



Best practice guide for roadside rest areas in Queensland

A guide for community groups, local governments and
relevant state government agencies in Queensland

July 2014

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- Caravan Parks Association of Queensland
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- Royal Automobile Club of Queensland
- Department of Transport and Main Roads

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Acronyms

CMCA	Campervan and Motorhome Club of Australia, through MoTOURing Australia	MUTCD	Manual of Uniform Traffic Control Devices
CIAA	Caravan Industry Association of Australia (formerly Caravan, Recreational Vehicles and Accommodation Industry of Australia)	NTDT	Northern Territory Department of Transport
CPAQ	Caravan Parks Association of Queensland	QDTS	<i>Queensland Drive Tourism Strategy 2013–2015</i>
CPTED	Crime Prevention Through Environmental Design	QTIC	Queensland Tourism Industry Council
DNRM	Department of Natural Resources and Mines	QPS	Queensland Police Service
DEHP	Department of Environment and Heritage Protection	RACQ	Royal Automobile Club of Queensland
DTESB	Department of Tourism, Major Events, Small Business and the Commonwealth Games	RV	Recreational vehicle
DTMR	Department of Transport and Main Roads	RAAG	Road Accident Action Group
DSDIP	Department of State Development, Infrastructure and Planning	RRCF	Roadside Rest Area Consultative Forum
EMQ	Emergency Management Queensland	TEQ	Tourism and Events Queensland
LGAQ	Local Government Association of Queensland	USA	United States of America



Minister's foreword

Drive tourism along Queensland's extensive road network is the lifeblood of many regional communities. It supports local economies, builds tourism destinations and creates employment.

The Queensland Government is committed to developing drive tourism in this state as part of our target to double overnight visitor expenditure from \$15 billion to \$30 billion per annum by 2020.

In January 2013, I launched the *Queensland Drive Tourism Strategy 2013–2015* to support the drive tourism industry and encourage travellers to take a driving holiday in Queensland. The strategy aims to position Queensland as a world-renowned drive tourism destination.

The quality of our road infrastructure, including roadside rest areas, plays an important role in providing a safe and enjoyable driving experience.

Roadside rest areas are a necessary safety feature of Queensland's road network in managing driver fatigue, which is a leading cause of road crashes.

Strategically located and designed rest areas can also enhance the travel experience, support local attractions and encourage visitors to stay longer and travel further.

This *Best practice guide for roadside rest areas in Queensland* will help local governments and community organisations effectively design, construct and manage roadside rest areas that promote driver safety and enhance the drive tourism experience.

The development of this essential infrastructure requires a collaborative approach between the Queensland Government, local governments and community groups which have direct responsibility for roadside rest areas.

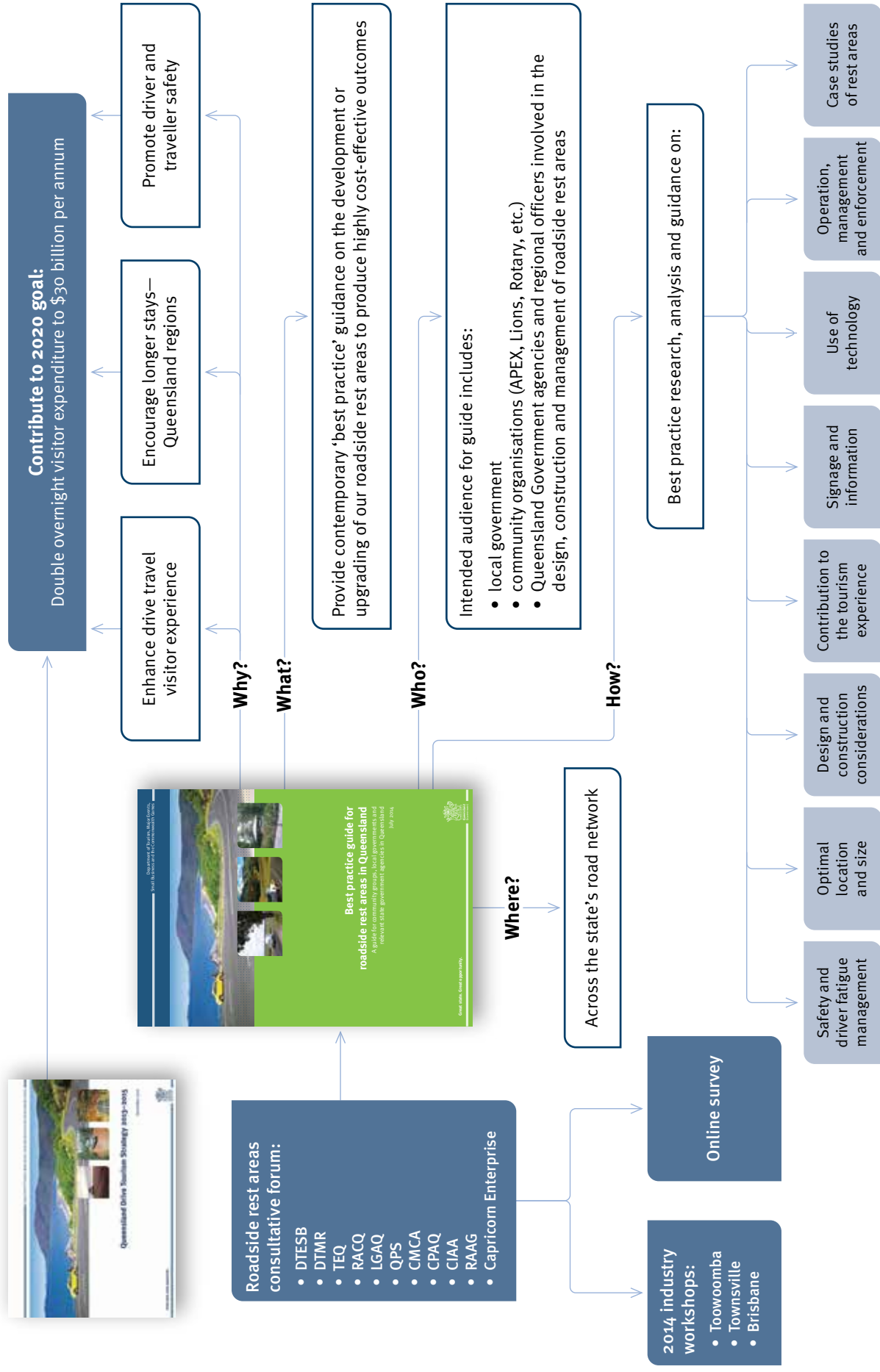
I acknowledge the hard work and dedication of the Roadside Rest Area Consultative Forum in developing this guide. I also acknowledge the input from the broader community who attended the regional workshops and completed the online survey which informed the guide.

This guide provides a well-grounded platform for stakeholders to consider the management and development of our network of roadside rest areas. It is now up to all of us to work together and take it forward.

The Honourable Jann Stuckey MP

Minister for Tourism, Major Events,
Small Business and the
Commonwealth Games

Best practice guide for roadside rest areas in Queensland—executive snapshot



Summary

This document is intended to guide the delivery and management of roadside rest areas to enable the consistency of drive tourism experiences throughout Queensland. It is a best practice document and therefore has no legal or binding effect. Implementation is at the discretion of local governments, community groups and those responsible for managing rest areas.

The *Queensland Drive Tourism Strategy 2013–2015* (QDTS) outlines actions to encourage travellers to take a driving holiday in Queensland and provides targeted support for the drive sector.

The strategy has the potential to:

- enhance drive travel experiences for visitors travelling in the state and encourage visitors to travel beyond major tourism destinations
- encourage longer stays in regional centres—creating greater spend within the region
- promote driver and traveller safety whilst creating new travel experiences.

In addition to these goals, the QDTS outlines six specific actions related to improvements in roadside rest areas to encourage more travellers to take a driving holiday in Queensland and to address driver fatigue.

The role of roadside rest areas in the drive tourism experience was a key issue raised during the consultation process for the QDTS.

The future of Queensland’s drive tourism market depends on the number of visitors taking a self-drive journey, the length of their journey, the time they spend in particular places and the amount of money they spend.

As a result, the QDTS committed to developing a best practice guide to assist local governments and community organisations effectively design and manage roadside rest areas and grow Queensland as a drive tourism destination.

The aim of this guide is to deliver a safe, comfortable and enjoyable road network for visitors by providing appropriate rest areas to reduce driver fatigue and enhance the drive tourism experience across the state.

Planning the journey is important as driving long distances in unfamiliar surroundings can be stressful. Breaking down the journey not only helps travellers get to their destination safely, it can also encourage travellers to visit local townships and attractions along the way, adding to their overall holiday experience.

What are roadside rest areas?

Roadside rest areas are designated spaces on highways and roads where drivers and passengers can take breaks to reduce driver fatigue. When suitably located, they also play an important role in maximising the drive tourism experience and the economic benefit to surrounding towns.

What are recreational vehicles?

Where referred to in this guide, recreational vehicles (RVs) include vehicles used by the travelling public, such as motorhomes, rigid vehicles, campervans, caravans and trailers.

1

Introduction



Rest stop beside the Lagoon, Condamine, Toowoomba

Source: Paul Ewart

1 Introduction

Background

Queensland is a vast state and roads are the lifeblood of communities. There are approximately 180 000 km of road in Queensland and, of that, 33 400 km are state-controlled roads.

These roads are highly traversed by heavy freight vehicles, long distance motorists, local trip commuters and tourists.

Roadside rest areas are important in the drive tourism experience, but may not be in optimum locations or meet the needs of different user groups. The major role of rest areas is to support driver safety by enabling the management of driver fatigue.

Heavy vehicle rest areas are extremely important for heavy vehicle drivers to break up their drive and provide comfortable rest stops on long haul routes. These rest areas are for fatigue management and help fulfil the legal requirement for truck drivers to rest at regular intervals.

This best practice guide addresses user needs for roadside rest areas and reviews the options for planning and providing roadside rest areas. It provides guidance for local governments and community groups in one cohesive document. Roadside rest areas provided by the Department of Transport and Main Roads (DTMR) will adhere to DTMR guidelines.

Purpose

How many roadside rest areas are there?

There are 730 recognised roadside rest areas in Queensland (*Guide to Queensland Roads*, DTMR).

Of these, 242 are specifically controlled and managed by DTMR, 404 by local governments, and 50 by the Department of Natural Resources and Mines. The remaining rest areas are managed by a combination of private operators and community groups.

The purpose of this guide is to provide local governments and community groups with information on:

- location
- planning
- design
- construction
- management
- maintenance.

It also establishes a set of guiding principles to be considered when developing or upgrading roadside rest areas. It is supported by the following objectives:

- Cultivate the drive tourism experience.
- Manage driver fatigue by establishing opportunities for rests and breaks, commonly known as ‘fatigue management’.
- Provide roadside rest areas that are appropriate and fit for purpose.
- Ensure roadside rest areas are primarily for rest opportunities rather than free camping areas.

Queensland Drive Tourism Strategy 2013–2015



The QDTS identified a vision for Queensland to be the number one drive tourism destination by the year 2020.

The guide is an initiative of the QDTS which was released by the Department of Tourism, Major Events, Small Business and the Commonwealth Games (DTESB) in December 2012. The QDTS comprises seven themes and 29 initiatives.

The QDTS specifically commits to the following themes which provide the framework for this guide:

- meeting consumer needs
- road quality, safety and maintenance
- signage
- roadside infrastructure
- accommodation and facilities
- visitor information and technology applications
- marketing and promotion.

To create a seamless drive experience for drive visitors to Queensland's road network and encourage drive tourism, the following drive tourism principles have been adopted:

- Attractive and comfortable roadside rest areas are provided for drive tourists.
- Effective signage is displayed for roadside rest areas.
- Effective maps are provided within roadside rest areas.
- Effective visitor information and technology applications are provided in roadside rest areas and along drive tourism routes where possible and feasible.

Context

The delivery of a successful roadside rest area involves numerous stakeholders and interest groups. Roadside rest areas should have facilities that are clean and 'fit for purpose' to encourage tourists to rest and explore surrounding towns and attractions.

Intended audience

This guide is written primarily for the following stakeholders:

- local government officers responsible for the design, establishment, management and/or maintenance of roadside rest areas
- community members, volunteers or other organisations involved in the design, establishment and maintenance of roadside rest areas, for example APEX, Rotary, Lions Clubs
- regional officers from state government agencies who may be guiding the development of roadside rest areas to enhance the drive tourism experience.

Relationship to existing roadside rest area guides

Several state government agencies play an important role in the management and operation of roadside rest areas, for example DTMR has a strong focus on heavy vehicle (truck) rest areas as part of the management of road freight and operations.

This guide does not intend to override existing requirements, guides and technical standards that are applied to roadside rest areas in Queensland. It has simply combined many of these elements into one document to provide guidance on how to ensure the rest area is suitably located, has long-term sustainability and provides real economic benefits to surrounding communities.

Other DTMR publications that were used to develop this guide include (but are not limited to):

- *Guide to Queensland Roads*
- *Road Planning and Design Manual*
- *Rest Areas and Stopping Places—Location, Design and Facilities.*

Principles of fatigue management

Roadside rest areas are an important safety feature of the Queensland road network and are designed to manage driver fatigue—which is a leading cause of road crashes. It is vitally important that rest areas are appropriately located to encourage drivers to stop and rest. The Royal Automobile Club of Queensland (RACQ) conducts intensive research into fatigue management and the use of rest areas.

The following principles of fatigue management should be considered when planning a roadside rest area:

- Roadside rest areas are generally located no more than 80 km or one hour's drive apart, in line with existing DTMR guidelines.
- Drivers are given advanced warning of roadside rest areas, with clear and effective signage leading up to a roadside rest area.
- Drivers are given warning and directional signage at the turn-in points of roadside rest areas, with clear and effective signage for identification of access points.
- Roadside rest areas include cool, shady areas where drivers may rest during daytime hours, and parking that is free of headlight glare for night time rest (whether it be by virtue of vegetation cover, earth mounds, fencing or fixed screening devices).
- Roadside rest areas contain a source of rainwater and non-potable water supply as a minimum for drivers to refresh themselves (Road Accident Action Group (RAAG) 2011; RACQ and DTMR, 2013).

Length of stay and camping

Growth in non-commercial camping has impacted on the use of rest areas for camping. In Queensland, there are a variety of rules and regulations for managing camping in roadside rest areas. This guide does not have any statutory or legal effect to override existing requirements.

Local governments in particular need to consider the impacts of both camping and rest area policy and management decisions as part of a broader approach to drive tourism.

In March 2014, DTESB released the *Queensland Camping Options Toolkit* which provides practical strategies and ideas for camping in Queensland. It is a useful reference for local governments in developing camping options.

2

Developing the guide



2 Developing the guide

This guide brings together practical ideas from both Australia and overseas, which have been enhanced by insights and concepts from industry practitioners throughout Queensland.

Best practice research

Worldwide research was conducted to find out what other countries and regions are doing to support their drive tourism experiences and to source international and national best practice examples. Case studies are included in Chapters 10 and 11.

Stakeholder engagement

A range of stakeholders were consulted during the development of this guide to find out their views on best practice examples and their innovative ideas for roadside rest areas. Organisations involved in the Roadside Rest Area Consultative Forum (RRCF) provided invaluable ideas and insights for making roadside rest areas attractive and encouraging travellers to stop, stay and explore.

Stakeholder workshops

A series of stakeholder engagement workshops were held in Townsville, Toowoomba and Brisbane to obtain feedback and input. The workshops were promoted through:

- LGAQ
- local governments in Queensland, via LGAQ
- RACQ
- TEQ
- Queensland Tourism Industry Council (QTIC), including regional tourism organisations, QTIC Drive Alliance and the QTIC Associations Council
- RRCF
- Department of State Development, Infrastructure and Planning (DSDIP).

Public online survey

RACQ developed a public online survey to obtain information from motorists about their use of roadside rest areas and their views on facilities in those areas. More than 1000 respondents participated in the survey. Responses from the survey have been incorporated throughout this guide and are also available at <http://www.dtesb.qld.gov.au/tourism/queensland-drive-tourism-strategy>.

Roadside Rest Area Consultative Forum (RRCF)

A key action of the QDTS was to establish an RRCF to address a number of matters such as driver behaviour, driver safety, education on rest area usage and rest area facilities.

The RRCF includes representatives from touring and caravanning groups, as well as local government and state government agencies involved in tourism, enforcement and operational matters relating to roadside rest areas.

The following organisations participated in the RRCF:

- Campervan and Motorhome Club of Australia, through MoTOURing Australia
- Capricorn Enterprise on behalf of regional tourism organisations
- Caravan Industry Association of Australia (formerly Caravan, Recreational Vehicles and Accommodation Industry of Australia)
- Caravan Parks Association of Queensland
- Department of Tourism, Major Events, Small Business and the Commonwealth Games
- Department of Transport and Main Roads
- Local Government Association of Queensland
- Road Accident Action Group
- Queensland Police Service
- Royal Automobile Club of Queensland
- Tourism and Events Queensland.

The public online survey highlighted why drivers travel long distances:

- 81% of Queensland drivers surveyed said their reason for travelling long distances would be to travel for tourism and leisure
- 10% of the group said they do not travel long distances
- 7% of the group said they travel for work, indicating there are some long distance commuters that are likely to have different needs regarding fatigue management
- less than 1% travelled long distances for medical reasons, which reinforces the importance of regular breaks and access to facilities with amenities for this group of travellers.



3

User profiles



3 User profiles

Research and public consultation identified a variety of roadside rest area users in Queensland that fall into the following user groups.

Drive tourists

Queensland is a vast state with long distances between townships. Long distance drive tourists include tourists from outside the region or locals taking inter-regional trips.

Drive tourists are motorists who travel for leisure purposes. These drivers may use roadside rest areas to break up the drive with short periods of rest while en route to their destination. Typically, they stay in hotels, motels, cabins or with family and friends.

Drive tourists may use roadside rest areas to break up the drive and for short periods of rest. Drivers can be travelling for work or leisure. The needs of this user group focus strongly on managing fatigue and encouraging drivers to take regular breaks.

‘The drive market represents visitors who use some form of vehicular transport as a mode of transport to reach their destination where their main purpose of visit is for leisure (i.e. where their main purpose is for a holiday to visit friends or relatives). This includes day trips and overnight trips to one or multiple destinations.’

DTESB, December 2012

The survey indicated that:

- 43% of Queensland drivers surveyed said they had not used formal roadside rest areas in the last 24 months
- only 30% of this group said they would normally use a formal roadside rest area.

Recreational vehicle (RV) and motorhome owners, caravanners and campers

This user group may use roadside rest areas to break up their drive or for overnight stays (where permitted).

DTMR-controlled sites that allow overnight stays for motorists must display signage and be limited to a maximum of 20 hours as defined in the *Transport Infrastructure Act 1994*.

These users may need amenities and washing facilities at roadside rest areas if their RV, motorhome or caravan does not contain a toilet.

Generally speaking, most roadside rest areas don't have suitable waste disposal or facilities to support long-term stays.

Roadside rest areas with 24 hour access are unsuitable for short-stay camping or extended stays.

For these reasons, other commercially-operated facilities such as camp grounds and caravan parks are preferred for extended stays.

For stays of more than one night, some commercial caravan parks have amenities and waste disposal facilities for campers which accommodate the specific needs of people travelling in RVs, motorhomes and caravans.

The survey indicated that:

- 95% of recreational vehicle drivers said they had used roadside rest areas in the last 24 months
- 73% of recreational vehicle drivers said they would stop at a formal roadside rest area.

Road freight operators

Truck drivers are required to stop at specific intervals in line with Queensland law. DTMR manages the Heavy Vehicle Rest Area Program which caters specifically for heavy road freight vehicles traversing the state-controlled road network.

DTMR routinely reviews its policies and guidelines for heavy vehicle rest areas in consultation with industry and other relevant stakeholders to provide for fatigue management in the road freight industry.

Although some roadside rest areas cater for both motorists and road freight operators, this guide only focuses on motorists as heavy vehicle roadside rest areas are covered by DTMR.



Source: Ray Cash Photography

4

Optimising siting and planning



Source: Alan Jensen

4 Optimising siting and planning

As siting and planning of roadside rest areas isn't an absolute science it needs to be determined on a case-by-case basis.

The planning of roadside rest areas is important in terms of economic benefits, road safety and successful management of fatigue. The siting of a roadside rest area must consider the needs of various users. Balancing the requirements of different user groups can often be a challenging task. Key considerations include distances between roadside rest areas, maximising the tourist experience, and accessibility for maintaining facilities, enforcement and surveillance.

Effective siting and planning of roadside rest areas involves:

- defining user requirements and maximising the attraction of the roadside rest area
- optimal siting and sizing of the roadside rest area
- considering local issues and land use planning
- funding, management and approvals
- spacing intervals and the road network.

Defining user requirements to maximise the attraction of roadside rest areas

Different user groups have different expectations and requirements for their travel experience. The needs of various user groups should be considered when planning roadside rest areas.

The matrix overleaf (Table 1 overleaf) helps stakeholders determine how best to maximise the attraction of roadside rest areas.

The term 'fit for purpose' is used to describe the way a roadside rest area is sited and designed to suit its locality, context, potential function and available budget for construction and maintenance.

Research indicates that one size and layout does not fit all when it comes to roadside rest areas, and that facilities will need to be 'fit for purpose'.

For example, user requirements for a roadside rest area in a remote area of Queensland will be vastly different to those requirements for a roadside rest area along a major highway or on tourist drives along Queensland's east coast.



Wallaman Falls Camp Site, Girringun National Park, Tropical North Queensland

Source: Tourism and Events Queensland. Photo: Steven Nowakowski

Table 1 Matrix of user requirements to maximise the attraction of roadside rest areas

User groups	Rest facilities	Amenity facilities	Tourist information and signage	Social connectedness
Drive tourists (fatigue management and drive tourism focus)	Seating, tables, shade, shelter	<ul style="list-style-type: none"> • Hand washing facilities • Toilets 	<ul style="list-style-type: none"> • Locational and geographic information • Information on local and 'must see' regional tourism attractions • Information on distances to major destinations • Information on roadside rest areas at least every two hours 	<ul style="list-style-type: none"> • Mobile phone coverage
Long distance motorists (fatigue management)	Seating, tables, shade, shelter	<ul style="list-style-type: none"> • Hand washing facilities • Toilets 	<ul style="list-style-type: none"> • Locational information • Information on roadside rest areas at least every two hours 	<ul style="list-style-type: none"> • Mobile phone coverage
RV and motorhome travellers (fatigue management and drive tourism focus)	Seating, tables, shade, shelter	<ul style="list-style-type: none"> • Proximity to fuel and food outlets • Hand washing facilities • Toilets • Dump points for waste 	<ul style="list-style-type: none"> • Information on local and regional tourism attractions • Information on roadside rest areas at least every two hours 	<ul style="list-style-type: none"> • Wireless internet access (for travel blogs, phone apps and information)
Caravanners (fatigue management and drive tourism focus)	Seating, tables, shade, shelter	<ul style="list-style-type: none"> • Proximity to fuel and food outlets • Hand washing facilities • Toilets • Dump points (for waste) 	<ul style="list-style-type: none"> • Information on local and regional tourism attractions • Information on roadside rest areas at least every two hours 	<ul style="list-style-type: none"> • Wireless internet access (for travel blogs, phone apps and information)
Campers (fatigue management and drive tourism focus)	<p>Generally, camping is prohibited or restricted in any area that is not a designated camping area, truck stop or public area, or an area that does not permit overnight camping.</p> <p>Local government authorities will be able to advise whether there are local laws limiting the length of stay. DTMR will be able to advise on any limitations to length of stay for any roadside rest area it controls. Signage at the roadside rest area may specify a limit on the length of stay.</p>			

Optimal siting and sizing of roadside rest areas

When considering a new roadside rest area, there are a range of things that need to be considered to determine optimal siting (see Table 2, page 13).

Existing roadside rest areas

Existing roadside rest areas can be beneficial irrespective of their quality or location. As such, the existing network of roadside rest areas must be the first consideration when planning a new roadside rest area.

Importance of managing driver fatigue

The general benchmark for managing driver fatigue is to stop every two hours and revive. There is a significant amount of research on how driving for longer than two hours affects human behaviour and physiological factors (RACQ, RAAG 2011).

Optimal distance between roadside rest areas

DTMR guidelines recommend that wherever possible, opportunities for motorists and heavy vehicle operators to stop and rest should generally be no more than 80 km or one hour's drive apart.

In addition, things like the distance to the nearest roadside rest area, the quality of that rest area, and its relationship and proximity to service stations, service centres and other stopping opportunities, such as cities and townships, need to be taken into account.

Many townships and service centres may provide similar benefits to roadside rest areas as they give travellers the opportunity to stop safely and rest.

The survey indicated that:

- on average, the Queensland drivers surveyed stopped for a break every 142 km
- on average, the recreational club members surveyed stopped for a break every 174 km
- these figures match the RACQ's recommendation to stop for a break every two hours when driving.

Sizing and facilities in roadside rest areas

The sizing of a roadside rest area needs to be appropriate for its likely users, their needs and their potential demands during peak season.

Roadside rest areas need to provide a safe stopping area and be sufficiently 'fit for purpose' in terms of the facilities they provide for various road users.

The size and dimensions of roadside rest areas need to allow for safe and easy entry, exit and manoeuvring within the site.

Chapter 5 provides detailed information about critical design elements for roadside rest areas.

Maximising the tourism experience and economic benefit for the local community

Roadside rest areas play an important role in supporting and improving the tourism experience, and in turn, increase the growth of visitor numbers to towns and attractions within regional Queensland.

The proximity of roadside rest areas to tourist attractions and major drive routes also needs to be considered so that roadside rest areas are able to support local economic development through tourist attractions and encourage visitors to stay longer.

A comprehensive inventory of quality tourist attractions, experiences and operations within a local area could be displayed at the rest area. Local tourism operators are encouraged to support roadside rest areas.

Separation from caravan parks

When siting roadside rest areas it is important to consider the impacts on commercial caravan park operators and to ensure roadside rest areas are physically located an acceptable distance away from them to avoid competition and lost revenue.

To enhance the economic benefits of tourism for a local community it is preferable for tourists to use local accommodation and caravan parks for overnight stays.

Strategic importance of the road

It is important to consider the Queensland road network when siting a new roadside rest area and the rest area's proximity to other rest areas in the region. Most traffic will be on the national road transport network, followed by the state-controlled road network.

Any proponent of a new roadside rest area must liaise with the State Assessment and Referral Agency to obtain consent for the proposal. Ideally, this should be done in consultation with officers from the relevant DTMR regional office. More information can be found in the DTMR's *Road Planning and Design Manual*; *State Development Assessment Provisions* (Modules 18 and 19); and *Guide to Queensland Roads*.

Traffic characteristics

Traffic characteristics to consider at the planning stage include:

- annual average daily traffic volume on the road
- predicted traffic growth over the next 20 years
- composition of traffic
- potential usage patterns of the proposed roadside rest area.

The composition and volume of traffic using a particular route will inform rest area requirements, for example safer entry and exit points may be needed along freight priority routes encountering significant volumes of tourist vehicles.

Consideration of crash zones and fatigue black spots

As fatigue management is a primary reason for providing roadside rest areas it is essential that the location of the roadside rest area aligns with known crash zones or fatigue black spots. Road traffic crash statistics can be requested by completing the DTMR's Road Crash, Registration, Licensing and Infringement Data Request Form at www.police.qld.gov.au/services/purchase/traffstats.htm.

Consideration of local issues and land use planning

Roadside rest areas will typically be located in the road reserve, although in more populated areas they may be provided on private property (e.g. service centres). The following town planning matters and key questions will need to be considered when siting a new roadside rest area.

Table 2 Local issues and land use planning considerations for siting a roadside rest area

Local issues and land use planning considerations	Questions to consider when selecting an appropriate roadside rest area site
Relevant regional plans	<ul style="list-style-type: none"> • Are there any relevant regional plans to be considered? For example, the Central Queensland Regional Plan and the Darling Downs Regional Plan set out priority living areas where urban settlement is preferred and priority agricultural areas where agricultural activity is preferred over other land uses.
Future development projects or works	<ul style="list-style-type: none"> • Are there any known development proposals or projects of state significance, such as mines or integrated tourist or casino resorts, which increase traffic volume and demand for additional roadside rest areas along high-volume traffic routes?
Consideration of local issues, including local government requirements, local laws and known site issues such as native title, heritage and wildlife conservation	<ul style="list-style-type: none"> • Are there any local government laws in effect that would apply to roadside rest areas? For example, if the roadside rest area is to be operated by local government there may be an existing local law restricting length of stay. • Are there any limitations on use of the land for a roadside rest area? • Is the land held in freehold ownership, or alternatively, if the land was previously held as crown land, has native title been extinguished on the land? • Does the land have any known heritage or cultural heritage features that may preclude its use as a roadside rest area? Contact the Department of Environment and Heritage Protection (DEHP) and the relevant local government authority for information. • Does the site have any protected flora or fauna or regional ecosystems requiring protection? Contact DEHP and the relevant local government authority to check.
Distance from common origins	<ul style="list-style-type: none"> • Is the site within a desirable or reasonable distance from likely travel origins, such as major towns or highway intersections, and tourist attractions?
Compatibility with land uses, local issues and local laws	<ul style="list-style-type: none"> • Have local government rules and regulations and related legislation been considered in relation to things like cultural heritage and native title? • Is it lawful to use and access the land?
All-weather accessibility	<ul style="list-style-type: none"> • Does the site allow for all-weather access? For example, in an ordinary flood event would the site be free of flooding? Contact the local government authority to check details of flooding at the site.
Support emergency management operations	<ul style="list-style-type: none"> • Will the site be able to support emergency management operations? For example, is there an opportunity for the facilities at the roadside rest area to be used during times of natural disasters, particularly during cyclones, thunderstorms, bushfires, earthquakes or other severe natural events? (Emergency Management Queensland, September 2012). • Is there a need for communication services at the roadside rest area to support emergency management operations?
Local road conditions and topography	<ul style="list-style-type: none"> • Are the local road conditions and the site's topography suitable for site access and establishment of a roadside rest area?
Noise and amenity impacts (quiet environment)	<ul style="list-style-type: none"> • Is the noise and amenity environment at the site generally suitable for providing rest and recovery for drivers? • If there is headlight glare at night, will the site allow sufficient room for glare reduction fencing or screening as a solution?
Use of old road or highway alignments as roadside rest areas	<ul style="list-style-type: none"> • Is there an opportunity to use a former highway alignment as a roadside rest area? For example, if a highway is being bypassed, the old carriageway may be suitable for a roadside rest area.

Ownership, funding and approval

Ownership of roadside rest areas

The ownership of a roadside rest area needs to be established from the outset, prior to design and construction, so that roles and responsibilities are clear. Ongoing maintenance and embellishment of the roadside rest area are also key considerations. Management of a roadside rest area is a long-term consideration that is addressed in detail in Chapter 9.

Funding

In light of current and local limitations it is essential that the planning authority prepares a formal business case to test the financial and operational viability of a roadside rest area prior to its design and construction.

There are two relevant funding streams: 'capital' and 'maintenance'. Capital costs include land acquisition, civil engineering construction and building works, services and facilities, while maintenance costs include regular servicing and refurbishment of the facility.

Approvals and licences

Various approvals and licences are required before the design and construction of the roadside rest area can begin. The primary approval is required from road safety authorities such as the RACQ and Queensland Police Service (QPS). It is important that the design of the roadside rest area represents a suitable and integrated solution that will achieve its primary purpose of reducing driver fatigue.

If the proposed roadside rest area involves access from a state-controlled road managed by DTMR, a Form 62 is required. The proponent needs to contact the State Assessment and Referral Agency and the local DTMR office to design a safe and appropriate access point from the roadside rest area.

If the rest area is a new use of land, approval may also be required from the relevant local government authority under the *Sustainable Planning Act 2007* (SPA). The local government authority will need to determine any town planning or building requirements.

If the roadside rest area is to provide toilets and waste dump points, the State Assessment and Referral Agency and the relevant local DEHP office must be contacted to discuss environmental licence requirements.

5

Design and construction



5 Design and construction

Critical design elements

The design of roadside rest areas needs to comply with engineering standards and be safe, low-maintenance and attractive as a stop and rest facility for the drive tourism market.

While previous chapters have outlined planning considerations for the siting of a roadside rest area, this chapter examines specific site design aspects, including:

- matching facilities to user needs
- site selection
- safe access
- functional site layout
- facility design and amenity
- maintenance minimisation.

Matching facilities to user needs

There are two categories of rest areas:

- motorist rest areas
- heavy vehicle rest areas.

It is important to differentiate between the needs of motorists and heavy vehicle drivers when determining what facilities to include in a roadside rest area, and what the capacity of those facilities should be. A proponent may need to make those decisions on a case-by-case basis.

There are set rules for designing roadside rest areas, for example DTMR guidelines specify various requirements for motorist rest areas in terms of location, vehicle mix, desired user type and traffic volumes.

DTMR usually classifies roadside rest areas as follows:

Type A

This type of roadside rest area provides extensive facilities of a high standard and supports all potential motorist types, including those wanting to use the site for limited stay opportunities. These sites generally do not conflict with commercial or civic sites within the area.

Type B

This type of roadside rest area provides an appropriate number of parking bays with facilities intended to cater for short- to medium- term rest periods that encourage rest during journeys. These sites feature medium standard facilities and do not conflict with commercial or civic sites. They provide a standard level of fatigue-related facilities on the state-controlled road network.

Type C

This type of roadside rest area provides an adequate number of parking bays safely situated away from the roadway, where motorists can stop in order to rest. Facilities may be minimal and might only include hardstand areas, bins and shade. These sites are provided where fatigue-related facilities are required without the need to provide a high standard of facilities.

The following table defines the desired standards and facilities for each DTMR roadside rest area. It can also be used to determine how a rest area could be improved as needs change and funding becomes available.

Table 3 Standards for roadside rest areas—heavy vehicle and motorist rest areas

	Heavy vehicle			Motorist		
	Type A	Type B	Type C	Type A	Type B	Type C
Capacity (for largest vehicle permitted on route)	Large: 15+ bays (>2000 HV AADT) Medium: 10–15 bays (500–2000 HV AADT) Small: 5–10 bays (<500 HV AADT)			Large: 20+ bays (>10 000 AADT) Medium: 10–20 bays (1000–10 000 AADT) Small: 5–10 bays (<1000 AADT)		
All-weather seal	Yes	Yes	Gravel	Yes	Yes	Gravel
Separation for vehicle types	Yes	Desirable	Where possible	Yes	Desirable	Where possible
Separation for long term/short term visitors	Yes	Desirable	No	Yes	Desirable	No
Bins	Yes	Yes	Yes	Yes	Yes	Yes
Natural shade/trees (where available)	Yes	Yes	Yes	Yes	Yes	Yes
Tables/chairs	Yes	Yes	Yes	Yes	Yes	Yes
Shelters/artificial shade	Yes	Yes	Yes	Yes	Yes	Yes
Toilets	Yes	Desirable	No	Yes	Desirable	No
Lighting	Yes	Desirable	No	Yes	Desirable	No
Separation from road	Well separated and screened with vegetation, mounding, barrier, etc.	Separated and screened where possible	Separated (as a minimum by line marking)	Well separated and screened with vegetation, mounding, barrier, etc.	Separated and screened where possible	Separated (as a minimum by line marking)
On-road signage	Yes	Yes	Yes	Yes	Yes	Yes
BBQ	No	No	No	Yes	Where possible	No
Playground	No	No	No	Yes	Where possible	No
Private camping allowed (20 hr max)	No	No	No	Yes	As appropriate	No
Caravan dump point provided	No	No	No	Yes	Where possible	No

Source: *Rest Areas and Stopping Places—Location, Design and Facilities* (March 2014)

Site selection

Typically the site for a new roadside rest area should:

- have a gentle gradient of 2 to 3 per cent—flatter sites will have poor drainage, while steeper slopes will create issues for users such as people with disabilities
- be flood-free—sites adjacent to creeks or rivers are usually better and care must be taken if the site is below known flood heights. All travellers stopping at the site must have the ability to escape via a flood-free route to higher ground during a flood event
- have canopy trees for shade—feedback from industry consultation stressed the importance of shade
- have a safe entry and exit point
- be open with good surveillance within the site
- be far enough away from the highway so that travellers are not disturbed by excessive vehicle noise or headlight glare
- be serviced with reticulated power, water and sewerage (if on the outskirts of town)
- contain a natural attraction and have scenic beauty and character that will contribute to the site's long-term popularity.

Safe access

Intersections

Roadside rest areas are predominantly located on highways and other major roads. Being inter-regional these roads carry higher volumes of vehicles, specifically freight vehicles, and the vehicles move at higher speeds.

It is common for drive tourists to be unfamiliar with roadside rest area locations. This means they may be inclined to make hasty decisions that adversely impact other vehicles.

Therefore, the roadside rest area must ensure the point of access provides:

- advanced warning that the facility is nearby
- sight distance in both directions of the highway so that approaching road users can take precautionary action and slow down
- wide shoulders of road so that approaching vehicles have adequate room to take evasive action.

When designing a suitable intersection, refer to DTMR's *Road Planning and Design Manual*—(Chapter 13: Intersections at Grade) which outlines a variety of different types of intersection treatments and their warrants for state-controlled roads. These include:

- **basic turn treatments**—which provide the simplest and least expensive layouts. This treatment provides little protection for turning vehicles and is therefore only suited to intersections or accesses with low through traffic and turning volumes

- **auxiliary turn treatments**—which provide short auxiliary lanes to allow traffic to bypass turning vehicles. While this treatment can be used for left turns, channelisation is recommended for right turns that require more protection than a basic turn treatment
- **channelised turn treatments**—which provide raised, depressed or painted medians or separation for conflicting vehicle travel paths and are typically used in conjunction with auxiliary lanes.

Before designing an appropriate intersection, assessment needs to be made of the through traffic and turning traffic volumes, the number of heavy vehicles, the potential for pedestrians and cyclists to be in the area, the speed environment and the types of other intersections and points of access in the vicinity. DTMR's *Road Planning and Design Manual* (Chapter 13) and Austroads' *Guide to Road Design—Part 4: Intersections and Crossings—General (2009)* provide instructions for determining the most appropriate intersection type.

Typically, in urban and semi-rural areas, the relevant road authority will authorise only one access point for a roadside rest area. In remote areas, two access points are common.

Site access road or crossing

The access road linking the roadside rest area to the carriageway plays an important role in site safety. It is essential that the access point has sufficient width to enable turning vehicles to safely enter the site without stopping and without interfering with traffic flow.

The access road should be able to accommodate two passing vehicles and have sufficient length to accommodate queuing. The appropriate length for queuing should be discussed with the relevant road authority and assessed on a case-by-case basis, taking into account the capacity of the roadside rest area and the hierarchy of the adjacent road. Typically, a maximum length of 22 metres measured from the edge line of the carriageway is sufficient for queuing a typical RV. It is important that any speed control device, such as speed humps, be located outside that area.

Functional site layout

Site layout should be designed for road safety to avoid conflict between vehicles and pedestrians. It is usually easier for single passenger vehicles to park adjacent to facilities than it is for longer combination vehicles with limited vision and wider turning circles. Therefore, heavy vehicles and RVs should have designated parking areas away from communal facilities and pedestrian crossings to enable them to enter and exit easily without needing to reverse.

Care must be taken to ensure long vehicles can easily enter any areas set aside for parking. *Austroads Design Vehicles and Turning Path Templates Guide* (2011) should be used to ensure accessibility.

While it is impossible to provide line markings to guide the parking of RVs in unsealed roadside rest areas, it is important that guidance is given on where and how to park so that vehicles are not parked overnight. The demand and supply of parking should be assessed for each site based on passing tourist volumes and other rest areas in the vicinity.

The minimum dimensions for parking spaces are detailed in *Australian Standards Parking Facilities—Part 1: Off-street car parking (2004) (AS2890.1)* and *Australian Standards Parking Facilities—Part 2: Off-street commercial vehicle servicing (2002) (AS2890.2)*. A summary of parking space dimensions and minimum turning radii is provided in the table 4.

Fencing

Ideally, all roadside rest area facilities should be protected from vehicle impact by fencing or bollards. A fence also provides demarcation between vehicle space and people space, making it a safer place for children and pets.

Potential layout configurations of roadside rest areas

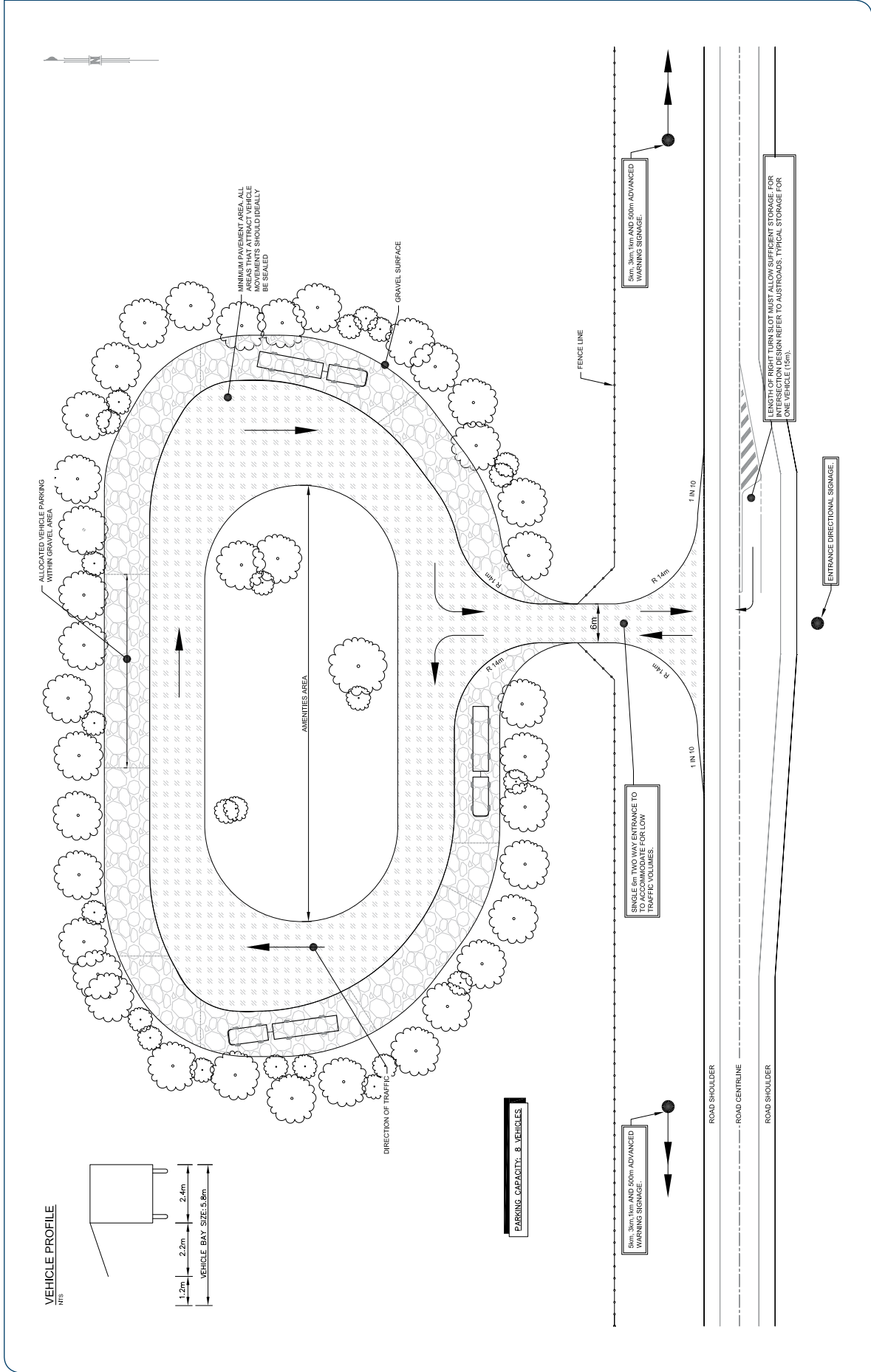
There is no one best practice design for roadside rest areas. In fact, the special attraction of popular rest areas has usually been captured by a designer incorporating an area's natural elements. This guide includes a number of different designs to help proponents visualise the variety of designs available.

The following designs have been prepared as examples of possible layouts for roadside rest areas. Each site will have a different capacity and different facilities and characteristics. It will need to be designed in line with site dimensions, adjoining land uses, the likely traffic environment and user groups.

Table 4 Parking standards for roadside rest areas

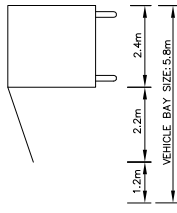
Vehicle type	Parking space dimensions	Turning circle radius
Standard vehicles		
Standard car	2.5 m × 5.4 m	6.3 m
Car space for a person with a disability (PWD)	4.8 m × 5.4 m	6.3 m
Rigid trucks		
Small rigid vehicle	3.5 m × 6.4 m	7.1 m
Medium rigid vehicle	3.5 m × 8.8 m	9.0 m
Large rigid vehicle	3.5 m × 12.5 m	12.5 m
Reticulated vehicles		
Motorhome (up to 17.5 m)	3.5 m × 19 m	15.0 m
Trucks and road trains		
Semi-trailer 19 m	3.5 m × 19 m	12.5 m
B Double 25 m	3.5 m × 26 m	12.5 m
A-Double (Type I Road Train) 36.2 m	3.5 m × 38 m	15.0 m
A-Triple (Type II Road Train) 53.4 m	3.5 m × 55 m	15.0 m

Source: Adjusted from AS2890.1, AS2890.2 and *Austroads Design Vehicles and Turning Path Templates Guide*

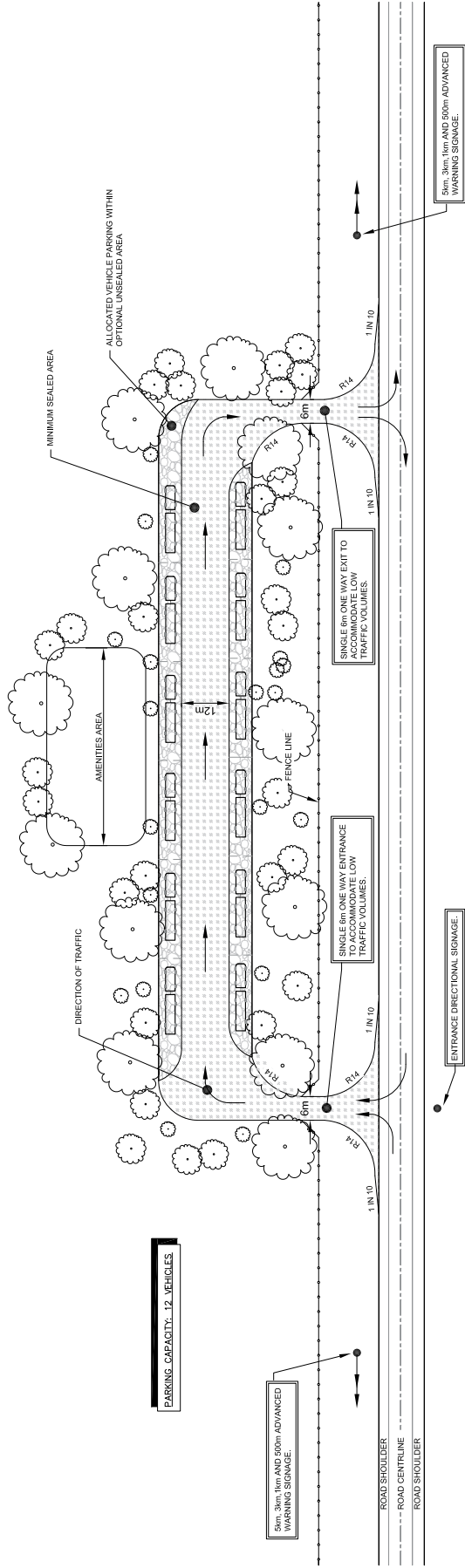


Roadside rest area (example 1)
 This roadside rest area would be suitable on a busy highway where the maximum number of overnight stays is moderate.

VEHICLE PROFILE
NTS



PARKING CAPACITY: 12 VEHICLES



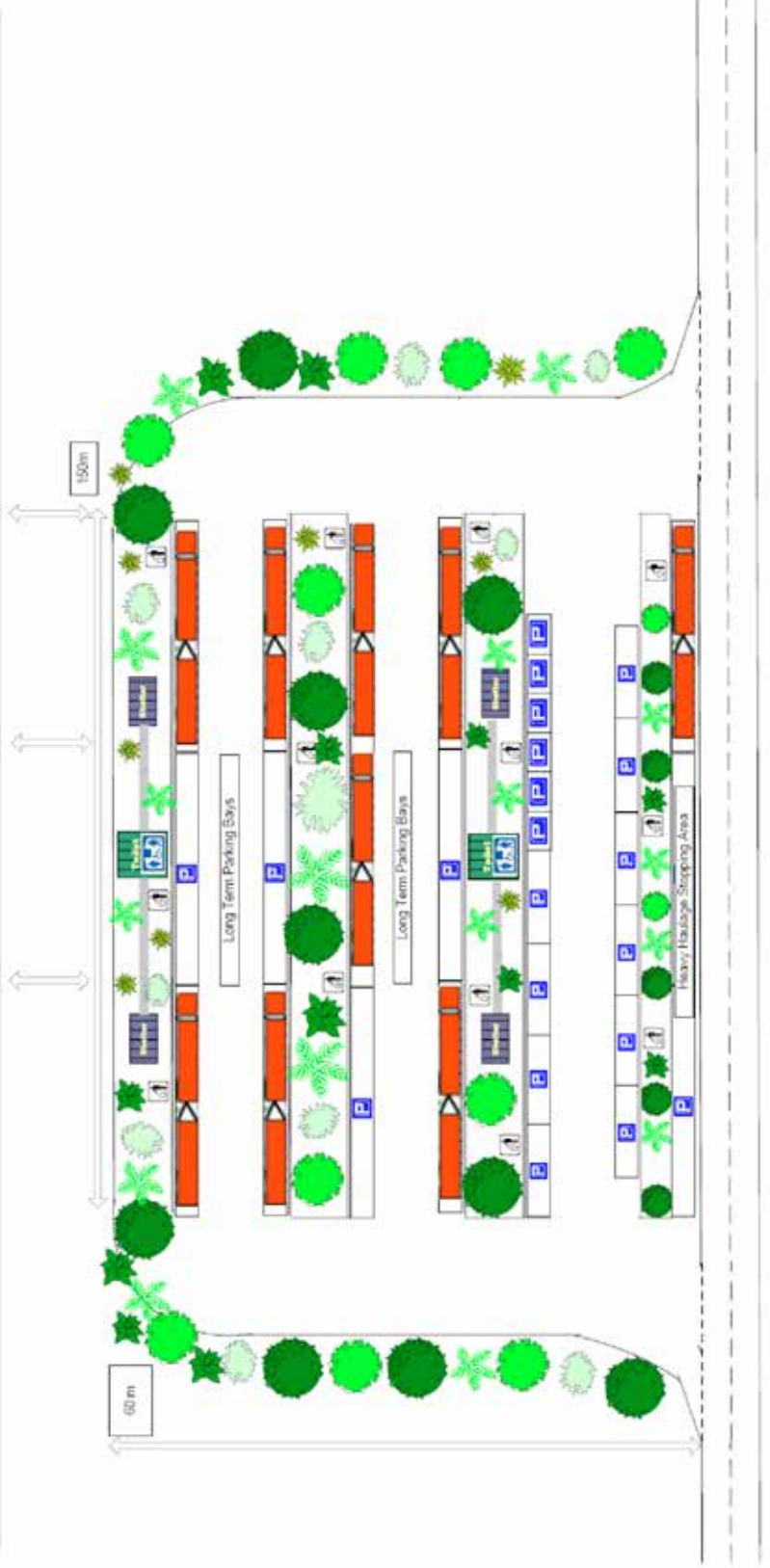
Roadside rest area (example 3)

This roadside rest area would be suitable in a regional or remote location where traffic volumes on the adjacent highway are low.

Proposed Standard Design Type A: Medium Dual-Use Rest Areas

Overall Length: Approx. 150 m
Overall Depth: Approx 60 m

Truck Bays Long Term: 12 x Type 1 Road Trains (50 m bays)
Heavy Haulage Stopping Area: 3 x Type 1 Road Trains (50 m bays)
Car Bays: Approx 6 bays
Caravan Bays: 10 bays



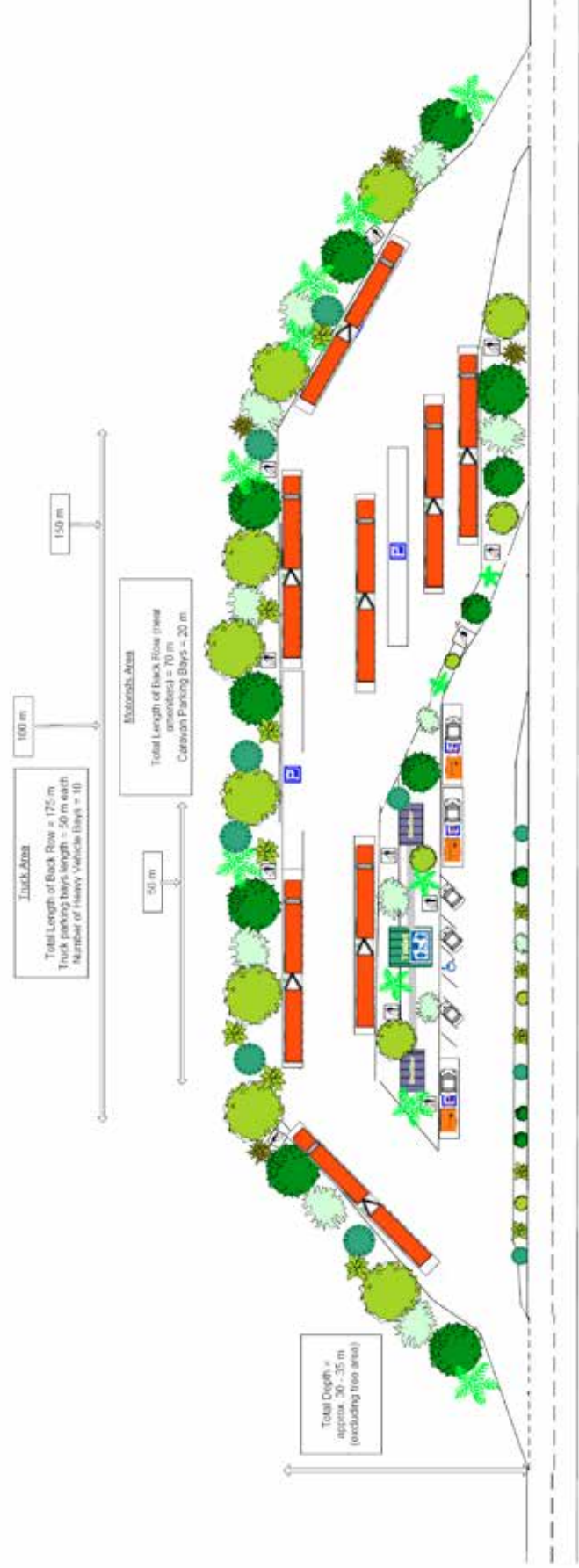
Roadside rest area (example 4)

This layout can be found in the *Rest Areas and Stopping Places—Location, Design and Facilities* guide. It provides short- or long-term parking for both heavy vehicles and motorists, and does not allow camping.

Proposed Standard Design Type A: Medium Dual-Use Rest Areas

Overall Length: Approx. 250m
Overall Depth: Approx 35m

Truck Bays: 10 (Type 1 Road Trains)
Car Bays: Approx 7
Caravan Bays: 3



Roadside rest area (example 5)

This is provided by the RAAG for a dual-access roadside rest area that includes heavy vehicle and motorist areas, and does not allow camping.

Facility design and amenity

A rest area design needs to allow adequate casual surveillance from within the site and incorporate the principles of crime prevention through environmental design (CPTED). Generally, low ground covers such as plants and shrubs should be avoided and trees should be positioned so they do not interfere with sight lines throughout the site.

Also keep the aesthetics and landscape design in mind to ensure roadside rest areas are attractive and comfortable. Including noise mounds and fencing may be a necessity if sites are located adjacent to high traffic volume locations.

It is recommended that proponents for a new roadside rest area use the services of the following professionals:

- chartered professional civil engineer to design the civil engineering components and ensure compliance with all standards and regulations
- architect to design the built elements and ensure compliance with building codes
- landscape architect to capture and maximise the attractiveness of the facility.

Maintenance minimisation

Roadside rest area maintenance is a recurrent cost that needs to be minimised wherever possible. Routine maintenance such as bin collection, toilet cleaning, grass cutting and vandalism repairs all create costs that need to be considered when designing a roadside rest area.

6

Facilities



6 Facilities

The nature and type of facilities vary throughout roadside rest areas in Queensland. The standard of facilities will determine a user's level of comfort and will influence whether a driver decides to stop and rest at the roadside rest area.

The facilities need to best match user needs and available funding so they are 'fit for purpose' and contribute to the overall tourism experience.

According to the DTMR guide, *Rest Area and Stopping Places—Location, Design and Facilities*, minimum facilities for a roadside rest area should include:

- rubbish bins
- toilets
- sheltered tables and seats
- water.

There is a strong correlation between the attractiveness of a roadside rest area and the standard and range of facilities provided. Even rest areas providing the minimum facilities will have varying standards.

This guide aims to encourage investment in existing and future roadside rest areas to optimise the benefits for drive tourism, road safety and fatigue management.

This chapter provides a range of potential facilities identified during research of interstate and overseas best practices.

Capital cost, 'fit for purpose' and ongoing maintenance should be taken into account when deciding what facilities to provide. State government agencies, local government authorities and community organisations planning to upgrade existing roadside rest areas or build new ones are encouraged to consider best practice examples in Australia and overseas. Detailed best practice case studies are provided in Chapter 10.

The following facilities were rated as important by the Queensland drivers surveyed:

- toilets (99.5%)
- adequate parking (96%)
- shelter and shade (93%)
- table, chairs and benches—a place to sit (93%)
- water supply (89%).

The following facilities were rated as important by the recreational club members surveyed:

- adequate parking (98%)
- toilets (83%)
- shelter and shade (76%)
- camping facilities (68%).

Rubbish bins

What case study research indicates

Rubbish collection is often a significant maintenance issue for roadside rest areas. Rubbish bins are listed as a minimum requirement for motorist rest areas (DTMR, 2014).

Best practice approach

In rural and remote areas, regular collection of waste from bins may not be practical or viable. Putting bins in these locations may also create problems for native wildlife, by encouraging them to forage through bins for food. In these circumstances, bins are usually enclosed to prevent wildlife accessing them and signage is used to encourage users to carry their food and general waste to the next town, commercial centre or roadside stop.



Contemporary rubbish bins for general waste and recycling

Toilets

What case study research indicates

Toilets are considered a minimum requirement for roadside rest areas. Most roadside rest areas researched had toilets and hand basin facilities available.

Best practice approach

All roadside rest areas should contain flushing toilets in areas with access to reticulated water. If possible, they should be connected to reticulated sewerage mains. However, as this is not practical in most of Queensland's roadside rest areas, the second preference would be to use a septic system. In areas without reticulated water, a waterless system should be considered and long-drop toilets that are commonly found in national parks should be phased out.

There should also be a regular maintenance program in place for toilet cleaning and syringe disposal to maintain the facilities in a clean, working condition. It is important to consider the security of toilet users when planning toilet facilities.

Best practice examples include the toilet block built by the Sunshine Coast Regional Council at Dicky Beach, Caloundra. There are also similar facilities at Bulcock Beach, Mudjimba and other Sunshine Coast locations. The design is a unisex, universally accessible toilet block enabling passive surveillance from the surrounds, incorporating crime prevention through environmental design (CPTED) principles.

The following type of toilet block (below) is more desirable than traditional toilet blocks as it enables casual surveillance from the surrounds and all cubicles cater for unisex access (male and female).



Roadside rest area toilet block

Shelters

What case study research indicates

It is important to provide users with shelter from the sun, wind and rain to ensure a comfortable break from driving.

Best practice approach

All roadside rest areas should provide a suitable area for people to sit and rest away from their vehicle. Ideally, these areas will include tables and seats that have shade from the sun and shelter from wind and rain. Wherever possible, roadside rest areas should incorporate shade from vegetation.



Roadside rest area, Waverley Creek

Source: Mr Graeme Ransley, RAAG

Shade structures are not required for vehicles, given the high associated costs.

Ideally, every roadside rest area will include an area with a picnic table and shade structure; however, there are no specific requirements to do so.

Waverley Creek's roadside rest area (above) features a traditional shelter with four tables and seating areas that can be used by multiple groups simultaneously. A rainwater tank collects run-off from the roof; and the tables have been treated with two pack epoxy seamless flake coating and two coats of sealer for easy cleaning.

Seating and tables

What case study research indicates

Seating and tables are a basic requirement in rest areas as they allow drivers to leave their vehicles and rest in a comfortable area (DTMR, 2002). Most case studies indicate the use of hardy, moulded concrete or traditional steel and timber chairs and tables. Providing multiple tables under one roof can cut costs substantially. An area containing two to four tables with walls separating each of them not only provides shade and protection from the wind, it also gives multiple parties privacy.

Best practice approach

Weatherproof and vandalproof structures are best. The materials used may vary depending on local conditions, maintenance and budget considerations.

Shade

What case study research indicates

Shade is a basic requirement for allowing drivers to rest and revive. Dehydration can cause fatigue, which reinforces the need for shade.

Best practice approach

In Queensland's tropical environment, shade is considered necessary for roadside rest areas. Most of the case studies either had trees providing shade or fixed shade structures.

Optimal shelter sheds have colorbond or galvanised steel roofs for ease of maintenance and to withstand harsh sun and weather conditions.



Old style shade table at roadside rest area, Warrego Highway

Potable and non-potable water supply

What case study research indicates

Most urban sites and roadside rest areas are able to readily provide potable water. However, in the more remote locations of northern and western Queensland for example, concrete rainwater tanks are more common, such as those used in roadside rest areas on the Natural Sciences Loop which originates at Cunnamulla.

Best practice approach

Ideally, reticulated water supply should be provided for major roadside rest areas. This guarantees the quality of potable water and eliminates the potential for contamination.

Where reticulated water supply is not available, water may be sourced from groundwater bores and rainwater tanks. All tank water needs to be marked: 'Rainwater not suitable for drinking'.

Playground equipment

What case study research indicates

Playground equipment was notably absent from most Australian roadside rest areas. In the overseas case studies however, playgrounds were more common.

Best practice approach

Playground equipment was given a low ranking by most stakeholder groups during the stakeholder workshops, indicating it was not a high priority for reducing driver fatigue. Playground facilities should be considered for inclusion, if budget allows, in areas where there are a higher proportion of families travelling along a drive route.

Playground equipment and facilities are most often found in roadside rest areas with petrol stations and in cases where multinational corporations provide the facilities for customers. This may be a reflection of the cost of maintenance and the public liability considerations for contemporary playground facilities.

Barbeques and cooking facilities

What case study research indicates

Barbeques and cooking facilities were provided in roadside rest areas adjacent to public parks or government-maintained facilities. Due to safety and rural fire concerns, all barbeques and cooking facilities should run on liquefied petroleum gas (LPG) or electricity, and open fireplaces should be phased out over time.

Stakeholders rated barbeques and cooking facilities as a low priority, particularly RV groups who are fairly self-contained. Some stakeholders felt that providing these facilities encouraged longer term stays rather than managing driver fatigue. Another consideration is that cooking facilities, as with toilets and showers, also require regular cleaning and maintenance.



BBQ facilities

Source: Michael Marston

Boiling water

What case study research indicates

There were no facilities for boiling water at any of the roadside rest areas researched. In fact, no facilities for boiling water have been identified anywhere in Queensland. DTMR's minimum standards for roadside rest areas do not require facilities for boiling water.

Best practice approach

Facilities for boiling water are considered non-essential but 'nice to have' at roadside rest areas. Health and safety is a consideration when providing facilities for boiling water at an unstaffed public facility.

Showers

What case study research indicates

Showers were not provided at the majority of roadside rest areas researched.

Best practice approach

Showers at roadside rest areas without on-site management are rare. Most roadside rest areas with showers are located in an urban or semi-urban environment as they require reticulated water, mains power and daily cleaning and maintenance to ensure the facility is hygienic, attractive and free from vandalism.

Coin-operated showers can be installed to raise money to cover amenity maintenance costs. The St Judes Road rest area at Ballandean in south east Queensland features coin-operated showers (www.cmca.net.au).

Site and facility lighting

What case study research indicates

Lighting at a roadside rest area enables facilities to be accessed after dark and is important in providing security for personal safety.

Site or overhead lighting provides additional security and perceived safety, especially if roadside rest areas are in remote and isolated locations.

Anecdotal information suggests that lone female drivers who do not feel safe stopping at a roadside rest area for a toilet break will travel on to the next destination before resting, which increases the risk of driver fatigue (Mr Graeme Ransley, Mackay RAAG).

Best practice approach

If mains electricity is available at the site, toilets and shelters should be provided with overhead, fixed lighting.

If mains electricity is not available at the site, solar energy alternatives such as solar panels, photovoltaic cells, battery packs and other electricity storage options should be considered to provide overhead lighting for personal safety and security. Operators will need to assess the risk of theft and vandalism and determine whether solar panels and solar lighting will achieve appropriate minimum lighting standards.

The most secure solar lighting option, according to solar providers, is to have panels and batteries mounted on top of car park light poles, underground wiring to shade structures, and vandalproof, movement sensor LED lighting.

Stakeholders suggested using mirrored or reflective glass panels to reflect car headlights.

The following examples of street lighting use appropriately positioned solar panels to reduce the incidence of theft or vandalism.



Examples of solar-powered lighting

Pet facilities

Travelling with pets

Travelling with pets is becoming increasingly popular with drive travellers, so it is therefore an important consideration when thinking about the design of roadside rest areas.

When developing this guide, the Royal Society for the Prevention of Cruelty to Animals (RSPCA) was consulted about pet facilities at roadside rest areas in Queensland. The RSPCA recommended providing:

- safe, clean drinking water—preferably through taps that turn off automatically after use
- water bowls bolted to the ground—that can be easily emptied and cleaned of sand and dirt
- shaded areas with trees or shelter
- biodegradable toilet bags available through dispensers—similar to those found in dog parks
- secure rubbish bins
- signage that reminds travellers not to leave pets in the car as they can overheat quickly
- additional signage to advise travellers entering the roadside rest area that they may encounter unleashed dogs.

Pets should be exercised in a safe environment and preferably on a leash for the animal's safety. Pets may become disorientated in unfamiliar surroundings and could be more likely to run away.

If incorporating an off-leash area in a roadside rest area, consider a secure and fenced environment that adequately allows dogs to run and jump freely, especially if the roadside rest area is located next to a freeway or highway. The entry and exits to the off-leash area should be double gated to ensure the safety of the animals.

Personal security and crime prevention

What case study research indicates

Research indicated that personal security facilities are common at American roadside rest areas, while in Australia there is only passive surveillance. Australia was less likely to include technological devices for personal safety such as panic buttons, emergency call phones and closed circuit television systems.

Best practice approach

A best practice approach to personal security and crime prevention includes good site design enabling clear lines of site throughout the entire roadside rest area, and clear pedestrian pathways and facilities which are illuminated at night.

The use of security and crime prevention technology is dependent on budget and the availability of power. Technology, such as the Snap Send Solve app, may be used to report vandalism, damage to infrastructure and maintenance requirements.

RV effluent dump points

What case study research indicates

Research showed that individual local government authorities aimed to encourage visitors by including dump points in roadside rest areas. Information about the location of these dump points can be found at www.dumppoints.com, www.sanidumps.com, www.cmca.net.au and in DTMR's *Guide to Queensland Roads*.

In Spain there appears to be a strong dependence and connection between serviced dump points and tourism attraction and expenditure. In Australia, some private operators provide dump points and charge non-staying users a nominal fee to use those facilities.

Best practice approach

A best practice approach to dump points involves 'fit for purpose' facilities containing in-ground, drive-over dump points, as well as waste collection facilities for general waste and recycling waste.



Signage and in-ground dump points

7

Signage and information



7 Signage and information

Signage is an important consideration for the design, operation and tourism experience of roadside rest areas.

This chapter looks at:

- external roadside signage that is timely and addresses traffic safety requirements for locating and accessing roadside rest areas
- internal signage that supports the safe and efficient movement of vehicles within the roadside rest area, including signage in truck rest areas which specifies ‘no parking’
- tourist signage examples and opportunities.

External signage

It is likely that many users of roadside rest areas are visitors to the area and are unsure of the exact location of the facility or how to access the site. There have been many accidents over the years, resulting from drivers suddenly braking and causing impact with vehicles in tow or drivers missing a rest area entrance, doing a U-turn on a narrow highway then colliding with an approaching vehicle.

Signage provides a clear reminder about rest areas and helps drivers avoid driver fatigue by planning breaks along their journey. Ideally, signs should incorporate details of the upcoming three rest opportunities over the next 100 km, which could include towns, villages and service centres.

Roadside signage is managed under the *Manual of Uniform Traffic Control Devices* (MUTCD) and is closely regulated to ensure road safety is maintained. The preferred locations of signs are as follows:

- Appropriate ‘advance warning’ signs (MUTCD)—these should be located at 500 metres, 300 metres and 200 metres before the rest area (depending on the speed environment)
- Desirable ‘advance warning’ signs—there is potential to provide signs at 10 km (that indicate the type of rest area), at 2 km (to indicate the type of rest area and the distance to the next rest area), and at 1 km (to indicate the upcoming rest area).

The preferred approach for roadside rest area signage under MUTCD standards is described below:

- **All rest areas** should have a sign containing symbols that show its suitability for road users.
- **Rest areas with design limitations that make them unsuitable for trucks and heavy vehicles** should be signed as ‘not recommended for trucks’.
- **Rest areas designed for heavy vehicle use** should be signed with the heavy vehicle or truck symbol.
- **Rest areas with separate sections for heavy vehicles and other road users** should be signed separately with heavy vehicle signs and signs for all road users.

Internal signage

By their very nature, RVs—whether car, caravan, fifth wheeler or motorhome—require space to manoeuvre. Forward entry and exit is essential to eliminate the risks associated with reversing large vehicles with limited rear vision. Therefore, internal signage must be very clear in advising visitors about the rules applying to the site.

Interesting signage and tourist information at roadside rest areas will encourage users to get out of their cars and take a break from driving.

Directional flow

As detailed in Chapter 5, it is best to establish a one-way traffic flow in roadside rest areas. Signs advising the direction of traffic flow and ‘no entry’ should also be provided.

Traffic speed

While passenger vehicles without trailers have been known to speed excessively through roadside rest areas, this is usually not an issue with vehicles towing trailers.



Example of Queensland signage for regulating traffic speed in a roadside rest area

This sign is not recommended for use in heavy vehicle rest areas which are designated for trucks only.

Parking zones

It is difficult to specify parking zones in roadside rest areas without sealed road surfaces as parking bays can't be marked on those surfaces.

'No standing' signs are recommended in areas where it is dangerous or inappropriate to park.

Pavement markings, such as directional arrows, are encouraged to supplement signs in parking zones. They give drivers additional guidance and can be used when drivers have a limited view of signage, particularly at night in poorly lit locations.

Driver safety information

Local governments may include signage promoting road safety and safe driving with positive reinforcement of fatigue management messaging.

Tourism promotion

Tourism promotion through signage is important for promoting drive tourism in Queensland. This kind of signage generally falls into three broad categories:

- **themed signage**—which carries a particular theme along an entire route, such as the Matilda Highway in west Queensland
- **specific localised signage**—which advises motorists of local attractions, such as the Stockman's Hall of Fame
- **Interpretive tourist information**—which is common at roadside rest areas and visitor information centres.

Themed signage

Tourism promotion using themed signage has been used successfully in Queensland, interstate and overseas. Typically all signage follows a common theme and provides travellers with a progressive suite of attractions. For example, the dinosaur theme on the Flinders Highway is consistent with the local tourism theme and attractions such as the Kronosaurus Korner (dinosaur museum) in Richmond and the Muttabuttasaurus statue in Hughenden.

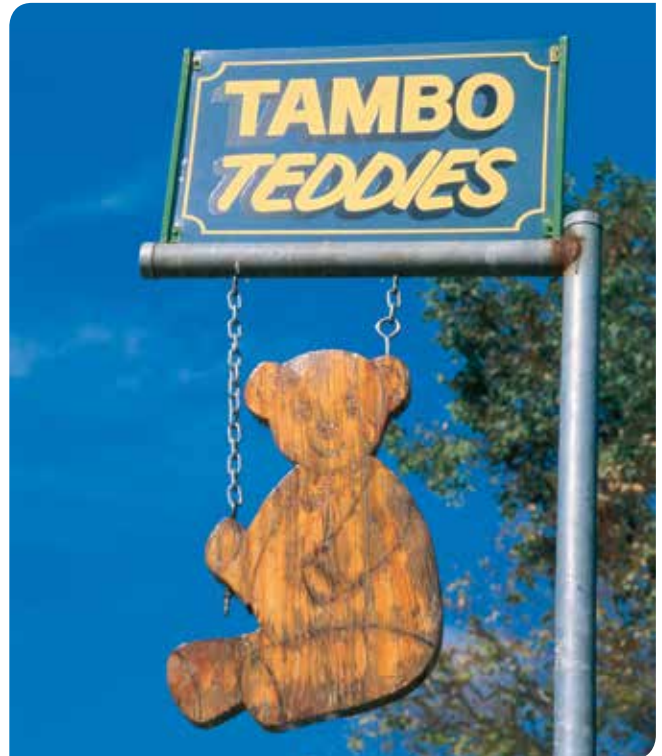


Tourist promotion signage—Dinosaur Trail to Richmond

Source: Tourism and Events Queensland

Specific localised signage

Specific localised signage provides the traveller with advanced notice of an attraction. This type of signage is usually located on private property, with the exception of directional signage which needs to comply with MUTCD standards. Permission can sometimes be obtained for the signage to be located in a road reserve. One of the most successful themed signage examples is 'Tambo Teddies'. Years of drought resulted in low wool prices and Tambo Teddies were seen as a great way to promote wool and the wool industry. The signage is now an institution and is part of the town's tourism attraction and theming.



Tourism promotion signage—Tambo Teddies

Source: Tourism and Events Queensland

Interpretive tourist signage

Interpretive tourist signage provides information about the local area and its attractions. This type of signage is usually found in roadside rest areas and visitor information centres, and typically contains information that entices the reader to visit an attraction. It is essential that all roadside rest areas provide quality information on the area's attractions, either through physical or electronic signage, so that tourists visit the attractions and spend money in the local area.

8

Technology



8 Technology

This chapter discusses a range of technologies that can be used in Queensland roadside rest areas.

Wi-fi access and mobile interaction

In the world of smart phones and tablets, digital media that allows for personal and mobile interaction is becoming more popular. Wi-fi access is increasingly being provided on public transport and in other areas where people congregate. While access to wi-fi in remote locations can be challenging, if it is achievable it should be considered.

Free wi-fi access: Florida Department of Transport

The Florida Department of Transport ran a trial offering free wi-fi at all of its welcome centres and a small number of roadside rest areas. Once connected to the wi-fi the user received 15 minutes of free internet access, then had the opportunity to purchase additional access time.

Digital signage kiosk: Ohio Department of Transport

The Ohio Department of Transport is installing digital signage kiosks in its most popular welcome centres as part of a project to generate advertising revenue. While these kiosks do not have touch screen capability, they enable mobile interaction through QR codes. These kiosks also display information slides on a timed rotation.

Wi-fi tourism promotion

Bluetooth beacons, marketed as 'ibeacons' by Apple, are another example of the application of technology. These devices 'push' information to smart phones, tablets and laptops which means mobile coverage is not required to access the internet. If local tourism organisations provided these beacons in roadside rest areas, travellers would receive information on local attractions, accommodation, fuel and food stops.

Mobile coverage

Mobile coverage is a key consideration in the planning and management of roadside rest areas, and it continues to improve in terms of geographic coverage and quality. If mobile coverage is available, the range of technological applications available at roadside rest areas increases dramatically and provides a higher level of service and safety. As the rollout of new mobile technology continues, the extent of coverage should be monitored regularly.

Smart phone apps

Smart phone applications ('apps') are continuing to grow in popularity. Anyone with a smart phone or tablet is able to download and access apps on their personal device. Apps provide an opportunity to continuously engage with travellers as the travellers move along a route.

Local tourism operators could consider developing a specific app that supports a roadside rest area and associated attractions. The following are some examples of specific apps supporting road travel and tourism.

RACQ roadside assistance app

RACQ has a free app that provides a portal for accessing roadside assistance, trip planning information, turn-by-turn directions, road conditions and membership discounts. The app, which is available for download on iPhones and android phones, has received positive reviews.

Drive North Queensland tourism app

Drive North Queensland has a free geo-positional app that displays information about the immediate area to travellers as they drive along a route. Information such as where to stay, where to eat and local attractions to visit can be sent through to the traveller's personal device at the click of a button. Information is sourced directly from the Australian Tourism Data Warehouse.

There is also capacity for a built-in social media interface so travellers can share their journey and experiences on Facebook, Twitter and Instagram. The app is available to travellers on the Savannah Way, Overlander's Way and Great Tropical Drive touring routes. There is significant opportunity for further expansion into this information sharing method to support the drive tourism market.

Info Centre Find app

An Info Centre Find app was recently launched by TEQ to help travellers identify the location of the nearest visitor information centre, and to enable these centres to transmit information directly to travellers.

Snap Send Solve app

Snap Send Solve is a free app which allows the public to report an issue to the relevant authority anywhere in Australia. It involves sending a message which contains a photo of the issue and the GPS location. The sender will receive an acknowledgement that their message was sent. The app is widely used by councils throughout Queensland.

Websites and online resources

There are numerous websites and online resources that help drivers plan their travel route and driving breaks, such as the DTMR and RACQ websites. For a list of other websites, see Chapter 14.

There is a GeoWiki information service that is available to members of the CMCA. The service provides Google Earth™ based information on rest areas, caravan parks and accommodation along a driving route.

Technologies and innovations that are focused on free roaming travellers include satellite GPS systems, satellite smartphones and apps such as Spot Connect. These technologies record personal locations and enable connectivity in an emergency.

Tourism organisations have websites that provide useful information about local attractions that can enhance the drive tourism experience.

Outback Queensland Tourism Association

www.adventureoutback.com.au

Southern Queensland Country Tourism

www.southernqueenslandcountry.com.au

Websites for Queensland tourism organisations

Tourism and Events Queensland

www.queenslandholidays.com.au

Capricorn Enterprise

www.capricornholidays.com.au

Bundaberg North Burnett Tourism

www.bundabergregion.info

Gladstone Area Promotion and Development Ltd

www.gladstoneregion.info

Townsville Enterprise

www.townsvilleholidays.info

Mackay Tourism

www.mackayregion.com

Tourism Tropical North Queensland

www.cairns-greatbarrierreef.org.au

Fraser Coast Opportunities

www.visitfrasercoast.com

Whitsundays Marketing and Development

www.tourismwhitsundays.com.au

Brisbane Marketing

www.visitbrisbane.com.au

Sunshine Coast Destination Ltd

www.visitsunshinecoast.com.au

Gold Coast Tourism

www.visitgoldcoast.com

9

Operations, management and enforcement



9 Operations, management and enforcement

The operation and management of roadside rest areas can be complex, given the competing demands of locals and road users.

There are 730 roadside rest areas in Queensland (DTMR's *Guide to Queensland Roads*). Of these, 242 rest areas are managed by DTMR under the *Transport Infrastructure Act 1994*.

The remaining rest areas are managed by local government authorities and community groups who have different capabilities and expectations regarding the level of service and maintenance.

In rural and remote locations, the management and regulation of roadside rest areas is challenging and extends beyond standard office hours and obligations. If conflict occurs between users it can therefore be difficult to manage.

There have been reports of conflict at combined motorist and heavy vehicle rest areas caused by refrigerated trucks and heavy vehicles arriving during the night and making a lot of noise. During these hours it is very difficult for any local government authority, transport regulator or law enforcement group, such as police, to control and manage the conflict.

DTMR requirements

Sites provided by DTMR should not conflict with civic or commercial facilities such as camping and caravan parks that offer longer-term accommodation.

According to DTMR's *Guide to Queensland Roads*, sites that allow overnight stays should display relevant signage and be limited to a maximum accommodation of 20 consecutive hours under the *Transport Infrastructure Act 1994*. If users stay longer, the roadside rest area is no longer being used for driver reviver or fatigue management.

Local government enforcement

A local government authority can pass a local law enforcing a maximum length of stay and other reasonable conditions in roadside rest areas. The primary management and enforcement arrangements are covered by local laws under the *Local Government Act 2009*. Length of stay is at the discretion of local government and is covered in more detail in Chapter 13.

Before passing a local law governing a rest area, the local government authority would need to consider the availability of staff and resources to enforce that law, and perhaps allow some exceptions to the law in special circumstances.

Maintenance and cleaning of roadside rest areas

The costs of routine maintenance of facilities should be factored into recurring budgets. Routine maintenance includes the mowing of lawns, maintaining gardens, cleaning toilets and facilities, and maintaining building fixtures, fittings and paved areas.

Community and industry engagement

Community groups can play a role in establishing and maintaining rest areas.

The American Route 66 is an example of a passionate group of retired volunteers who established the Route 66 Historical Museum rest area which is now a tourist attraction on the route.

Funding for the maintenance of roadside rest areas could be generated from corporate sponsorships and commercial advertising, for example the Bushells Association sponsors driver reviver centres in New South Wales.



Another example of community engagement is RAAG's partnership with the Retreat Hotel at Denison Creek which is approximately 65 km west of Mackay on the Peak Downs Highway. The partnership established a self-serve 24/7 driver reviver rest stop with free tea, coffee and biscuits. This rest area is a dual motorist and heavy vehicle rest stop and is located in the centre of a 'high fatigue' crash zone.

When considering community involvement, it is also wise to anticipate the long term sustainability of such arrangements.

Queensland camping options toolkit

The *Queensland camping options toolkit* developed by DTESB is a useful guide on camping in Queensland and is available at www.dtesb.qld.gov.au.

10

Best practice case studies



10 Best practice case studies

Drive tourism is not just popular in Australia, it is also popular overseas where a number of the best known tourism drives are located. These tourism drives are supported by a network of quality roadside rest areas and activities. The following case studies provide some insight into roadside rest areas in Australia and overseas.

Australian roadside rest areas and drive tourism

Roadside rest areas are widely used throughout Australia, particularly in rural areas where there are significant distances between towns and traveller facilities. Roadside facilities in Australia can vary from an area with parking, a rubbish bin and a shade shelter, to an area with a staffed information kiosk, refreshment area, toilets, picnic tables and RV dump points.

Roadside rest areas are the responsibility of a variety of authorities including state transport agencies, local governments and community organisations. In Australia there are various rules about overnight occupation and penalties may apply for camping or extended stays at certain rest areas.

Roadside rest areas in Australia do not usually provide commercial facilities, such as petrol stations or restaurants, as these facilities are located at designated service centres.

Matilda Highway, Queensland

The Matilda Highway stretches more than 1800 km between Cunnamulla in south west Queensland to Karumba in the Gulf of Carpentaria; and is well used for drive tourism.

The Highway passes through a number of outback towns including Charleville, Longreach, Winton and Normanton. While roadside rest areas along the route generally provide shade, picnic tables and rubbish bins, the facilities in each area vary. Informative and interpretive signage is provided along the route, and again, the standard of facilities and interpretive information varies depending on the rest area.



Signage on the Matilda Highway, Queensland

Source: Tourism and Events Queensland

Caboolture Travel Centre, Queensland

The Caboolture Travel Centre, located on the north-bound carriageway of the Bruce Highway at Morayfield, is an example of a commercial facility providing a range of services for travellers including toilets, food, information and petrol.

Facilities at the travel centre include:

- truckies lounge and toilets with showers
- separate truck refuelling area
- truck parking bays
- van and trailer parking bays
- general parking bays
- outdoor shelters in the surrounding park
- children's playground and outdoor seating area
- conference room and separate lounge room
- staffed visitor information centre
- community noticeboard
- food court, toilets and ATMs
- petrol station and convenience store.

Natural Sciences Loop, Queensland

The Natural Sciences Loop is a 1000 km historic route from Cunnamulla to Augathella in central Queensland that features tourist attractions and rest areas with amenities for drive tourists. The four visitor centres along the loop receive approximately 6800 visitors annually. The loop includes the towns of Augathella, Eromanga, Charleville, Quilpie, Cunnamulla and Thargomindah.

The Natural Sciences Loop was established through partnership between the South West Regional Economic Development Association, Queensland Government and the four shires of Murweh, Paroo, Bulloo and Quilpie. The Natural Sciences Loop is considered a best practice example of how to successfully showcase a region and derive economic benefits for regional communities.



Natural Sciences Loop—roadside rest area toilet and all abilities access ramp

Wyandra rest area, Queensland

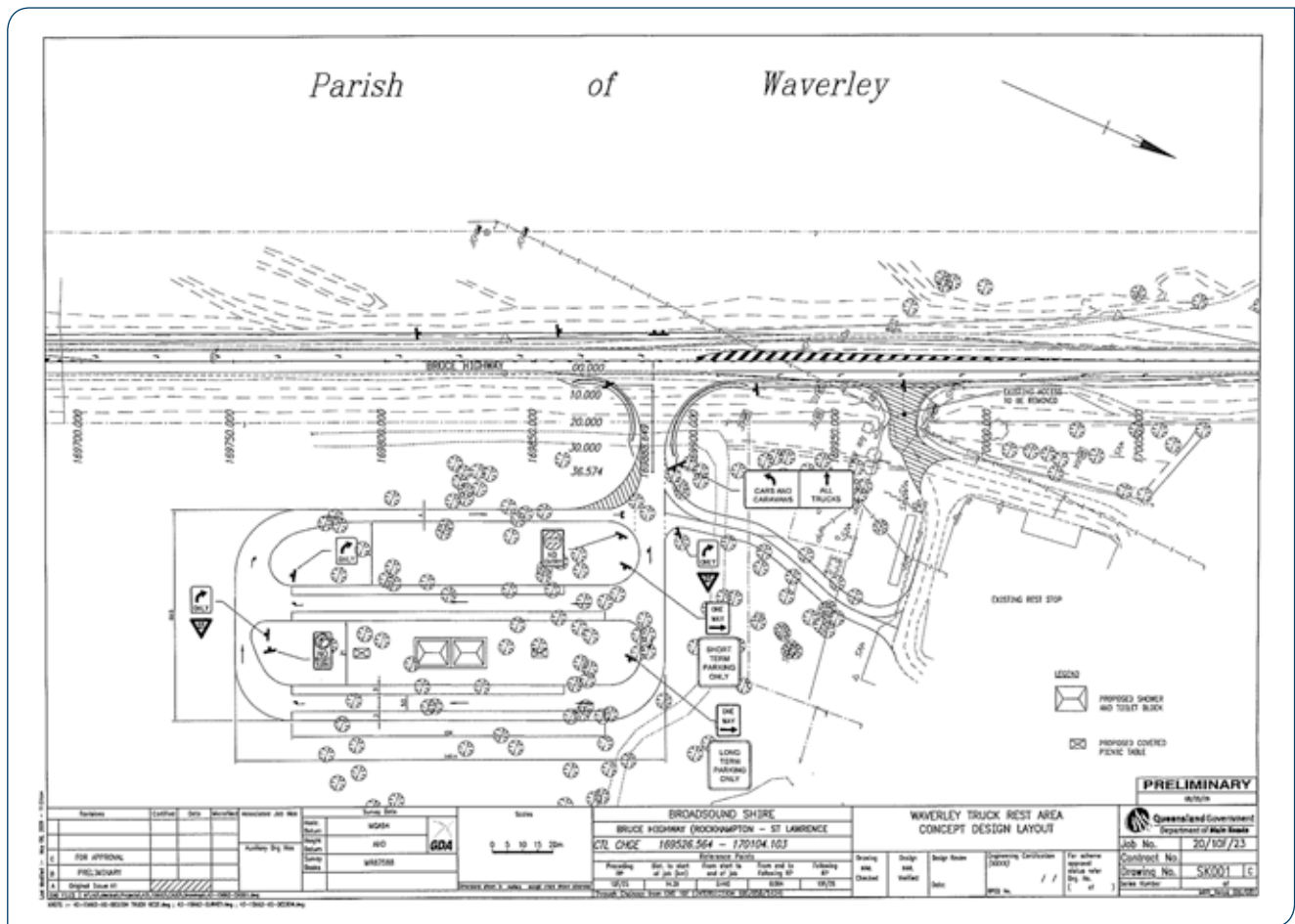
The roadside rest area at Wyandra in southern Queensland is located between Barrington and Charleville on the Mitchell Highway. It is a good example of a rest area in a remote location. Facilities include a stand-alone toilet, an uncovered picnic table, shade from trees, a parking area and space for caravans and RVs.

Waverley Creek roadside rest area, Queensland

The roadside rest area at Waverley Creek is located on the Bruce Highway, 11 km south of St Lawrence and about halfway between Mackay and Rockhampton.

The rest area is a combined motorist and heavy vehicle rest area with split facilities. Parking is available for 14 B-Double trucks. Facilities include a shelter shed, truck parking area, sealed hard stand area, toilet block, shady trees, wood-fired barbeques and a public telephone.

The rest area has recently been upgraded by DTMR through Federal Government funding; and is considered to be a best practice example of a rest area for truck drivers.



Technical design of Waverley Creek roadside rest area

Great Ocean Road, Victoria

The Great Ocean Road is a heritage-listed route stretching 243 km between Torquay and Allansford in Victoria. The road was built by returning World War I soldiers between 1919 and 1932 and was dedicated to their comrades—making it the world’s longest war memorial. Popular attractions such as the Twelve Apostles and London Bridge draw a large number of tourists to the route.



The Great Ocean Road, Victoria

Source: Shutterstock.com

As the Great Ocean Road is constrained in some sections, there are a range of roadside rest areas provided along the route—ranging from widened shoulders of road where drivers can stop and take photographs, through to rest areas with bus parking and information booths.

There are visitor information centres at most of the major towns the route passes through and also at major attractions such as the Twelve Apostles.

Overseas experience

Research into the overseas experience revealed a very different culture in rest stops. In the United States of America (USA) for example, rest stops are welcome centres that have comfortable facilities for tourists and visitors. Some welcome centres are open 24 hours, indicating a more holistic and economic approach.

Spanish and European purpose-built driver rest stops support local tourism and economic development activities.

Drive tourism in the USA

In the USA, rest areas are typically non-commercial facilities that provide parking and amenities as a minimum but can extend to including information kiosks, vending machines and RV dump points. Roadside rest areas are generally funded, managed and maintained by the relevant state transport authority.

For example, Caltrans—a state agency responsible for highway planning—maintains all roadside rest areas in California. As a minimum, these roadside rest areas have toilets, rubbish bins, water, picnic tables and public phones. Higher-level facilities have disabled access and may also include RV waste dump points, food vending machines and pet rest areas.

The USA also has welcome centres which are a type of rest area located near a state border or a major attraction. These centres are generally larger than rest areas, have more facilities and are staffed.

There are both federal and state laws prohibiting private retailers and businesses from conducting commercial activity in roadside rest areas.

On interstate highways, the signage is used to indicate where drivers can stop for petrol, food, accommodation, camping, attractions etc.

Route 66: Los Angeles to New York

Route 66 is arguably one of the most famous and iconic roads in the USA. The 4000 km route, which was established in 1926, connects Los Angeles on the west coast to New York on the east coast. Route 66 crosses eight states and three time zones. It also played an important historical role as a major path for those who migrated west during The Great Depression. Although it is now officially decommissioned, the route still attracts a significant number of drive tourists.



Route 66

Source: Shutterstock.com

Roadside rest areas along Route 66 work within a network of commercial roadside facilities, such as fuel service centres. An example of a high-level roadside facility on Route 66 is the Manassas Safety Rest Area and Welcome Centre in Virginia, which is managed by the Virginia Department of Transport (DoT). The rest area is open 24 hours a day, 365 days a year and is accessible for all vehicles. Facilities include telephones, a picnic area with barbeque, a pet rest area, toilets, 16 car spaces and 10 truck spaces. The welcome centre is open from 8.30 am to 5.00 pm daily, but is closed for Thanksgiving, Christmas and New Year’s Day.

The Virginia DoT encourages local communities to sponsor safety rest areas such as the one at Manassas.

Roadside facilities are managed by relevant state agencies, local communities and not-for-profit organisations. As a result, the standard of roadside rest areas and their facilities varies significantly.

The Cascade Loop

The Cascade Loop is a 650 km drive tourism trail circling the heart of Washington state and passing through the islands of Puget Sound, the Cascade Ranges and the Columbia River Valley.

It is managed by the Cascade Loop Association, which is a not-for-profit organisation that provides maps and information about drive times, accommodation, tours, hiking trails and food stops.

There is no overarching strategy for managing the Cascade Loop's roadside rest areas and rest stops, possibly due to the frequency of towns along the trail which have reduced the need for roadside rest areas. It could also be because the Cascade Loop is part of the North Cascades National Park, which is managed by the Forest Service.

The trail contains a number of visitor centres managed by the Forest Service. The North Cascade Visitor Centre is an example of a higher-quality tourist facility along the route. While it operates in a similar way to the welcome centres on the route, it is more focused on providing educational information about the national park. It also provides toilets, information desks, a sales area and interpretive trails.

Great Texas Coastal Birding Trail

The Great Texas Coastal Birding Trail is a 1120 km nature-based tourism trail connecting communities along the coast of Texas. There are over 300 sites along the birding trail which are marked, numbered and coded according to their accessibility and facilities.

There is a high level of community involvement in managing the birding trail. A Great Texas Birding Classic is held annually to provide ongoing funding for the route and local communities. The trail is a good example of how natural features and attractions can be incorporated into drive tourism.

Motorway service areas in the UK

In the United Kingdom (UK), motorway service areas are places where drivers can leave a motorway to rest, refuel and access refreshments. Most of these service areas are operated privately by commercial entities. 'Lay-bys' are the only other type of roadside rest area in the UK, where drivers can pull over and take a break from driving.

Aires de Service in France

In France, full service areas (known as aires de service) and picnic sites are available on the auto-route network. By law, there must be a service area or picnic site every 20 km.

Full service areas provide facilities such as toilets, showers, petrol stations, restaurants, snack bars and convenience stores, and a number of them are now also equipped with free wi-fi. Infographic signage is used to entice drivers to these facilities.

Drive tourism and rest areas in New Zealand

New Zealand has a strong drive tourism sector based on the many scenic drives located on its North Island and South Island. Rest areas in New Zealand generally include parking, toilets, picnic tables and unmanned information kiosks as a minimum, but they can also include RV dump points.

New Zealand drive tourism differs from Australia due to the many scenic attractions and townships that provide frequent stopping opportunities. Services at roadside rest areas in New Zealand are delivered on an ad hoc basis by a range of agencies and local community organisations.

The Forgotten World Highway

The Forgotten World Highway, one of New Zealand's oldest touring routes, is built on colonial bridle paths formed in the late 19th century. Stretching for 150 km between Stratford and Taumarunui, it is a shorter drive than other scenic routes but is extremely popular with tourists on the North Island.

The route goes through the central plateau of the North Island and across to Mount Taranaki on the west coast. It has over 30 historical and natural tourist attractions such as the Moki Tunnel, also known as Hobbit's Hole.

Sections of the route are physically constrained, so this impacts on the number and type of rest areas that can be provided. However, roadside rest areas are located at regular intervals and range from a shaded area with picnic tables and rubbish bins through to commercial facilities such as restaurants.

The route is well signed with informative and interpretive signage for tourists. The theme of the Forgotten World Highway is used in all directional signage and the blue information signs are similar to those used in Australia.

Milford Road

Milford Road is considered one of the most scenic drives in New Zealand. The 240 km road connects Te Anau and Milford Sound through the Fiordland National Park.

There are few roadside facilities outside of Te Anau, Knobs Flat, The Divide and Milford Sound. Road users, including tour buses, are known to pull over on widened shoulders to rest and take photos.

Te Anau has a kiosk is staffed part time and provides travellers with information about safe driving and fitting chains to vehicles in winter.

Toilets and RV dump points are only provided at limited intervals along the route—at Te Anau, Knobs Flat and Milford Sound—to help preserve the surrounding national park. Informative signage has a strong presence along the route due to potential driving risks such as slippery surfaces.

There are a number of significant attractions along the route, such as the Mirror Lakes and Homer Pass, which are supported by a range of interpretive signage.

What makes these rest areas successful?

Research suggests that these Australian and overseas case studies are popular with drive tourists for a variety of different reasons, including:

- consistent theming along the route (such as Route 66)
- scenic beauty or attractions (such as the Forgotten World Highway and the Great Ocean Road)
- historical importance (such as the Matilda Highway)
- consistent access to roadside rest areas
- consistent standards of roadside rest areas
- consistent informative and interpretive signage along the route and at roadside rest areas
- consideration and balancing of commercial interests, such as shops
- community involvement in promoting and managing the route and roadside rest areas (such as the Great Texas Coastal Birding Trail).

Clear informative and interpretative signage, and consistency in the quality of facilities ranked highly in the empirical evidence provided in travel blogs and forums for each of the routes. These elements add significant benefits to the scenic or historical value of the driving route and appear to make a difference in terms of visitor satisfaction.

11

Literature review



11 Literature review

A literature review was carried out to source international and national examples of best practice. The literature review was intentionally broad, sourcing information from academic journals, government websites, tourism operator websites and travel blogs.

Government strategies were reviewed for roadside rest areas in the Northern Territory, Victoria and South Australia. The strategies highlighted the importance of having a framework in place for providing and managing roadside rest areas. The Northern Territory strategy was particularly focused on providing roadside rest areas to manage driver fatigue, and placed equal emphasis on tourists and professional drivers such as truck drivers. The Victorian and South Australian strategies outline categories for roadside rest areas and the corresponding management approach for each type of roadside rest area, with a particular focus on drive tourism.

Motorcaravanning in Spain



Motorcaravanning in Spain: Current situation and proposals for action provides an economic perspective on motorcaravanning and statistics on the number of caravans in Europe. The document commits the Spanish government to the following three actions:

- Create specific areas for motorcaravans (parking and dump points) on main road networks, in towns and in nature reserves.
- Signpost services and designated areas for motorcaravans on road networks, access roads and urban streets.
- Include regulations for motorcaravan circulation in municipal by-laws and in laws relating to vehicle circulation and parking.

Victorian Rest Area Strategy

VicRoads—the agency that manages state-controlled roads in Victoria—has a rest area strategy that addresses roadside rest areas in regional Victoria.

The strategy provides high-level policy guidance and outlines categories for roadside rest areas. However, the strategy does not include details about the type of facilities to be incorporated in the various roadside rest areas, nor does it identify a best practice approach for providing facilities.

The strategy commits to developing rest area route plans for all key freight and tourist routes in regional Victoria.

Roadside Rest Areas Strategy for South Australia



The *Roadside Rest Area Strategy for South Australia* (June 2008) details roadside rest area types, user profiles, design elements, signage and facilities that should be provided in roadside rest areas. The strategy suggests that an ideal roadside rest area is a place that provides shade, picnic tables, bins, parking areas, water and tourist information.

The strategy provides guidelines and examples of minimum standards for facilities and sets standards for informative signage to be used at all roadside rest areas. It also provides a framework for community involvement in developing and managing roadside rest areas and incorporating roadside rest areas into established roadside facilities such as service stations.

The *Roadside Rest Area Strategy for South Australia* is considered to be a good guide for achieving consistency and quality in roadside rest areas.

Master Plan for the Bowen Basin, Queensland

The RAAG has prepared a master plan for roadside rest areas and stopping places for the Bowen Basin and the regional road network. The aim of the document is to reduce the incidence and severity of road crashes on key routes in the Bowen Basin region by delivering additional rest opportunities for motorists and heavy vehicle drivers.

With an emphasis on mining-related activities in the Bowen Basin, the improved roadside rest areas are to benefit all road users, whether they are mining industry personnel, mine service providers, residents of regional communities, tourists or freight services transiting through the region.

The master plan includes a table of design standards for roadside rest areas (based on existing DTMR standards), a general list of items to consider when locating a roadside rest area and possible concept layouts also aided by DTMR. The document is considered to be the 'go to' guide for locating and upgrading roadside rest areas in the Bowen Basin and surrounding region.

Policy for roadside rest areas in the Northern Territory

The Northern Territory Department of Transport (NTDT) has a succinct two-page roadside rest areas policy, which came into effect in 2002. While NTDT oversees the policy, the Department of Planning and Infrastructure is responsible for building and maintaining roadside rest areas.

Under the roadside rest areas policy, roadside rest areas are to be provided at approximate intervals of 80 km for the purposes of reducing driver fatigue. Minimum facilities include garbage bins with animal protection grills, shelters and tables. Additional facilities include emergency water tanks in isolated areas and dry composting toilets.

The policy states that road users may not stay at a roadside rest area for longer than 24 hours. The policy also acknowledges that enforcement 'is limited by the impracticality of monitoring a large number of road users over a vast distance', so enforcement is restricted to serious breaches. For serious breaches, a Notice of Trespass will be issued under the *Trespass Act 2010*.

Interestingly, the policy acknowledges that as roadside rest areas may compete with caravan parks they should not be located within 80 km of a commercial facility, except at a tourist interest point. Also of interest is that truck parking bays and motorist rest areas are to be kept separated and motorists are not to use truck parking bays except in an emergency.

12

Resources for travellers



12 Resources for travellers

Location of visitor information centres

Tourism and Events Queensland recently launched an Info Centre Find app to help travellers locate the nearest visitor information centre. Details are available at <http://www.tq.com.au/resource-centre/industry-assistance/visitor-information-centres/vic-app.cfm>.

Map of roadside rest areas in Queensland

A map of roadside rest areas in Queensland can be found at www.tmr.qld.gov.au.

Information about roadside rest areas in Queensland

Information and photographs of facilities at roadside rest areas in Queensland can be found at <http://www.exploreaustralia.net.au/Stay/Rest-areas/Queensland>.

Traffic and travel information

Current traffic information, including information on state-controlled roads, can be found at <http://131940.qld.gov.au/>.

Plan your journey

A journey planner and information on reducing driver fatigue is available at the DTMR website: <http://www.qld.gov.au/transport/safety/holiday-travel/planning/index.html>.

Locational information for points of interest and roadside rest areas along state-controlled roads (suitable for Garmin and Tom Tom navigational systems) can be downloaded at the DTMR website: <http://www.tmr.qld.gov.au/Travel-and-transport/Maps-and-guides/Points-of-interest-files.aspx>.

A journey planner that includes information on available stops is available at the RACQ website: http://www.racq.com.au/travel/drive_travel/trip_planner.

The RACQ mobile app can also help you plan your trip or request roadside assistance. It can be downloaded at http://www.racq.com.au/membership/member_services_and_advice/mobile.

Find points of interest

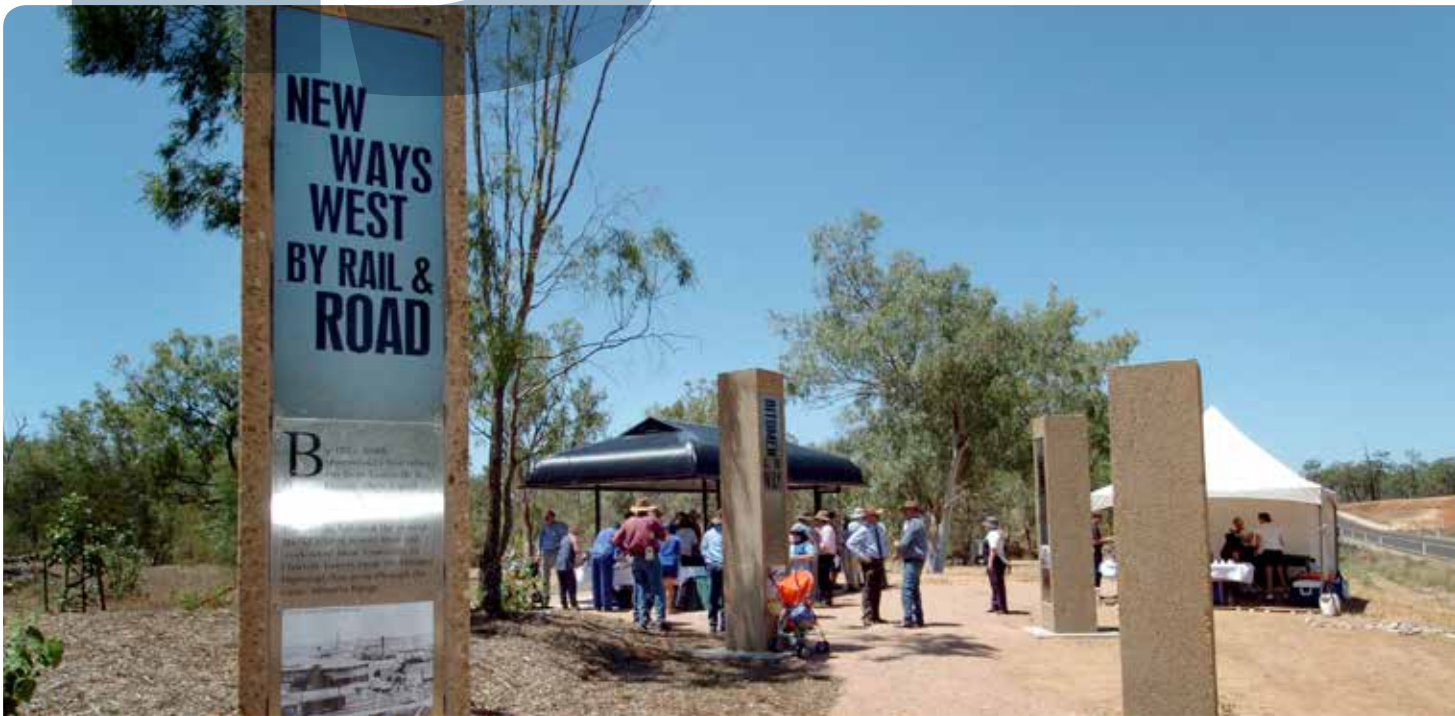
You can find points of interest along your journey at the DTMR website: <http://www.tmr.qld.gov.au/Travel-and-transport/Maps-and-guides>.

Dump points for blackwater and greywater waste in Queensland

The location of public dump points can be found at www.dumpppoints.com, www.sanidumps.com, www.cmca.net.au and in DTMR's *Guide to Queensland Roads*.

13

Resources for planners and designers of roadside rest areas



13 Resources for planners and designers of roadside rest areas

Signage and devices for roadside rest areas

The MUTCD contains information about the design, methods, standards and procedures required for every sign, signal, marking, light or device installed on a Queensland road.

Planning approval processes

Modules 18 and 19 of the *State Development Assessment Provisions* contain information about state transport infrastructure protection and state transport network functionality. The provisions are administered by the State Assessment and Referral Agency within the Department of State Development, Infrastructure and Planning (DSDIP). More information is available at www.dsdipl.qld.gov.au/sara.

Local government planning schemes (town plans)

The relevant local government planning scheme may set requirements for planning, building and approval of works associated with a roadside rest area. More information can be found by visiting the relevant local government website and searching for 'planning' or 'planning and development' topics.

Local laws and operations

A local government authority may have local laws that govern the length of stay at publicly-operated facilities and local laws concerning noise control and the management of domestic animals.

14

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