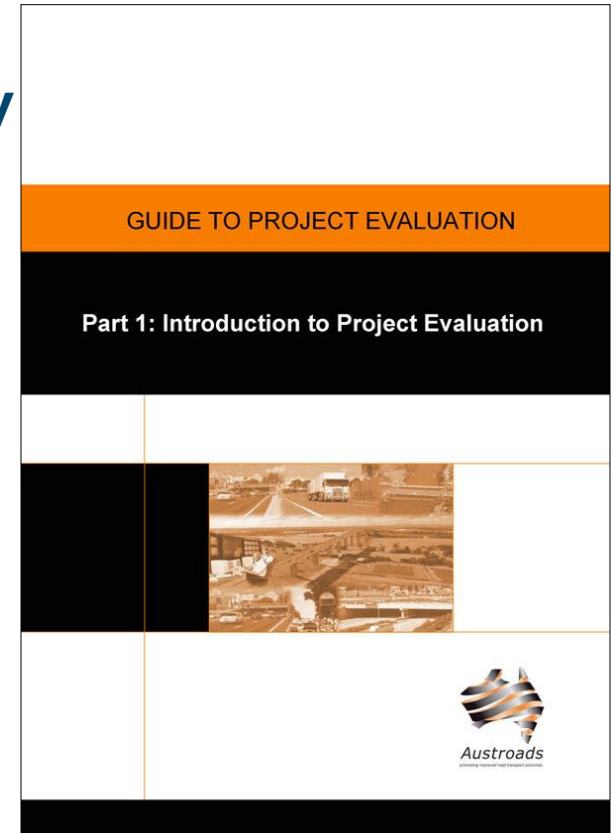
# The Guides – Project Delivery

- **Part 1 Overview**
- **Part 2 Project delivery planning and control**
- **Part 3 Contract Management**
- **Part 4 Direct management of construction**



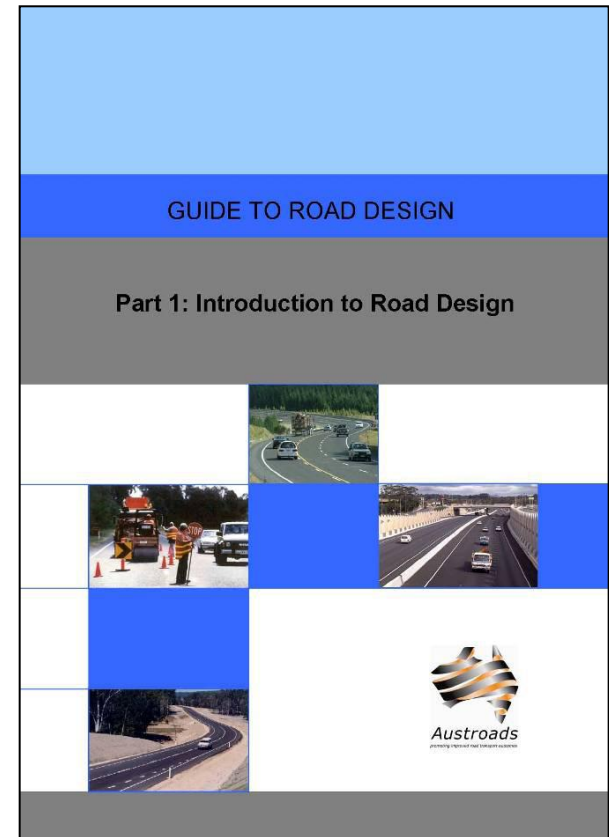
# The Guides – Project Evaluation

- **Part 1 Introduction**
- **Part 2 Project evaluation methodology**
- **Part 3 Models and procedures**
- **Part 4 Project evaluation data**
- **Part 5 Impact on the national and regional economies**
- **Part 6 Distributional (equity) effects**
- **Part 7 Post-completion evaluation**
- **Part 8 Examples and applications**



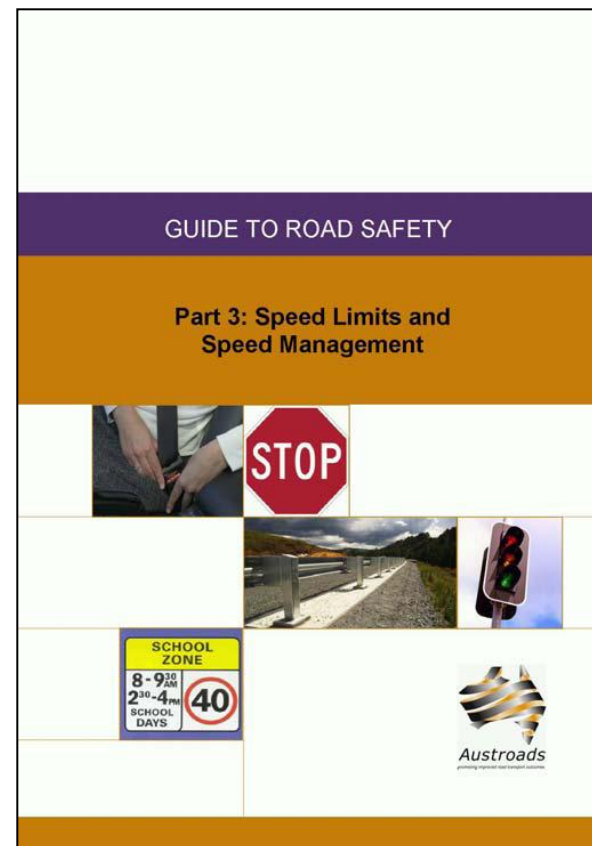
# The Guides – Road Design

- **Part 1 Introduction to Road Design**
- **Part 2 Design Considerations**
- **Part 3 Geometric Design**
- **Part 4 Intersections and Crossings**
  - **Part 4A – Unsignalised and Signalised Intersections**
  - **Part 4B – Roundabouts**
  - **Part 4C – Interchanges**
- **Part 5 Drainage Design**
- **Part 6 Roadside Design, Safety and Barriers**
  - **Part 6A – Pedestrian and Cyclist Paths**
  - **Part 6B – Roadside Environment**
- **Part 7 Geotechnical Investigation & Design**
- **Part 8 Process and Documentation**



# The Guides – Road Safety

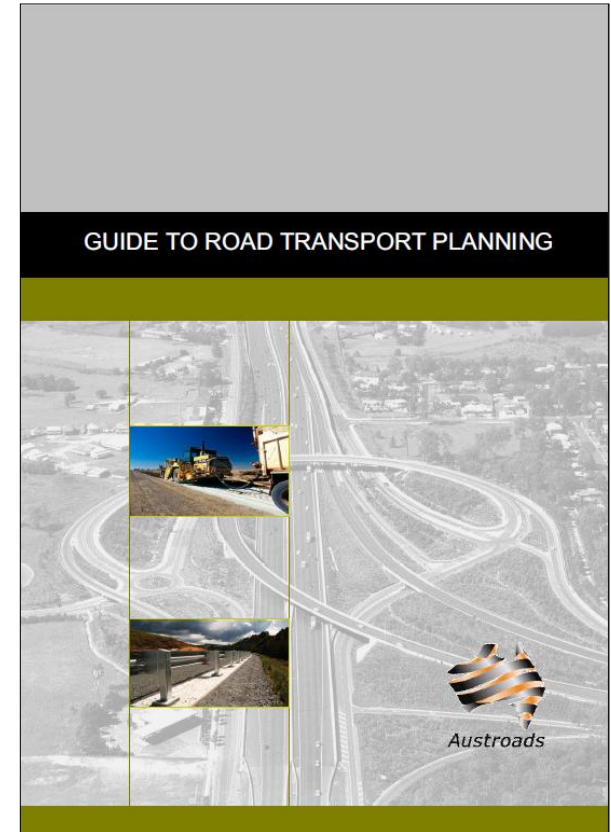
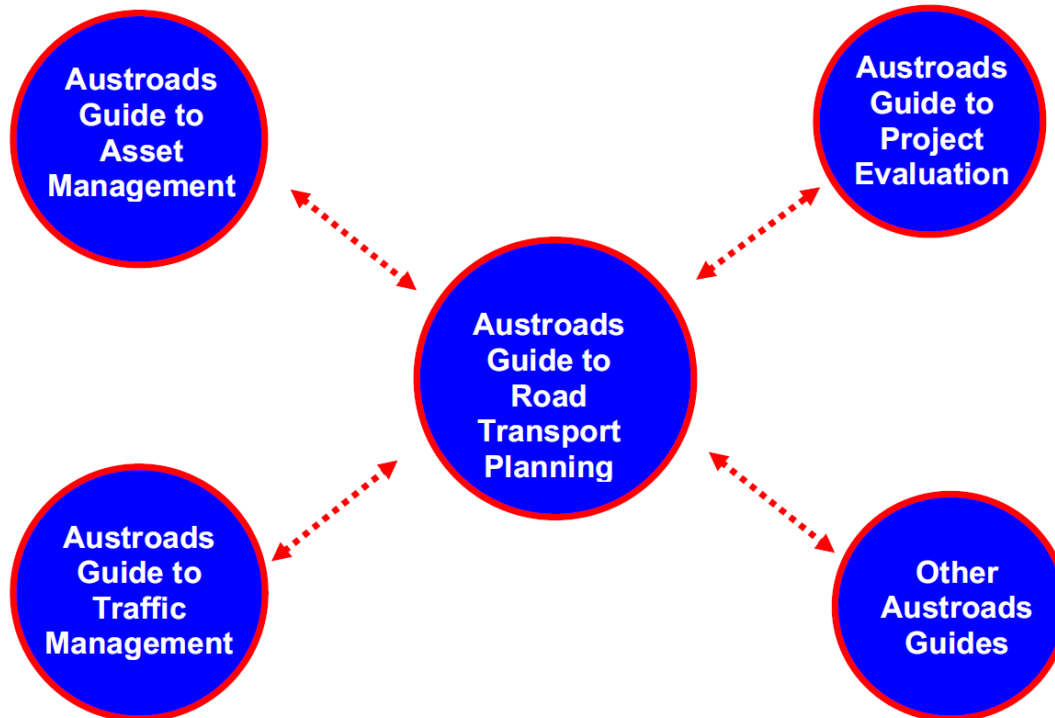
- **Part 1 Road Safety Overview**
- **Part 2 Road Safety Strategy and Evaluation**
- **Part 3 Speed Limits and Speed Management**
- **Part 4 Local Government and Community Road Safety**
- **Part 5 Road Safety for Rural and Remote Areas**
- **Part 6 Road Safety Audit (update of existing guide)**
- **Part 7 Road Network Crash Risk Assessment and Management**
- **Part 8 Treatment of Crash Locations (update of existing guide)**
- **Part 9 Roadside Hazard Management**





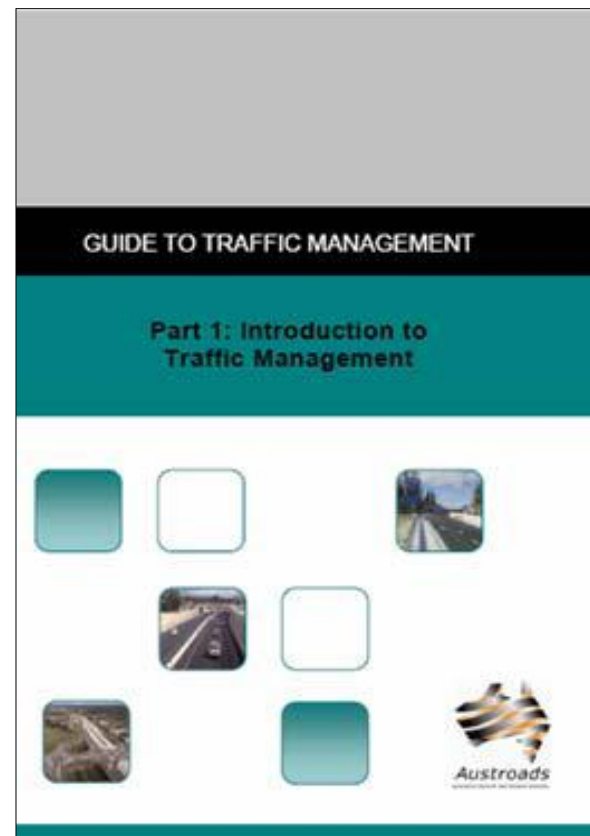
# The Guides – Road Transport Planning

'Provides a frame of reference regarding road planning principles and processes...'



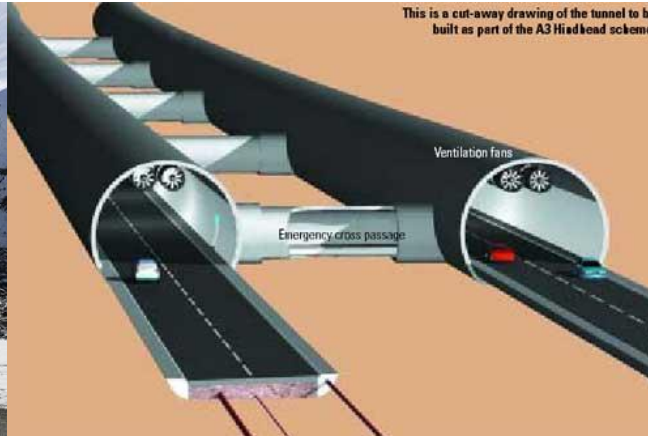
# The Guides – Traffic Management

- **Part 1 Introduction**
- **Part 2 Traffic Theory**
- **Part 3 Traffic Studies and Analysis**
- **Part 4 Network Management**
- **Part 5 Road Management**
- **Part 6 Intersections, Interchanges and Crossings**
- **Part 7 Traffic Management in Activity Centres**
- **Part 8 Local Area Traffic Management**
- **Part 9 Traffic Operations**
- **Part 10 Traffic Control Devices**
- **Part 11 Parking**
- **Part 12 Traffic Impacts of Developments**
- **Part 13 Road Environment Safety**



# The Guides – Road Tunnels

- **Part 1 Introduction to Road Tunnels**
- **Part 2 Planning, Design and Commissioning**
- **Part 3 Operation and Maintenance**



# *Update and Review Schedule*

- Up-to-date, consistent and contemporary
- Each guide will be reviewed
  - based on feedback from the industry
  - as new research is conducted and published
  - at least every five years
- Reviews and updating will be communicated via newsletter, RoadWatch and Austroads website.

**[www.austroads.com.au](http://www.austroads.com.au)**

# *Where can I get a copy?*

- **Guides are available in hardcopy and PDF format from the Austroads website**
- **Guides are free (in PDF format) to road agencies including councils in Australia and New Zealand.**

[www.onlinepublications.austroads.com.au](http://www.onlinepublications.austroads.com.au)

# NZTA Promulgation programme

- **Primary source**  
**[www.nzta.govt.nz](http://www.nzta.govt.nz)**
- **Three Categories of Guide:**
  - **Replacement for Current Guides**
  - **Best Practice**
  - **Reference only**

# Guide Categories

Category	Relevance/Impact	Guides	Actions
1. Reference only	<ul style="list-style-type: none"> <li>•Background information and reading</li> <li>•Little or no impact on current practice</li> <li>•No reference made to replaced documents in any manuals, processes or procedures</li> <li>•Promulgated as information only</li> </ul>	<b>Project Evaluation</b> <b>Road Safety*</b> <b>Transport Planning</b>	<ul style="list-style-type: none"> <li>•Website promotion only               <ul style="list-style-type: none"> <li>◦Listed with synopsis</li> <li>◦Guidelines for intended use and positioning</li> </ul> </li> <li>•Listed as additional reference and reading in documents</li> </ul>
2. Best practice guidelines	<ul style="list-style-type: none"> <li>•Confirmation of or improvements to working practices</li> <li>•Referred to in one or more manual, process or procedure</li> <li>•Impact on process/procedure rather than physical works</li> <li>•Require promulgation with a higher emphasis and profile</li> </ul>	<b>Asset Management</b> <b>Project Delivery</b> <b>Traffic Management</b> <b>Bridge Technology</b> <b>Pavement Technology</b>	Website plus targeted communication <ul style="list-style-type: none"> <li>•Website promotion               <ul style="list-style-type: none"> <li>◦Listed with synopsis</li> <li>◦Guidelines for intended use and positioning</li> </ul> </li> <li>•Targeted communication explaining relevance and anticipated impact               <ul style="list-style-type: none"> <li>◦Includes strategy for project implementation</li> </ul> </li> </ul> Update references in published manuals and procedures
3. Replacements for active documents	<ul style="list-style-type: none"> <li>•Direct replacements for design manuals/standards</li> <li>•Integral part of a manual, process or procedure</li> <li>•High impact on process/procedure and physical works</li> <li>•Important to promulgate effectively and efficiently</li> </ul>	<b>Road Design</b>	All of #2 plus: <ul style="list-style-type: none"> <li>•Awareness Seminars/workshops               <ul style="list-style-type: none"> <li>◦NZTA Offices and teams</li> <li>◦RCA's</li> </ul> </li> <li>•Advice about appropriate project implementation               <ul style="list-style-type: none"> <li>◦Web-based</li> <li>◦Targeted communication</li> </ul> </li> </ul>

• [www.nzta.govt.nz](http://www.nzta.govt.nz)

# *NZTA Promulgation programme*

## **Replacement for Current Guides**

- **Awareness Seminars/workshops**
  - **NZTA Offices and teams**
  - **RCA's**
  - **Practitioners**
- **Advice about appropriate project implementation**
  - **Web-based**
  - **Targeted communication**





# *NZTA Promulgation programme*

## **Awareness Seminars/workshops**

- **In association with ARRB**
  - **Guides to Traffic Management and Road Safety**
    - **Auckland – 21<sup>st</sup> June 2010**
    - **Wellington – 23<sup>rd</sup> June 2010**
    - **Christchurch – 25<sup>th</sup> June 2010**

# *NZTA Promulgation programme*

## **Awareness Seminars/workshops**

- **Guide to Road design (Parts 3, 4 & 6)**
  - **Auckland – 27<sup>th</sup> July 2010**
  - **Hamilton – 28<sup>th</sup> July 2010**
  - **Wellington – 30<sup>th</sup> July 2010**
  - **Christchurch – 2<sup>nd</sup> August 2010**
  - **Dunedin – 4<sup>th</sup> August 2010**

# *NZTA Promulgation programme*

## **Best Practice**

- **Website promotion**
  - **Listed with synopsis**
  - **Guidelines for intended use and positioning**
  - **Targeted communication explaining relevance and anticipated impact**
    - **Includes strategy for project implementation**
- **Update references in published manuals and procedures**

# *NZTA Promulgation programme*

## **Reference Only**

- **Website promotion**
  - **Listed with synopsis**
  - **Guidelines for intended use and positioning**
- **Listed as additional reference and reading in documents**



# NZTA Promulgation

Home | Related

## Highway Design Advice

Creating a safe, forgiving, readable and predictable environment that is appropriate to its context and environmentally sensitive.

[▶ more](#)

- ▶ **Austroads Guides**
- ▶ **NZ Austroads Supplement**
- ▶ **Technical Advice Notes**
- ▶ **Environmental Issues**
- ▶ **Urban Design**
- ▶ **Planning Issues**
- ▶ **Frequently asked questions**

Tolling online

SEARCH

resources & manuals

About us

Highway design

The sta

New Zealand's strategic road network and from work to a robust route for the network safe, read closely with traffic operating and its impact on the needs of the bu

Key bridge? Put our one-stop

# Information Board

- [www.nzta.govt.nz](http://www.nzta.govt.nz)
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