Queensland Guide to Traffic Management

Part 12: Integrated Transport Assessments for Developments (2020)

July 2021



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Feedback

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

About this document

Austroads' <u>Guide to Traffic Management</u> Part 12: Integrated Transport Assessments for Developments is concerned with identifying and managing the impacts on the road system arising from land use developments. It provides guidance for planners and engineers associated with the design, development and management of a variety of land use developments. The Guide aims to ensure consistency in the assessment and treatment of traffic impacts, including addressing the needs of all road users and the effect upon the broader community.

Part 12 presents the land use and transport planning context for traffic impact assessment, including travel demand, safety, parking and access management issues. It provides guidance on the need and criteria for impact assessments, and a detailed procedure for identifying and assessing the traffic impacts and mitigating their effects. Assessment of safety, infrastructure and environmental effects is also covered. Examples are given of checklists, report structures, traffic generation rates and case study projects.

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 12: *Integrated Transport Assessments for Developments* except where the *Guide* is accepted without changes.

This Part is designed to be read and applied together with Austroads *Guide to Traffic Management* Part 12: *Integrated Transport Assessments for Developments*. Readers must have access to the Austroads *Guide* to understand application in Queensland.

This document:

- sets out how the Austroads *Guide to Traffic Management* Part 12: *Integrated Transport* Assessments for Developments applies in Queensland
- has precedence over the Austroads *Guide to Traffic Management* Part 12: *Integrated Transport Assessments for Developments* when applied in Queensland, and
- has the same section numbering and headings as the Austroads *Guide to Traffic Management* Part 12: *Integrated Transport Assessments for Developments*.

The following table summarises the relationship between the Austroads *Guide to Traffic Management* Part 12: *Integrated Transport Assessments for Developments* 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. |

Definitions

The following general amended definitions apply when reading the *Queensland Guide to Traffic Management* Part 12: *Integrated Transport Assessments for Developments*.

| Reference to | Means |
|--------------|--|
| AGTM Part 12 | Austroads <i>Guide to Traffic Management</i> Part 12: <i>Integrated Transport</i> <i>Assessments for Developments</i> , as amended by this document; for example, a reference to AGTM Part 12 means the reader must refer to the Austroads <i>Guide to Traffic Management</i> Part 12: <i>Integrated Transport</i> <i>Assessments for Developments</i> , and the <i>Queensland Guide to Traffic</i> <i>Management</i> Part 12: <i>Integrated Transport Assessments for</i> <i>Developments</i> (QGTM Part 12). |
| | Throughout AGTM Part 12, references are made to other Parts of the AGTM (for example, when reading AGTM Part 12, 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 12, the reader may be referred to the <i>Guide to Road Safety</i> Part 3: <i>Speed Limits and Speed Management</i>). |
| | 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 <u><i>Traffic and Road Use Management</i></u> (TRUM) manual preceded this <i>Queensland Guide to Traffic Management</i> 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

• <u>www.legislation.qld.gov.au</u>

Relationship table

Austroads *Guide to Traffic Management* Part 12: *Traffic Impacts of Development* is **not accepted and does not apply** in Queensland.

| Section | | Title | Queensland application |
|---------|--|--|------------------------|
| 1. | Introduc | tion | |
| | 1.1 | Purpose | Not accepted |
| | 1.2 | Intended User | Not accepted |
| | 1.3 | How to Use | Not accepted |
| | 1.4 | Scope | Not accepted |
| | 1.5 | Out of Scope | Not accepted |
| 2. | Transpo | rt Impacts and Developments | |
| | 2.1 | Why Assess the Traffic Impacts of Developments? | Not accepted |
| | 2.2 | Considering the Type and Scale of a Development | Not accepted |
| | 2.3 | Traffic Impact Assessments in Context | Not accepted |
| 3. | Setting The Scene for Traffic Impact Assessments | | Not accepted |
| 0. | 3.1 | Transport and Town Planning | |
| | 3.1.1 | Planning Schemes and Transport | Not accepted |
| | 3.1.2 | Planning Processes | Not accepted |
| | 3.1.3 | Transport Considerations | Not accepted |
| | 3.1.4 | Road Safety Considerations | Not accepted |
| | 3.1.5 | Travel Demand Management and Sustainable Development | Not accepted |
| | 3.1.6 | Parking Supply and Parking Restraint | Not accepted |
| | 3.1.7 | Planning for Public Transport | Not accepted |
| | 3.2 | Road Network Planning | |
| | 3.2.1 | Road Classification | Not accepted |
| | 3.2.2 | Arterial Roads and Local Streets | Not accepted |
| | 3.2.3 | Recent Developments | Not accepted |
| | 3.3 | Traffic Planning | |
| | 3.3.1 | Road Access Management | Not accepted |
| | 3.3.2 | Parking Issues | Not accepted |
| 4. | Traffic Management for Developments | | |
| | 4.1 | Elements | Not accepted |
| | 4.2 | Road User Considerations | |
| | 4.2.1 | General Traffic | Not accepted |
| | 4.2.2 | Vehicle Types | Not accepted |

Queensland-specific advice is provided in the <u>Guide to Traffic Impact Assessment</u>.

| S | ection | Title | Queensland application |
|----|---------------------------|--|------------------------|
| | 4.2.3 | Heavy Vehicles | Not accepted |
| | 4.2.4 | Buses | Not accepted |
| | 4.2.5 | Emergency Vehicles | Not accepted |
| | 4.2.6 | Pedestrians | Not accepted |
| | 4.2.7 | Cyclists | Not accepted |
| | 4.2.8 | Light Rail and Bus Rapid Transit Systems | Not accepted |
| | 4.2.9 | Network Operating Frameworks and Plans | Not accepted |
| | 4.3 | Access to Developments | |
| | 4.3.1 | Approach Roads | Not accepted |
| | 4.3.2 | Driveways or Intersections into the Development | Not accepted |
| | 4.3.3 | Internal Roads, Circulation Areas and Parking | Not accepted |
| | 4.4 | Subdivision Developments | Not accepted |
| | 4.4.1 | Residential Subdivisions | Not accepted |
| | 4.4.2 | Industrial Subdivisions | Not accepted |
| 5. | Traffic Impact Assessment | | Not accepted |
| | 5.1 | What is a Traffic Impact Assessment? | Not accepted |
| | 5.1.1 | Traffic Impact Assessment Report | Not accepted |
| | 5.1.2 | Traffic Impact Statement | Not accepted |
| | 5.2 | The Need for Traffic Impact Assessment | |
| | 5.2.1 | General | Not accepted |
| | 5.2.2 | Criteria for Traffic Impact Assessment | Not accepted |
| | 5.2.3 | Assessing Site Suitability for Development | Not accepted |
| | 5.2.4 | Other Assessments | Not accepted |
| | 5.3 | Steps in a Traffic Impact Assessment | Not accepted |
| | 5.4 | Conducting a Traffic Impact Assessment | Not accepted |
| | 5.4.1 | Document the Proposed Development | Not accepted |
| | 5.4.2 | Resolve Any Initial Problems with Designers | Not accepted |
| | 5.4.3 | Identify Area and Stakeholders Affected | Not accepted |
| | 5.4.4 | Describe Existing and Design Year Conditions | Not accepted |
| | 5.4.5 | Determine Generated Traffic and Modal Split | Not accepted |
| | 5.4.6 | Determine Approach and Departure Directions | Not accepted |
| | 5.4.7 | Assign Traffic to Roads | Not accepted |
| | 5.4.8 | Determine Where Non-car Traffic Will Go | Not accepted |
| | 5.4.9 | Review Limits of Area Affected | Not accepted |
| | 5.4.10 | Assess Traffic Operation on Roads | Not accepted |
| | 5.4.11 | Assess Traffic Operation On-site | Not accepted |
| | 5.4.12 | Determine Required Impact-mitigating Treatments | Not accepted |

| Ś | Section | Title | Queensland application |
|--------|--|--|------------------------|
| | 5.4.13 | Obtain Independent Road Safety Engineering Assessment | Not accepted |
| | 5.4.14 | Document Findings and Recommendations | Not accepted |
| 6. | Assessm | ent of Other Impacts | |
| | 6.1 | Introduction | Not accepted |
| | 6.2 | Road Safety Assessment | |
| | 6.2.1 | Types of Road Safety Assessment | Not accepted |
| | 6.2.2 | Types of Developments to be Assessed or Audited | Not accepted |
| | 6.2.3 | Who Should Undertake an Assessment or Audit | Not accepted |
| | 6.2.4 | Typical Road Safety Issues | Not accepted |
| | 6.3 | Infrastructure and Pavement Impact Assessment | Not accepted |
| | 6.4 | Environmental and Other Impacts | Not accepted |
| Арр | endices | | |
| А | Checklist | for Traffic Impact Assessments | Not accepted |
| В | Example Checklists | | |
| | B.1 | Technical Completeness Checklist | Not accepted |
| | B.2 | Checklists for Road Impact Assessment | Not accepted |
| С | Traffic Impact Assessment Report Structure | | |
| | C.1 | Report Outline | Not accepted |
| C D | Example of Traffic Generation Rates | | Not accepted |
| | D.1 | Low Density Residential Flat Dwellings | Not accepted |
| | D.2 | High Density Residential Flat Dwellings | Not accepted |
| | D.3 | Housing for Seniors | Not accepted |
| | D.4 | Office Blocks | Not accepted |
| | D.5 | Business Parks and Industrial Estates | Not accepted |
| Е | Sample F | Rural Project – Quarry | Not accepted |
| | E.1 | Step 1: Development Profile | |
| | E.1.1 | Development Details | Not accepted |
| | E.1.2 | Surrounding Road Network Details | Not accepted |
| | E.1.3 | Development Traffic Generation | Not accepted |
| | E.1.4 | Traffic Generation – Light Vehicles | Not accepted |
| | E.1.5. | Traffic Generation – Heavy Commercial Vehicles | Not accepted |
| | E.1.6 | Development Traffic Distribution | Not accepted |
| | E.1.7 | Study Network Definition | Not accepted |
| | E.1.8 | Design Horizon | Not accepted |
| | E.1.9 | On-site Aspects | Not accepted |
| | E.2 | Step 2: Pavement Impact Assessment | Not accepted |

| S | ection | Title | Queensland application |
|-----|---|---|------------------------|
| | E.3 | Step 3: Traffic Operation Assessment | Not accepted |
| | E.3.1 | Road Link Analysis | Not accepted |
| | E.3.2 | Intersection Analysis | Not accepted |
| | E.4 | Step 4: Safety Review | Not accepted |
| | E.5 | Step 5: Environmental and Other Issues | Not accepted |
| | E.6 | Step 6: Impact Mitigation | |
| | E.6.1 | Impacts | Not accepted |
| | E.6.2 | Costing / Contributions | Not accepted |
| F | Sample Urban Project – Commercial / Industrial Development | | Not accepted |
| | F.1 | Step 1: Development Profile | |
| | F.1.1 | Development Details | Not accepted |
| | F.1.2 | Surrounding Road Network Details | Not accepted |
| | F.1.3 | Development Traffic Generation | Not accepted |
| | F.1.4 | Development Traffic Distribution | Not accepted |
| | F.1.5 | Study Network Definition | Not accepted |
| | F.1.6 | Pavement Impacts | Not accepted |
| | F.1.7 | Design Horizon | Not accepted |
| | F.1.8 | On-site Aspects | Not accepted |
| | F.2 | Step 2: Pavement Impact Assessment | Not accepted |
| | F.3 | Step 3: Traffic Operation Assessment | Not accepted |
| | F.3.1 | Intersection Analysis | Not accepted |
| | F.4 | Step 4: Safety Review | Not accepted |
| | F.5 | Step 5: Environmental and Other Issues | Not accepted |
| | F.6 | Step 6: Impact Mitigation | Not accepted |
| Com | mentaries | | |
| C1 | Commentary 1 | | Not accepted |
| | C1.1 | Transport Assessment and Traffic Impact Assessment | Not accepted |
| | C1.2 | Contents of a Full Transport Assessment | Not accepted |
| C2 | Commen | tary 2 | Not accepted |
| C3 | Commen | tary 3 | |
| | C3.1 | Functional Classification | Not accepted |
| | C3.2 | Networks for Specific Road User Groups | Not accepted |
| C4 | Commen | nentary 4 Not accepted | |
| C5 | Commentary 5 | | |
| | C5.1 | Process | Not accepted |
| | C5.2 | Existing Traffic Data | Not accepted |

| Section | | Title | Queensland application |
|---------|--------------|-----------------------------------|------------------------|
| | C5.3 | Design Year | Not accepted |
| | C5.4 | Traffic Growth and Future Traffic | Not accepted |
| C6 | Comment | tary 6 | Not accepted |
| C7 | Commentary 7 | | Not accepted |
| C8 | Commentary 8 | | Not accepted |
| C9 | Commentary 9 | | Not accepted |

Contents

| About this document | i |
|--|-----|
| How to use this document | i |
| Definitions | ii |
| References | ii |
| Relationship table | iii |
| Austroads guidance applies in Queensland | 1 |

Austroads guidance does not apply in Queensland

Austroads Guide to Traffic Management Part 12: Integrated Transport Assessments for Developments is **not accepted and does not apply** in Queensland.

Queensland-specific advice is provided in the <u>Guide to Traffic Impact Assessment</u>. This document takes precedence over national guidance on this topic in Queensland.

For general enquiries about the guidelines, please contact:

Director (Corridor Management and Protection Unit) Transport Strategy and Planning Branch Transport and Main Roads

Email: planningpolicy@tmr.qld.gov.au.

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