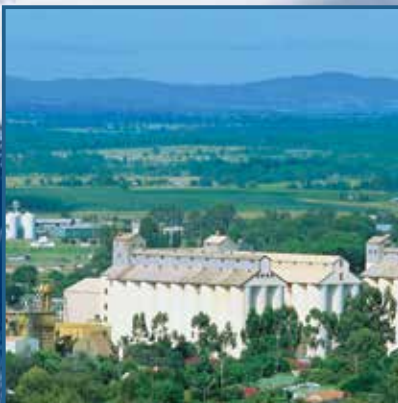


WIDE BAY BURNETT

DRAFT REGIONAL TRANSPORT PLAN

2018



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We acknowledge the Traditional Owners and Custodians of the land to which this plan applies and pay our respects to their Elders both past and present.

The Department of Transport and Main Roads wishes to acknowledge the valuable input and contribution from our local government partners to develop this plan:

- Bundaberg Regional Council
- Cherbourg Aboriginal Shire Council
- Fraser Coast Regional Council
- Gympie Regional Council
- North Burnett Regional Council
- South Burnett Regional Council.

Cover images: Lake McKenzie, Fraser Island (background); Kingaroy peanut silos (inset, left); Boats on river, Maryborough (inset, centre); Old Monto Shire Hall (inset, right).

Inside cover image: Sugar cane fields



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Bundaberg Post Office

The background image shows a historic, light-colored building with a prominent clock tower on the left. The building has arched windows and a red-tiled roof. In the foreground, there are palm trees and a street lamp. A blue semi-transparent rectangle is overlaid on the top half of the image, containing the section header.

1. Introduction

1.1 A shared direction for transport

The *Wide Bay Burnett Regional Transport Plan* (the Plan) outlines a shared direction for shaping the region's transport system over the next 15 years.

The Plan was developed in consultation with local government and key stakeholders, with input from customers and industry. The Department of Transport and Main Roads will continue to work in partnership with all levels of government, the community and industry to implement the Plan and achieve shared goals for the region.

The Plan covers all modes of transport with a focus on the networks and services in the region and the inter-regional and international connections that are vital to the region's social and economic prosperity.

The Wide Bay Burnett region is home to over 290,000 people and includes the local government areas of Bundaberg, Cherbourg, Fraser Coast, Gympie, North Burnett and South Burnett.¹

1.2 What is a Regional Transport Plan

The purpose of the *Wide Bay Burnett Regional Transport Plan* is to set out regional transport priorities and actions for developing the transport system in a way that supports regional goals for the community, economy and environment.

The Plan has been developed in accordance with the *Transport Planning and Coordination Act 1994* and meets the department's legislative responsibility to develop integrated regional transport plans that complement land use planning and support the goals and objectives of Regional Plans.

Regional Transport Plans are a fundamental component in the hierarchy of integrated transport system planning. They have an essential role in defining local responses to wider community goals, system objectives, problems and priorities, through the development of policy choices and transport system strategies at a regional level.

The approach to developing Regional Transport Plans is aligned with the *Australian Transport Assessment and Planning Guidelines* for best practice transport assessment and planning (Figure 1).

The regional policy choices and system strategies expressed in this Plan are used to:

- inform more detailed planning or investigations at a network, area, corridor, route or link level
- guide development, assessment and selection of specific investment solutions.

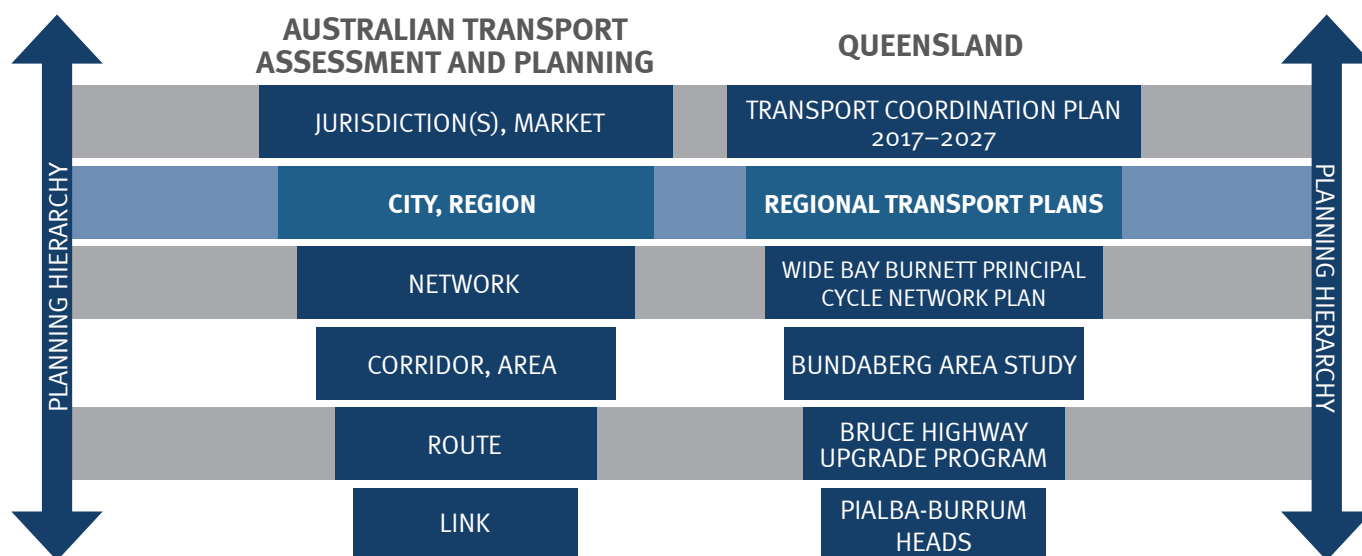


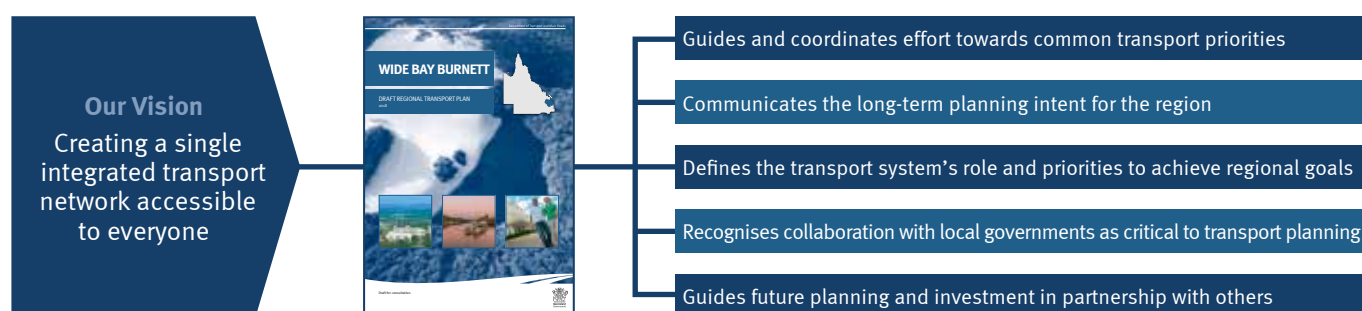
Figure 1: Examples of how Queensland responds to the Australian Transport Assessment and Planning hierarchy

¹ Australian Bureau of Statistics. (2017). *Regional Population Growth, Australia* (Catalogue No. 3218.0).

The Plan supports the department's vision of 'creating a single integrated transport network accessible to everyone' through:

- guiding and coordinating effort towards common transport priorities
- communicating the long-term planning intent for the region
- defining the transport system's role and priorities to achieve regional goals
- recognising collaboration with local governments as critical to 'one-network' transport planning
- guiding future planning and investment in partnership with others.

The Plan will be used by Transport and Main Roads to inform investment decisions to develop the regional transport network.



1.3 Strategic alignment

This Regional Transport Plan has been developed in the context of policies, strategies, plans and investment frameworks across all levels of government (see Table 1 on page 8). These policy and planning documents are reflected in the objectives, challenges, opportunities and priorities identified in the Plan.

The Plan aligns with:

- *State Infrastructure Plan*
- *State Planning Policy*
- *Wide Bay Burnett Regional Plan 2011*
- local government land use, transport plans and strategies
- economic development strategies
- the *Australian Government's Australian Infrastructure Plan* (prepared by Infrastructure Australia).

The Plan responds to customer needs, as well as the goals and directions of the community, industry and all levels of government.

Transport and Main Roads also produces statewide strategies and plans that guide coordinated outcomes for transport networks and services across Queensland. These high-level plans set the broader framework for taking action at the regional and local level.

Key planning documents include:

- *Transport Coordination Plan 2017–2027*
- 'Queensland Transport Strategy' (draft)
- *Transport and Main Roads Strategic Plan 2016–2020*
- 'Queensland Freight Strategy' (draft)
- *Moving People Connecting Communities*
- *Safer Roads, Safer Queensland: Queensland's Road Safety Strategy 2015–2021*
- *Queensland Cycling Strategy 2017–2027*
- *Queensland Road System Performance Plan*
- *Bruce Highway Action Plan*
- 'Heavy Vehicle Network Plan' (draft).

Priorities and actions identified in the Plan align with current statewide transport policies and objectives. The department regularly reviews and updates statewide strategies and plans. Future updates to the Plan will reflect any additional or amended statewide plans and strategies as part of the update.

Table 1: The strategic fit of Regional Transport Plans

FRAMEWORK ELEMENT	DIRECTION SETTING	STRATEGIC PLANNING	PROGRAMMING (including investment)	DELIVERING
	Establish broad, high level strategic intent or policy positions	Develop plans or strategies to focus on key themes or areas	Identify, evaluate, prioritise and program initiatives including addressing funding/ investment requirements, competing needs and timeframes	Provide services and infrastructure such as public transport, bridges and tunnels, maintenance, regulation and compliance/ monitoring activities
National	<ul style="list-style-type: none"> Australian Infrastructure Plan Smart Cities Plan 	<ul style="list-style-type: none"> Australian Transport and Assessment Planning Guidelines Infrastructure Australia's Infrastructure Priority List National Land Freight Strategy Infrastructure Australia's Urban Transport Strategy 	<ul style="list-style-type: none"> Infrastructure Investment Program Australian Infrastructure Audit National Land Transport Network investment strategies Fix the Bruce Townsville City Deal 	<ul style="list-style-type: none"> Bruce Highway Upgrade, Gympie to Kolan River Cooroy to Curra, Sections A, B and C Saltwater Creek Flood Immunity Upgrade Toowoomba Second Range Crossing
Queensland Government	<ul style="list-style-type: none"> Objectives for the community Advance Queensland State Planning Policy 	<ul style="list-style-type: none"> Regional Plans <ul style="list-style-type: none"> Wide Bay Burnett Regional Plan 2011 State Infrastructure Plan Part A Building Queensland's Infrastructure Pipeline Queensland Cycling Strategy 2017–2027 	<ul style="list-style-type: none"> Project Assessment Framework State Infrastructure Plan Part B Building Queensland Business Case Assessment Bruce Highway Action Plan 	<ul style="list-style-type: none"> Maryborough–Hervey Bay Road and Urraween Road intersection upgrades Pialba–Burrum Heads Road, Scrub Hill Road and Wide Bay Drive intersection upgrade Bullock Point Boating Facility construction and upgrade North Coast Line Capacity Improvement Project Cross River Rail
Departmental	<ul style="list-style-type: none"> Transport Coordination Plan 2017–2027 Queensland Transport Strategy (draft) Transport and Main Roads Strategic Plan 2016–2020 	<ul style="list-style-type: none"> Regional Transport Plans System strategies and plans (e.g. rail, ports, freight, passenger, road safety) Area and corridor transport strategies Route and link plans Principal cycle network plans 	<ul style="list-style-type: none"> 10-year transport infrastructure portfolio investment planning Queensland Transport and Roads Investment Program (QTRIP) Highway investment strategies Transport System Planning Program 	<ul style="list-style-type: none"> Transport service contracts Transport Infrastructure Development Scheme Safer Roads Sooner
Local	<ul style="list-style-type: none"> Vision statements Strategic/corporate plans 	<ul style="list-style-type: none"> Planning schemes Local area plans Local transport plans 	<ul style="list-style-type: none"> Local government infrastructure plans Local government investment and works programs 	<ul style="list-style-type: none"> Local roads projects Bikeway and footpath projects Local bus infrastructure projects

1.4 Alignment with the *State Infrastructure Plan*

The *State Infrastructure Plan* outlines the Queensland Government's strategic direction for the planning, investment and delivery of infrastructure throughout Queensland. This Regional Transport Plan applies the transport policy objectives of the *State Infrastructure Plan* at a regional level.

The Queensland Government's strategic direction for transport infrastructure is expressed by the *State Infrastructure Plan* responses (Table 2). Accordingly, many of the planning actions in this Plan respond to these with a particular focus on improving supply chains, safer connections between regional centres and better use of data and technology.

Table 2: *State Infrastructure Plan* responses (Part A, p 52)

TRANSPORT				
Focus on maintenance and rehabilitation of existing infrastructure to reduce the long-term cost of repair and improve network resilience.	Unlock the potential of critical supply chains by identifying and improving the freight network.	Seek innovation and technology solutions to create a better performing and lower emissions transport system.	Digitally connected smart infrastructure to improve capacity, safety and security.	Connect regional communities with access to essential services and opportunities.

1.5 Alignment with the *Transport Coordination Plan*

The *Transport Coordination Plan 2017–2027* (TCP) provides a strategic framework for the planning and management of transport resources in Queensland over a 10-year timeframe. The TCP was developed in accordance with the requirements of the *Transport Planning and Coordination Act 1994* and identifies the high level objectives for transport in Queensland, across five key areas:

- **Customer experience and affordability** – transport meets the needs of all Queenslanders, now and into the future.
- **Community connectivity** – transport connects communities to employment and vital services.
- **Efficiency and productivity** – transport facilitates the efficient movement of people and freight to grow Queensland's economy.
- **Safety and security** – transport is safe and secure for customers and goods.
- **Environment and sustainability** – transport contributes to a cleaner, healthier and more liveable environment and is resilient to Queensland's weather extremes.

The TCP provides a suite of transport key performance indicators (KPIs) to measure progress towards these objectives and also includes clear criteria for prioritising spending on transport that align with the *State Infrastructure Plan*'s options assessment approach.

The TCP is the overarching medium-term strategic document that provides guidance and direction for more detailed transport strategies and plans produced by Transport and Main Roads, such as Regional Transport Plans and modal strategies. The TCP is consistent with the Queensland Government's overall strategic planning for Queensland, including the government's objectives for the community and the *State Infrastructure Plan*.

The system-wide transport objectives articulated in the TCP have informed the Wide Bay Burnett region's priorities and corresponding transport objectives, actions and measures of success. The TCP's transport KPIs have provided a means to measure the impact the Regional Transport Plan has on the region's transport system – and what this will mean for customers, the community, the economy and the environment.

1.6 Alignment with the *State Planning Policy*

The *State Planning Policy* outlines the Queensland Government's interests in land use planning and development for Queensland. It identifies and seeks to protect, through the planning framework, three transport interests: state transport infrastructure; strategic airports and aviation facilities; and strategic ports.

The *State Planning Policy* identifies two strategic airports in the region – Bundaberg and Hervey Bay Airports – and the Port of Bundaberg as the only strategic port.

1.7 Alignment with regional planning

The Queensland Government produces statutory regional plans to provide strategic direction and policies to deliver regional outcomes which align with the state's interests in land use planning and development. They aim to ensure that a consistent framework is operating across all of Queensland, integrating federal, state and local government planning agendas and linking infrastructure and service provision.

Wide Bay Burnett Regional Plan

The *Wide Bay Burnett Regional Plan* (the regional plan) outlines strategic directions, regional settlement patterns and characteristics. The regional plan was published in 2011 and includes the same local government areas as the *Wide Bay Burnett Regional Transport Plan*.

The regional plan addresses a range of issues relating to cultivating a strong, healthy and sustainable future for the Wide Bay Burnett region such as climate change and natural hazards, environment and natural resource management, economy, community, managing growth and infrastructure.

The vision for the Wide Bay Burnett region identified in the regional plan defines the community's long-term aspirations through:

- a balanced lifestyle with diverse housing, employment and recreation opportunities

- a distinct character and sense of community based on its people and their culture
- the retention of the regionally unique built and natural environments
- a robust economy built on the foundations of its natural and human resources that takes opportunities to build diversity and resilience to change
- infrastructure and services that meet the region's need to support the economy, accessibility and healthy active communities.

Since the development of the regional plan in 2011, there has been a shift in population trends and settlement patterns within the region, including an overall slowing in the population growth. Transport and Main Roads has used updated population forecasts to inform its transport planning activities. Although the population projections outlined in the regional plan are no longer current, the broad goals and intent are still relevant and have informed the development of the Regional Transport Plan.

The regional plan takes precedence over all local government planning instruments and provides the context for local planning. It recognises the need for an integrated transport network throughout the region to enable communities to become better connected and more accessible. The need to plan for the region's road, rail and air networks is a key theme to ensure high quality transport infrastructure and efficient supply chains including improved resilience, best use of existing infrastructure and managing growth in transport network demand.



Sea turtles at Lady Elliot Island



Bruce Highway Upgrade, Cooroy to Curra – Section C

1.8 Achievements to date

Transport and Main Roads has reflected on the objectives outlined in the *Wide Bay Burnett Regional Plan*, along with other strategic direction setting documents. The following transport network improvements have been delivered to support the objectives set out in the *Wide Bay Burnett Regional Plan* and other strategic directions.

Bruce Highway upgrades

The Bruce Highway, under the Bruce Highway Upgrade Program, has been a focus for road network investment in the region in recent years. Planning and construction works delivered include:

- safety improvements, comprising the provision of wide centre line treatments, pavement widening, intersection improvements and safer roadsides through safety barriers, clear zones, flatter slopes, rest areas and stopping places
- flood immunity improvements, including raised embankments, culverts and bridges
- capacity improvements, including provision of additional lanes, grade separation and intersection upgrades.

Within the Wide Bay Burnett region, recent construction projects include the Tinana overpass south of

Maryborough, Cooroy to Curra Upgrade – Section C and various overtaking lanes, wide centre line treatments and intersection upgrades. Planning has also been commenced for the Saltwater Creek and Tiara Flood Immunity Upgrade, Wide Bay Highway Intersection Upgrade and planning and design for Cooroy to Curra Section D.

Active transport

The *Wide Bay Burnett Principal Cycle Network Plan* (WBBPCNP) and priority route maps were developed collaboratively by local governments and Transport and Main Roads. The WBBPCNP identifies the regional cycle network and is used to guide coordinated delivery of a connected cycle network in the region. Local governments in the region are able to apply for funding through the Cycling Infrastructure Program to deliver projects under the WBBPCNP. Since 2016, the Cycling Infrastructure Program has committed money to accelerate delivery of the principal cycle network on the local and state road networks in the region.

The opening of the Kingaroy to Kilkivan Rail Trail was a joint initiative of the Queensland Government and the South Burnett and Gympie regional councils. The rail trail is part of the delivery of a network of longer distance and inter-centre routes across the region that will attract recreational and touring cyclists, drawing both tourists and local residents to the area.

Monto–Mount Perry Road – bridge replacement and approaches

In 2015, the flooding associated with Tropical Cyclone Marcia washed away the single-lane timber bridge crossing the Burnett River. This restricted east–west access from North Burnett to the adjacent local government areas of Bundaberg and Fraser Coast. A new two-lane concrete bridge and the realignment of bridge approach roads was completed in May 2017. The new bridge provides greater flood immunity and improved safety.

Burrum Heads recreational boating facilities

Burrum Heads is a seaside town in Fraser Coast Regional Council located 30 minutes from Hervey Bay. To meet demand and improve safety, the construction of the Burrum Heads Lions Park boat ramp and floating walkway was jointly funded by the Queensland Government and Fraser Coast Regional Council and completed in 2017. Benefits of the project include:

- improved safety and access to surrounding waterways with the construction of a two-lane all-tide boat ramp
- reduced congestion with the installation of a floating walkway to assist with boat launching and retrieval activities
- adequate parking facilities at Lions Park to support the local village, particularly during busy periods
- improved water quality upstream of Lions Park with the realignment of the stormwater pipe outlet.



Burrum Heads recreational boating facility

Roads to Recovery

Projects recently completed under the Roads to Recovery Program include:

- reconstruction of around two kilometres of pavement on Woods Road, Nikenbah (Fraser Coast Regional Council) to address poor vertical geometry and inundation issues
- seal on Winfield Road, Winfield (Bundaberg Regional Council) widened to six metres to improve safety concerns for tourism and residential users
- widened and sealed Old Maryborough Road, Chatsworth (Gympie Regional Council) to 8.6 metres to address safety issues associated with narrow seal width and high traffic volumes
- removal of old bitumen and sealing on Mount Stanley Road, East Nanango (South Burnett Regional Council) to address the road's continued deterioration
- completed seal of Sandersons Road, Mundubbera (North Burnett Regional Council) to eliminate corrugations and to suppress dust that can encourage dust mites, which is an issue in high value agricultural areas.

Safety – Black spots

Safety initiatives across the region that have been recently completed or are underway include intersection upgrades, road widening, overtaking lanes and additional rest and parking areas for heavy vehicles. Several local projects have been delivered in Bundaberg, Maryborough, Hervey Bay, Gympie and Kingaroy including: realigning the intersection at Burnett Heads Road–Mittleheusers Road in Burnett Heads to a staggered T-junction; installing right turn lanes and widening the pavement, sealing shoulders, line marking and signage to improve safety at Bauple Drive, Bauple; intersection upgrade at Apple Tree Creek on the Bruce Highway and intersection works on Urraween Road and Maryborough–Hervey Bay road to improve road safety.

Heavy vehicle safety and productivity

The construction of the missing link between Kay McDuff Drive and the Bundaberg Ring Road provides a major heavy vehicle traffic corridor to and from the Bundaberg Ring Road with direct access to the Bundaberg Food Park industrial development. This project was required to improve freight connectivity between the Bundaberg Ring Road, Kensington industrial areas and Bundaberg Airport. The new link offers significant cost savings and road network efficiencies for the businesses established in this industrial area and for freight companies as heavy vehicles no longer need to break down their loads to access the area's businesses. The project has also improved residential amenity, removing heavy vehicle movements accessing the industrial estate through residential areas.

1.9 Developing Regional Transport Plans

Planning principles

All levels of government routinely face increasing pressure to fund more public services and infrastructure in order to meet community expectations. Funding is limited, so competing priorities must be continually balanced.

Regional Transport Plans will help to achieve this in several ways:

- by establishing the region-centric planning that leads to good investment decisions – a focus at this level helps to ensure that funds are prioritised to meet regional needs and customer expectations
- by promoting consideration of non-infrastructure solutions for regional priorities, which are often more cost effective than building new infrastructure
- by helping to identify and align cross-agency priorities and actions to promote efficient and coordinated planning and investment.

In the context of constrained funding, Regional Transport Plans are being developed with the view that solutions to transport challenges and customer needs are not always about building new or expanding existing infrastructure, but include identifying new and innovative ways to do more with less. The best outcome may not be a new road or other type of transport facility. Instead, it may be modification of an existing asset, for example, reconfiguring a road to accommodate bicycle lanes or using technology to communicate real-time information to road users.

Consideration of lower cost and non-infrastructure solutions within planning and investment decision-making processes ensures we are getting the most from our existing assets and using infrastructure smarter and more efficiently than before. Identifying shared goals and partnership opportunities across government and with the private sector positions the region to leverage collective expertise and resources to achieve more with available funding. The department's approach to identifying, prioritising and investing in transport system solutions aligns to the *State Infrastructure Plan's* options assessment approach as shown in Figure 2.

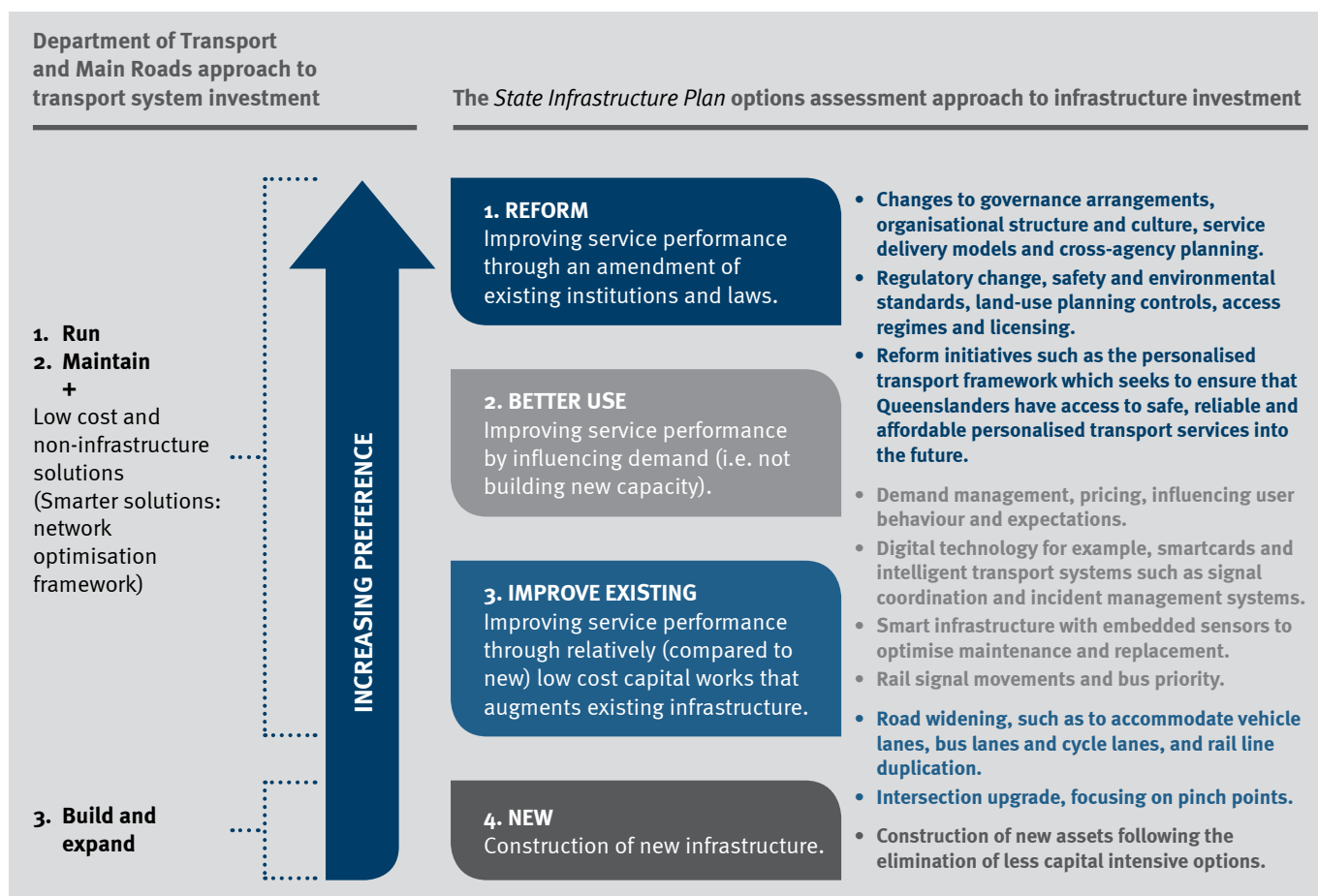
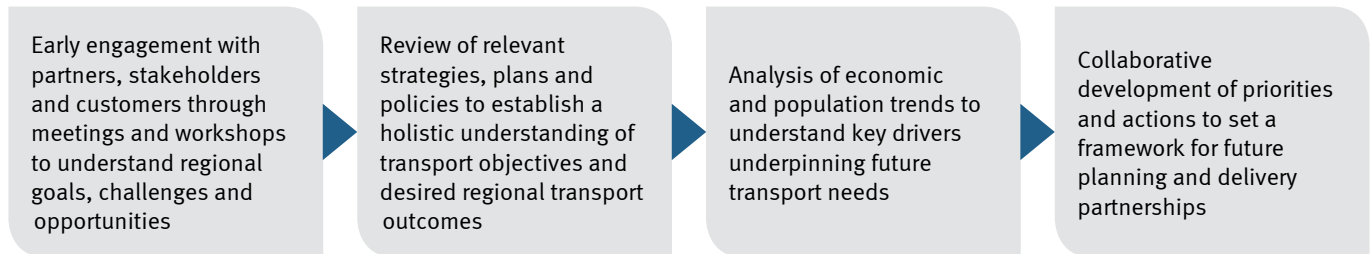


Figure 2: Alignment between the departmental and government approaches to infrastructure investment

Process

The *Wide Bay Burnett Regional Transport Plan* was developed with a ‘customer-first’ and ‘one network’ approach. Early engagement with customers, stakeholders and partners was vital to identify and understand the region’s issues, challenges, opportunities, goals and priorities for taking action. Key stages in the development process are set out below.



Bundaberg 2013 flood

Customer-first approach

A 'customer-first' approach is about being conscious of how customers experience the transport system and being willing to change the way we do things to improve that experience. It also means viewing the transport system as customers do: as 'one network', with little perceivable difference between the various parts provided or managed by the different levels of government. Transport and Main Roads' customer-centric approach is central to the way it does business. The approach is about shaping deliverables and services with customers in mind, co-designing solutions that embrace the future and communicating effectively and meaningfully.

One network

Regional Transport Plans are developed on the basis that the transport system operates as 'one-network'. Working and collaborating with all relevant transport system stakeholders to develop this Plan ensures planning priorities for the regional transport system are considered as a whole. Transport and Main Roads will continue to partner with local governments and transport operators to continuously improve the transport system and experience of our customers.

Engaging with our customers

To achieve a 'one network' approach, the department involved customer representatives early in the creation of all Regional Transport Plans and engaged and developed content in partnership with local government and other government agencies. To inform the development of this Plan, representatives were selected from different locations in the region, covering a range of sectors and interests, including government, community and industry. To gain customer input, the department hosted workshops and facilitated a number of one-on-one interviews. Some of the key issues that emerged from this engagement included:

- Poor network resilience resulting in isolation and damage to transport assets impacting accessibility, reliability and efficiency.
- Supply chain inefficiencies across the region associated with heavy vehicle restrictions, throughput capacity in the region's port and the need for more consolidated logistics operations for industry.
- Attracting and retaining funding for the upgrade and maintenance of the transport network.
- The resilience and reliability of the communication network with poor coverage and access to real time data in remote areas.
- Mobility disadvantage for both older and younger people, the disabled and the socially disadvantaged, due to limited public or community transport services and inadequate accessible pathways and infrastructure.
- Road safety due to competing demands on the road between commuter traffic and freight, poor road conditions, limited overtaking opportunities and extreme weather events.

The input from customers has informed the priorities and actions identified in this Plan.

Structure

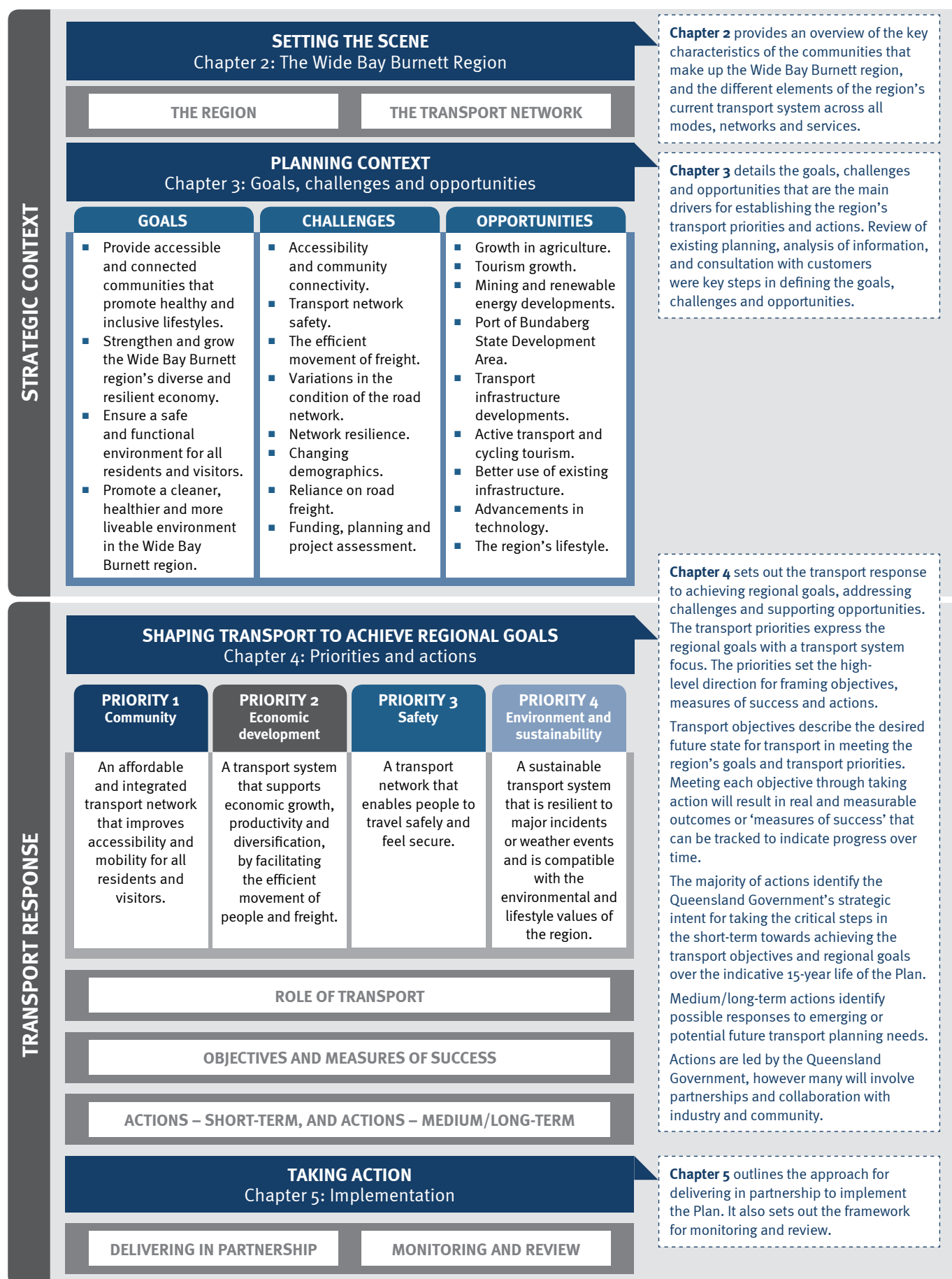
The document comprises five chapters covering an introduction, setting the scene, planning context, transport response, and implementation. The sequence and content of chapters reflects the development and implementation stages for the Plan.

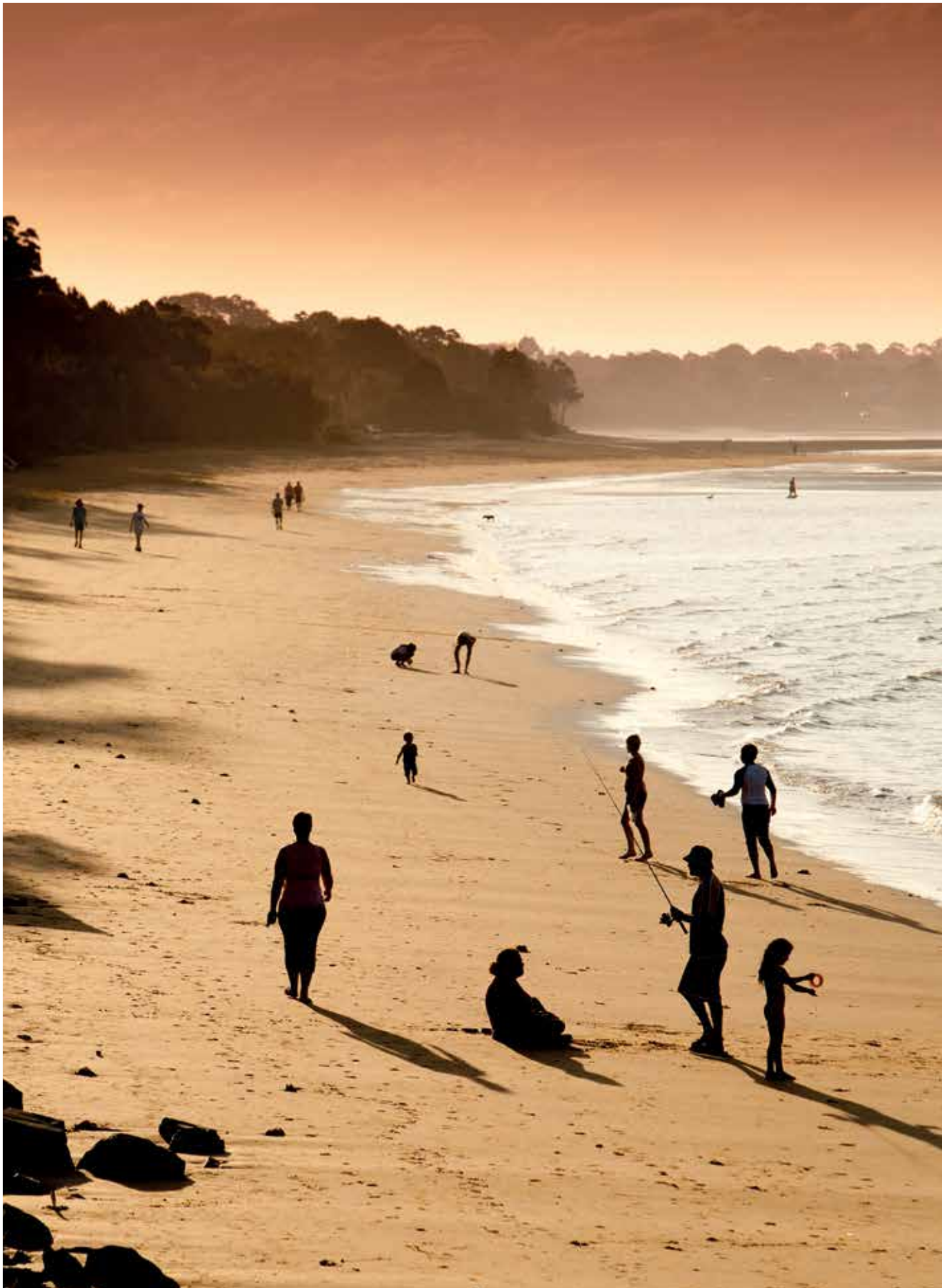
- **Chapter 1** introduces the purpose, scope and strategic alignment of the Regional Transport Plan.
- **Chapter 2** provides an overview of the region's community, economy and transport system.

- **Chapter 3** describes the region's goals, challenges and opportunities and their relationship to transport.
- **Chapter 4** sets out the priorities, objectives and actions for shaping the transport system over the next 15 years.
- **Chapter 5** outlines the Plan's implementation and review process.

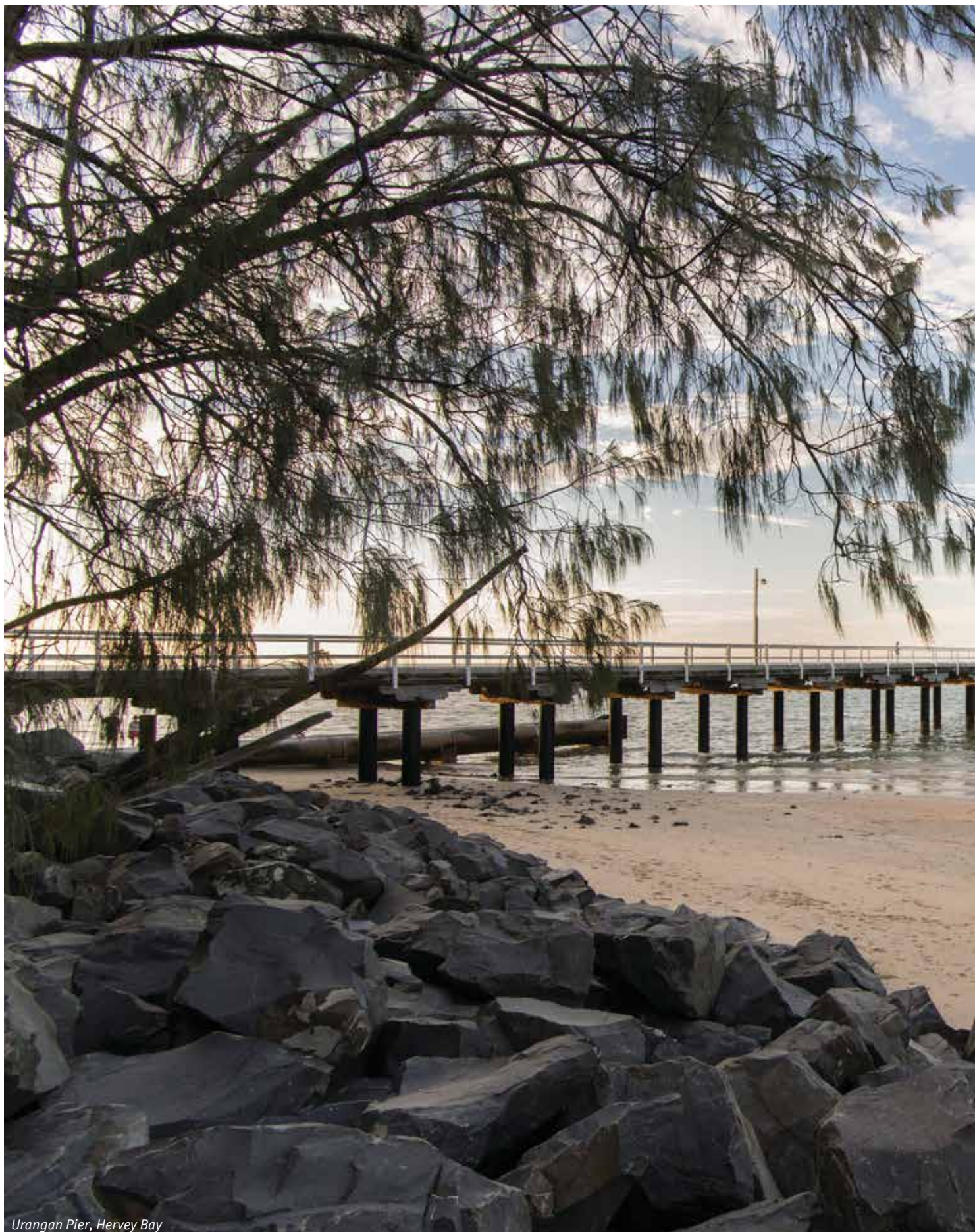
Table 3 outlines the key components of the Regional Transport Plan.

Table 3: Structure of the draft Wide Bay Burnett Regional Transport Plan





Activity on beach in the early evening, Hervey Bay



Urangan Pier, Hervey Bay



2. The Wide Bay Burnett Region

2.1 Region overview

WIDE BAY BURNETT REGION
COVERS AN AREA OF

48,488 KM² OR **2.8%**
OF QUEENSLAND'S LAND AREA²



LOCAL GOVERNMENT
AREAS INCLUDE:

- 1 BUNDABERG REGIONAL COUNCIL
- 2 CHERBOURG ABORIGINAL SHIRE COUNCIL
- 3 FRASER COAST REGIONAL COUNCIL
- 4 GYMPIE REGIONAL COUNCIL
- 5 NORTH BURNETT REGIONAL COUNCIL
- 6 SOUTH BURNETT REGIONAL COUNCIL

POPULATION GROWTH²

2016

292,400

(6% OF QLD POPULATION)



2036

364,800



125,380

JOB IN THE REGION^{2, 3}
WITH A GRP IN 2016 OF

\$ 11.96
BILLION⁴

WIDE BAY BURNETT REGION'S
AGRICULTURAL INDUSTRY
ATTRACTS A
LARGE SEASONAL WORKFORCE



FRASER ISLAND IS A SIGNIFICANT
ASSET OF THE REGION AS A
WORLD HERITAGE AREA
AND THE WORLD'S LARGEST SAND
ISLAND⁵



BUNDABERG (**22.4%**), FRASER
COAST (**25.4%**), GYMPIE (**21.7%**),
NORTH BURNETT (**23.1%**) AND
SOUTH BURNETT (**22.2%**) HAVE
HIGHER PROPORTION OF POPULATION
OVER 65 THAN QUEENSLAND'S

14.7%²

KEY FEATURES OF THE REGIONAL ECONOMY



Health care and social assistance
(**16.3%**), retail (**12.1%**) and education
and training (**9.9%**) are the region's
top employing industries⁶



In 2014–2015, the gross value of total
agricultural commodities produced
in the Wide Bay Burnett region was
\$1.148 billion⁷



The **manufacturing industry** has
strengths in agriculture and transport
manufacturing including sugar,
aviation and rail equipment



In 2016, regional tourism
expenditure totalled
\$1.1 billion⁸



95% of visitors in the
2014–15 financial year were
domestic visitors⁸

- 2 Queensland Government Statistician's Office, Queensland Treasury. (2017). *Queensland Regional Resident Profile for Wide Bay Burnett*.
- 3 Job numbers quoted as at March 2017.
- 4 Regional Development Australia Wide Bay Burnett. (2017). www.economy.id.com.au/rda-wide-bay-burnett/gross-regional-product.
- 5 Tourism and Events Queensland. (2016). *Fraser Island Visitor Guide*.
- 6 Queensland Government Statistician's Office, Queensland Treasury. (2017). *Queensland Regional Workforce Profile for Wide Bay Burnett*.
- 7 Australian Bureau of Statistics. (2016). *Value of Agricultural Commodities Produced, Australia, 2014-15 (Catalogue No. 7503.0)*.
- 8 Tourism Research Australia. (2015). *Local Government Area Profiles Wide Bay Burnett*.

Local government areas

Local government areas and population centres*	2016 estimated resident population	2036 projected population	Average annual growth rate (2011–2036)
BUNDABERG REGIONAL COUNCIL – Bundaberg (Principal Centre), Bargara, Childers and Gin Gin 	2016 Pop'n 94,500	2036 Pop'n 117,900	Growth rate 1.0%
Employment and economy Major employing sectors are health care and social assistance (17.2 per cent), retail trade (12.4 per cent) and agriculture, forestry and fishing (10.3 per cent). Bundaberg is well known for its sugar industry and associated products.	bypasses the major activity centre of Bundaberg. To the north, Gin Gin Road connects Bundaberg to the Bruce Highway and Gin Gin, and both Childers and Goodwood Roads connect Bundaberg to the Bruce Highway and Childers to the south. The region supports an airport offering daily flights and the Port of Bundaberg which is a bulk port handling sugar and molasses. The North Coast Rail line passes through Bundaberg and is serviced by the Spirit of Queensland, the Spirit of the Outback and Tilt Train.		
Access The Bruce Highway is the main north-south route through the Bundaberg Regional Council area. The Bruce Highway			
CHERBOURG ABORIGINAL SHIRE COUNCIL – Cherbourg 	2016 Pop'n 1300	2036 Pop'n 1500	Growth rate 0.6%
Employment and economy Major employing industries are health care and social assistance (43.3 per cent), education and training (22 per cent) and public administration and safety (23.4 per cent). Education and training initiatives in Cherbourg include skill development in timber joinery and the cattle industry that contribute to council enterprises.	Access The Cherbourg Aboriginal Shire Council sits within South Burnett Regional Council, bordering the Wondai forest and Lake Barambah to the south. Access to the shire is via Cherbourg Road connecting north to the Bunya Highway via Murgon. There is access to the Shire through a dedicated helicopter landing pad, otherwise the regions closest airstrip is Kingaroy.		

* Employment statistics in this section are sourced from Australian Bureau of Statistics. (2016.) *Census of Population and Housing – General Community Profile – G51 (Industry of Employment by Age and Sex)* and unpublished data. Employment industries are categorised as per the employment divisions of Australian Bureau of Statistics. (2013). *Australian and New Zealand Standard Industrial Classification 2006 (Revision 2.0) (Catalogue No. 1292.0)* and cited in Queensland Regional Workforce Profile for LGAs within the region. Population statistics are sourced from various editions of Australian Bureau of Statistics, *Regional Population Growth, Australia (Catalogue No. 3218.0)*.

Local government areas and population centres*	2016 estimated resident population	2036 projected population	Average annual growth rate (2011–2036)
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FRASER COAST REGIONAL COUNCIL

– Hervey Bay (principal centre),
Maryborough (principal centre),
Howard and Tiaro

2016 Pop'n
103,000

2036 Pop'n
135,000

Growth rate
1.3%



Employment and economy

Major employing industries are health care and social assistance (19.0 per cent), retail trade (13.0 per cent) and education and training (10.4 per cent).

The area is a popular retirement destination which is reflected by over a quarter of the population aged over 65, compared to Queensland's 14.7 per cent. Tourism is also important to the economy with attractions including Hervey Bay with its whale watching tours and Fraser Island.

Access

The Bruce Highway traverses the Fraser Coast Council area, passing the western outskirts of Maryborough. The major network converges at Maryborough with the Maryborough–Biggenden Road connecting to Biggenden to the west and the Maryborough–Hervey Bay Road connecting to Hervey Bay to the east. Hervey Bay Airport has services to Brisbane, Sydney and Lady Elliot Island. Fraser Coast is on the North Coast Rail line serviced by the Spirit of Queensland, Spirit of the Outback and Tilt Train rail services at Maryborough West Station and the Tilt Train at Howard Station.

GYMPIE REGIONAL COUNCIL – Gympie (major centre), Rainbow Beach and Tin Can Bay

2016 Pop'n
50,300

2036 Pop'n
60,600

Growth rate
1.0%



Employment and economy



Major employing industries are health care and social assistance (12.6 per cent), retail trade (12.2 per cent), education and training (10.2 per cent) and manufacturing (9.3 per cent).

Access

Gympie Regional Council is serviced by three major highways, the Bruce Highway and Burnett Highway traversing north to south and the Wide Bay Highway, from east to west. The Bruce Highway will ultimately bypass the

urban centre of Gympie through the delivery of Cooroy to Curra Section D, however there is no definitive timeframe for the construction of this project. The local government area also provides the only access to Tin Can Bay and Rainbow Beach and the Cooloola State Forest, via Tin Can Bay Road. Fraser Island is accessible from Inskip Point (just north of Rainbow Beach) via barge. Queensland Rail Travel and Citytrain offer services through the Gympie North Rail Station. Air services are available from Gympie Airport.

* Employment statistics in this section are sourced from Australian Bureau of Statistics. (2016.) *Census of Population and Housing – General Community Profile – G51 (Industry of Employment by Age and Sex)* and unpublished data. Employment industries are categorised as per the employment divisions of Australian Bureau of Statistics. (2013). *Australian and New Zealand Standard Industrial Classification 2006 (Revision 2.0) (Catalogue No. 1292.0)* and cited in Queensland Regional Workforce Profile for LGAs within the region. Population statistics are sourced from various editions of Australian Bureau of Statistics, *Regional Population Growth, Australia (Catalogue No. 3218.0)*.

Local government areas and population centres*	2016 estimated resident population	2036 projected population	Average annual growth rate (2011–2036)
NORTH BURNETT REGIONAL COUNCIL – Gayndah, Eidsvold, Monto, Mount Perry and Mundubbera 	2016 Pop'n 10,600	2036 Pop'n 9700	Growth rate -0.3%
Employment and economy Major employing industries are agriculture, forestry and fishing (32.4 per cent) health care and social assistance (9.9 per cent) and education and training (7.8 per cent). Agriculture is the most significant industry in the area producing a diverse range of produce including citrus, beef, fodder crops such as lucerne, small crops, pork, broad acre crops, mining, timber and milk. The area experiences population fluctuations during harvesting season.	Access The main connector within the region is the Burnett Highway. Other roads connecting to the Burnett Highway include Mundubbera–Durong Road and Monto–Mount Perry Road from the south, Eidsvold–Theodore Road from the west and Gladstone–Monto Road from the east. Gayndah, Mundubbera and Monto all have sealed airstrips however these do not support scheduled flights. The Isis Highway provides an east–west link between the Bruce Highway at Childers and the Burnett Highway at Ban Ban Springs.		
SOUTH BURNETT REGIONAL COUNCIL – Kingaroy (major centre), Murgon, Nanango and Wondai 	2016 Pop'n 32,700	2036 Pop'n 40,200	Growth rate 0.9%
Employment and economy Major employing industries are health care and social assistance (13.5 per cent), agriculture, forestry and fishing (12.1 per cent) and retail trade (11.3 per cent). Manufacturing is also a large employer, employing 9.4 per cent of workers. Kingaroy is well known for peanuts and meat processing (pork).	Access The South Burnett Regional Council can be accessed via three major highways, the D'Aguiar Highway, connecting Nanango and Kingaroy to South East Queensland, the Burnett Highway, traversing from north to south and the Bunya Highway navigating from the south-west to north-west. Other connectors include the Chinchilla–Wondai Road, Murgon–Gayndah Road and Mundubbera–Durong Road. The region supports air services at Kingaroy and small aerodromes at Nanango and Wondai.		
WIDE BAY BURNETT REGION TOTAL	292,400	364,800	1.4%

* Employment statistics in this section are sourced from Australian Bureau of Statistics. (2016.) *Census of Population and Housing – General Community Profile – G51 (Industry of Employment by Age and Sex)* and unpublished data. Employment industries are categorised as per the employment divisions of Australian Bureau of Statistics. (2013). *Australian and New Zealand Standard Industrial Classification 2006 (Revision 2.0) (Catalogue No. 1292.0)* and cited in Queensland Regional Workforce Profile for LGAs within the region. Population statistics are sourced from various editions of Australian Bureau of Statistics, *Regional Population Growth, Australia (Catalogue No. 3218.0)*.

2.2 Transport network

The region's transport network includes road, rail, marine, air, active transport and public transport infrastructure and services. An overview of the region's transport network is shown in Figure 3.



Figure 3: Overview of Wide Bay Burnett region transport network

272 KM
NATIONAL LAND TRANSPORT NETWORK
2,690 KM
STATE-CONTROLLED ROADS
16,276 KM
LOCAL GOVERNMENT MANAGED ROADS



152 FATALITIES AND
1926 CRASHES REQUIRING
HOSPITALISATION OCCURRED BETWEEN
2012 TO 2016⁹



TOTAL THROUGHPUT FOR PORT OF BUNDABERG IN
THE YEAR LEADING UP TO MAY 2017 WAS

452,906 TONNES¹⁰



IN THE 2015–2016 FINANCIAL YEAR
172,482 PASSENGERS
PASSED THROUGH BUNDABERG AIRPORT¹¹



HERVEY BAY AND BUNDABERG AIRPORTS PROVIDE
PASSENGER AIR SERVICES



**GYMPIE NORTH
STATION**

IS THE NORTHERN MOST
STATION ON SOUTH EAST
QUEENSLAND'S CITYTRAIN
NETWORK CONNECTING
THROUGH BRISBANE TO
IPSWICH AND THE GOLD COAST



URBAN BUS SERVICES

ARE AVAILABLE IN BUNDABERG, GYMPIE, HERVEY
BAY AND MARYBOROUGH



FRASER ISLAND

IS CONNECTED BY BARGES, FERRY AND WATER
TAXI SERVICES FROM HERVEY BAY AND BARGE
FROM RAINBOW BEACH



⁹ Queensland Government. (2017). Open data www.data.qld.gov.au/dataset/crash-data-from-queensland-roads/resource/e88943co-5968-4972-a15f-38e120d72eco.

¹⁰ Queensland Government. (2017). Open data www.msq.qld.gov.au/Shipping/Shipping-movements/Movement-statistics-by-port-2016-2017.

¹¹ Bundaberg Regional Council. (2017). *Business Bundaberg Facts and Figures*.

Roads

The road network is the primary transport network across the region for freight, commuter and passenger movements. The Bruce Highway is part of the National Land Transport Network connecting Brisbane to Cairns, passing through Gympie, Tiaro, Maryborough, Childers and Gin Gin. The State Network includes a number of town to town links including: the Burnett, Isis, Bunya and D'Aguilar Highways; Bundaberg Port Road; Bundaberg Ring Road; Bundaberg–Gin Gin Road; Bundaberg–Bargara Road and Maryborough–Hervey Bay Road. Local roads support access to urban areas, tourism attractions and farm gates. Links to the Port of Bundaberg include the Bundaberg Port Road, Bundaberg Ring Road and Isis Highway connecting to the Bruce Highway to the south and Bundaberg–Bargara Road and Bundaberg Gin Gin Road connection to the Bruce Highway to the north.

Most of the key state-controlled roads in the Wide Bay Burnett region are approved routes for B-doubles (23-metre and 25-metre) with the exception of a small section of Chinchilla-Wondai Road which is designated for Type 1 road trains.

Average annual daily traffic (AADT) varies significantly across the region with the Bruce Highway south of Gympie attracting the highest inter-regional demand at over 16,500 vehicles per day. The Burnett Highway is an important north–south connection for heavy vehicles particularly around Gayndah where they contribute up to 40 per cent of AADT.

The urban arterial roads in Bundaberg and Hervey Bay attract the highest traffic volumes in the region with 28,156 vehicles per day on Bundaberg–Bargara Road and 19,356 vehicles per day on Maryborough–Hervey Bay Road.

The Wide Bay Burnett region includes two tourism routes that are identified by the *Queensland Tourism and Transport Strategy*, they are the Bruce and Burnett highways, providing north-south links.

Private vehicles are the predominant mode of transport across the region. Only 5.9 per cent of dwellings do not own a private vehicle, which is similar to Queensland's average of six percent.¹²

The Roads and Transport Alliance and Regional Roads and Transport Groups

The Roads and Transport Alliance is a cooperative governance arrangement between the Department of Transport and Main Roads, the Local Government Association of Queensland (LGAQ) and local governments to invest in and regionally manage the Queensland transport network. Its objectives are to:

- maximise the economic, social and environmental benefits of joint investments
- achieve maximum efficiencies through collaboration and innovation in network planning, program development and delivery
- improve technical skills through training, technology and knowledge transfer
- optimise safety
- maximise investment on the Queensland transport network.

The Alliance includes Regional Roads and Transport Groups where Transport and Main Roads and local government representatives within the region work collaboratively to plan and prioritise investment on road and transport infrastructure. This includes allocating funding to the highest priority projects and identifying opportunities for financial efficiencies.

¹² Australian Bureau of Statistics. (2017). *Census of Population and Housing 2016*.

Bus and coach

A range of bus and coach services operate within the region. These include public passenger transport services, school bus services, community transport services, rail connection buses and long distance coach services. Bundaberg, Gympie, Hervey Bay and Maryborough are all serviced by urban bus routes that connect suburban areas and nearby settlements to shopping areas, hospitals and education. For example, Hervey Bay and Maryborough are connected by urban bus services, as is Bundaberg to Bargara and Elliott Heads and Gympie to the seaside settlements of Rainbow Beach and Tin Can Bay. Frequencies range across the region and between routes from hourly services to running only once or twice a day.

Intra-regional services provide connectivity between towns and larger centres in the region allowing residents to access essential goods and services. The North Burnett

Transport Service includes a number of routes which each run two to three times per week to connect North Burnett towns to Bundaberg and Maryborough and is subsidised by the Queensland Government under a Transport Services Contract.

Both Cherbourg Aboriginal Council and Fraser Coast Regional Council offer a community bus service to provide transport to access basic goods and services.

Long-distance coach services operate along the Bruce Highway between Brisbane and Cairns, stopping at towns along the route. Greyhound Australia also operate a north-south route that connects Hervey Bay with Byron Bay in northern New South Wales.



Urban bus services, Bundaberg

Rail

The North Coast line runs north–south through the Wide Bay Burnett region, connecting Brisbane to Cairns and coastal centres in between. The system caters to rail freight including container, maintenance and cattle trains and passenger rail including high speed tilt trains and commuter services between Gympie and Brisbane. The trip from Gympie North Station to Brisbane's Central Station takes just under three hours with two services provided daily Monday to Saturday and one service on Sundays.

Most North Coast line freight commodities pass through the region to destinations further north or south to Brisbane. In 2015–2016, the North Coast line carried 6.8 billion gross tonne kilometres (GTKs) of freight by operators Pacific National and Aurizon including railing containerised and general freight, industrial products, sugar and molasses, which is approximately a third of the total amount of rail freight transported in Queensland.¹³

Five passenger rail services operate on the North Coast line:

- Spirit of Queensland connecting Brisbane and Cairns with five return services per week
- Tilt Train connecting Brisbane and Bundaberg with a four-hour and 30-minute journey and six return services per week
- Tilt Train connecting Brisbane and Rockhampton with a seven-hour and 30-minute journey and six return services per week

- Spirit of the Outback connecting Brisbane to Longreach with two return services per week
- Sunshine Coast line connecting Gympie North to Brisbane with two services per day Monday to Saturday and one service per day on Sundays. This service has a two-hour and 56-minute journey time.

Four services stop within the region at Bundaberg Station, Howard Station (with exception of both the Spirit of Queensland and the Spirit of the Outback), Maryborough West Station and Gympie North Station. Five services stop at Gympie North Station because it is the northern extent connecting to Brisbane, Ipswich and the Gold Coast.

Rail connection buses operated by Queensland Rail are available between Hervey Bay and Maryborough West Station and between Gympie and Gympie North Station.

Rail also supports the sugar cane industry through cane rail networks connecting farms to the sugar mills in the vicinity of Bundaberg.

Marine

Ports

The Port of Bundaberg is located approximately 185 kilometres south of Gladstone and 365 kilometres north of Brisbane, 19 kilometres downstream from the City of Bundaberg and approximately five kilometres from the mouth of the Burnett River. The Port of Bundaberg is managed and operated by Gladstone Ports Corporation. It is serviced by Sir Thomas Hiley Wharf which handles



Tilt Train on the North Coast line

¹³ Queensland Rail. (2016). *Queensland Rail Annual Report 2015–2016*

bulk sugar exports and John T. Fisher Wharf which handles molasses imports. In 2015–2016, Sir Thomas Hiley Wharf exported 516,080 tonnes of sugar and John T. Fisher Wharf imported 24,915 tonnes of molasses.¹⁴

Port service providers are available 24 hours per day, seven days per week. The port limits ship size to 200-metre length and 32-metre beam for berthing.¹⁵ In recent years, the Port of Bundaberg has handled an average of 12 vessels per year and is consequently at a berth utilisation of around five percent, leaving considerable scope for additional vessel calls.¹⁶

Most road connections to the port are at arterial road standard and pass through residential, commercial and developed agricultural land. The Bundaberg Ring Road provides a single carriageway connection from the Isis Highway south of Bundaberg to the Bundaberg Port Road. There is no rail connection to the Port of Bundaberg from the main North Coast line.

In February 2017, the Department of State Development declared a 6076 hectare State Development Area for the Port of Bundaberg. The State Development Area was developed in response to demand surrounding growing industrial activities and could help to facilitate economic growth in the region and may lead to port expansion.¹⁷

Other marine infrastructure

Marine facilities across the region support a range of commuter, tourism and recreation opportunities including river cruises, whale watching tours, diving expeditions, fishing charters and Great Barrier Reef tours.¹⁸ Three primary barge and ferry services provide access to Fraser Island, departing from River Heads, Urangan Boat Harbour and Rainbow Beach:

- Fraser Venture Barge runs six barges and ferry services daily which depart River Heads (20 minutes south of Hervey Bay) and land at Wanggollba Creek on Fraser Island.¹⁹
- The Kingfisher Bay Ferry has 10 barges and ferry services which depart River Heads and land at Kingfisher Bay Resort on the western side of Fraser Island.²⁰

- Manta Ray Barge operates continuous services between 5.15am and 6.00pm daily with two barges operating from Inskip Point Rainbow Beach to Hook Point on Fraser Island with a barge departing every 30 minutes.

Additional barges operate during peak holiday periods providing increased frequency.²¹ In addition, water taxi services departing from Urangan to Fraser Island commenced in 2017.²²

Ferries from Bundaberg and the Town of Seventeen Seventy provide day trips exploring the Southern Barrier Reef and Lady Musgrave Island.²³

Marine infrastructure, such as boat ramps with trailer parking, jetties and marinas are available to support recreational boating for residents and visitors to the region. Recreational boating and marine activities are an important aspect of the region's identity and lifestyle, with 10 per cent of Queensland's boats being registered to persons within the Wide Bay Burnett region.²⁴ The Boat Club Marina, located in Urangan Harbour Hervey Bay, provides berthing facilities for yachting holiday makers to the Great Sandy Straits and Fraser Island. The Marina comprises four arms of 98 berths which can accommodate vessels up to 25 metres long.²⁵ Maryborough's Mary River Marina is used exclusively for tourism and recreation.

Active transport

Active transport refers to non-motorised travel such as walking and cycling. Active transport infrastructure, including footpaths and on and off road cycle infrastructure, is provided in urban areas across the region. These vary in terms of their connectivity and quality.

The Wide Bay Burnett region's journey to work data illustrates that 4.4 per cent of workers walked or cycled to work, similar to the average across Queensland (4.3 per cent).²⁶ The Wide Bay Burnett Principal Cycle Network Plan (WBBPCNP), outlines the principal cycle network for towns and cities across the region. It aims to develop the cycle network by guiding future state and local government investment in detailed planning and construction.

14 Gladstone Ports Corporation. (2017). www.gpcl.com.au/operations/port-of-bundaberg.

15 Gladstone Ports Corporation. (2012). *Port of Bundaberg Port Procedures and Information for Shipping*.

16 Gladstone Port Corporation. (2016). *Trade and transport study for the Port of Bundaberg catchment area, Report – Trade and transport for the Port of Bundaberg*.

17 Department of State Development. (2017). www.statedevelopment.qld.gov.au/coordinator-general/bundaberg-state-development-area.html.

18 TripAdvisor. (2017). www.tripadvisor.com.au/Attraction_Products-g255404-zfg11865-Hervey_Bay_Fraser_Coast_Queensland.html, www.tripadvisor.com.au/Attractions-g255334-Activities-c61-t167-Bundaberg_Queensland.html.

19 Fraser Island Ferry. (2017). www.fraserislandferry.com.au/barges/fraser-venture-barge.html.

20 Fraser Island Ferry. (2017). www.fraserislandferry.com.au/barges/kingfisher-bay-ferry.html.

21 Manta Ray. (2017). www.mantarayfraserislandbarge.com.au/.

22 Fraser Coast Regional Council meeting notes 20/03/2017.

23 Lady Musgrave Island. (2017). www.ladymusgraveisland.com/tours/1770-great-barrier-reef-cruises/.

24 Department of Transport and Main Roads. (2016). *Queensland Recreational Boating Demand Study*.

25 The Boat Club Hervey Bay. (2017). www.boatclub.com.au/venues/marina/.

26 Queensland Government Statistician Office, Queensland Treasury. (2017). *Queensland Regional Workforce Profile Wide Bay Burnett*.

A total of 25 principal cycle network maps across the region identify core routes designed to be bicycle friendly and easy to use as an everyday form of transport, with an opportunity to expand into other townships with a high active transport mode share.

Bundaberg and Fraser Coast Regional Councils have both invested in high quality pathways and promotional material to encourage residents and tourists walking and cycling to enjoy the natural attributes in many of their coastal towns.²⁷ Hervey Bay is an example, the active transport network takes advantage of the relatively flat topography and high scenic amenity. A network of cycle paths connecting the foreshore and a dedicated cycling / walking mobility corridor has been developed, with additional links planned for implementation over the next 20 years.²⁸ South Burnett and Gympie regional councils – with funding from the Queensland Government – completed the Kingaroy to

Kilkivan Rail Trail (89 kilometres) in 2017. The rail trail provides a recreational facility for residents, and a cycling destination, attracting day trippers and tourists to the region. People can visit points of interest along the way, contributing to the local economy.²⁹ Other rail trails in Wide Bay Burnett include: Mary to the Bay Rail Trail (13.5 kilometres) in Hervey Bay; Watawa Recreation Trail (3.4 kilometres) near Gin Gin and the Boolboonda Rail Trail and Tunnel (3 kilometres) between Boolboonda and Wonbah.

Air

Hervey Bay Airport and Bundaberg Airport support the region's scheduled passenger services. Other airports include Maryborough and Kingaroy.

Bundaberg Regional Airport is owned and operated by Bundaberg Regional Council. There are approximately 35 domestic services per day operated between



Cyclist on Bourbong Street, Bundaberg

27 Fraser Coast Regional Council. (2017). www.ourfrasercoast.com.au, Bundaberg Regional Council. (2017). www.bundaberg.qld.gov.au/discover/local-visitor-attractions/walking_trails/walk_and_cycle.

28 Fraser Coast Regional Council. (2015). *Walk and Cycle Strategy*.

29 South Burnett Times. (2017). www.southburnettimes.com.au/news/trail-launch-on-track/3054475/.

QantasLink and Virgin Australia to Brisbane. In 2016, 172,482 passengers travelled through Bundaberg Airport, an eight per cent increase compared to the previous financial year.³⁰

Hervey Bay (Fraser Coast) Airport and Maryborough Airport are owned and operated by Fraser Coast Regional Council. Passenger services connecting Hervey Bay to Brisbane and to Sydney are provided by QantasLink. Virgin Australia also provides a daily return service to Sydney. Hervey Bay Airport is the gateway for flights to World Heritage listed Fraser Island and Lady Elliot Island on the Southern Barrier Reef.³¹ The Hervey Bay Airport experienced a six per cent increase in passenger numbers in the 2015–2016 year on Sydney and Brisbane routes.³²

Qantas Freight is available at Bundaberg Airport and Hervey Bay Airport and Virgin Australia Cargo Services are available at Hervey Bay Airport. Access to these airports are via the Isis Highway (Bundaberg to Childers); Bundaberg ring roads and Booral, Hervey Bay Maryborough and Torbanlea Pinalba Roads respectively.

Mobility and community transport services

Convenient and affordable transport options for access to employment, education, social and community services are essential for supporting liveable and prosperous communities.

Travel subsidies and special transport services are available to people with a transport disadvantage, including the elderly, sick and people with a disability who require travel assistance to access essential health and community service needs. The range of transport services available in the region include subsidised taxi travel, community bus services and patient transport services delivered by the Queensland Ambulance Service.

Taxi services are available in Bundaberg, Childers, Hervey Bay, Maryborough, Gympie, Monto, Eidsvold, Gayndah, Mundubbera, Nanango, Wondai, Rainbow Beach, Tin Can Bay, Murgon and Kingaroy. Other personalised transport services such as booked hire now also play a role in the region's transport system. This trend towards more diverse transport options offers customers improved choice about how they travel.

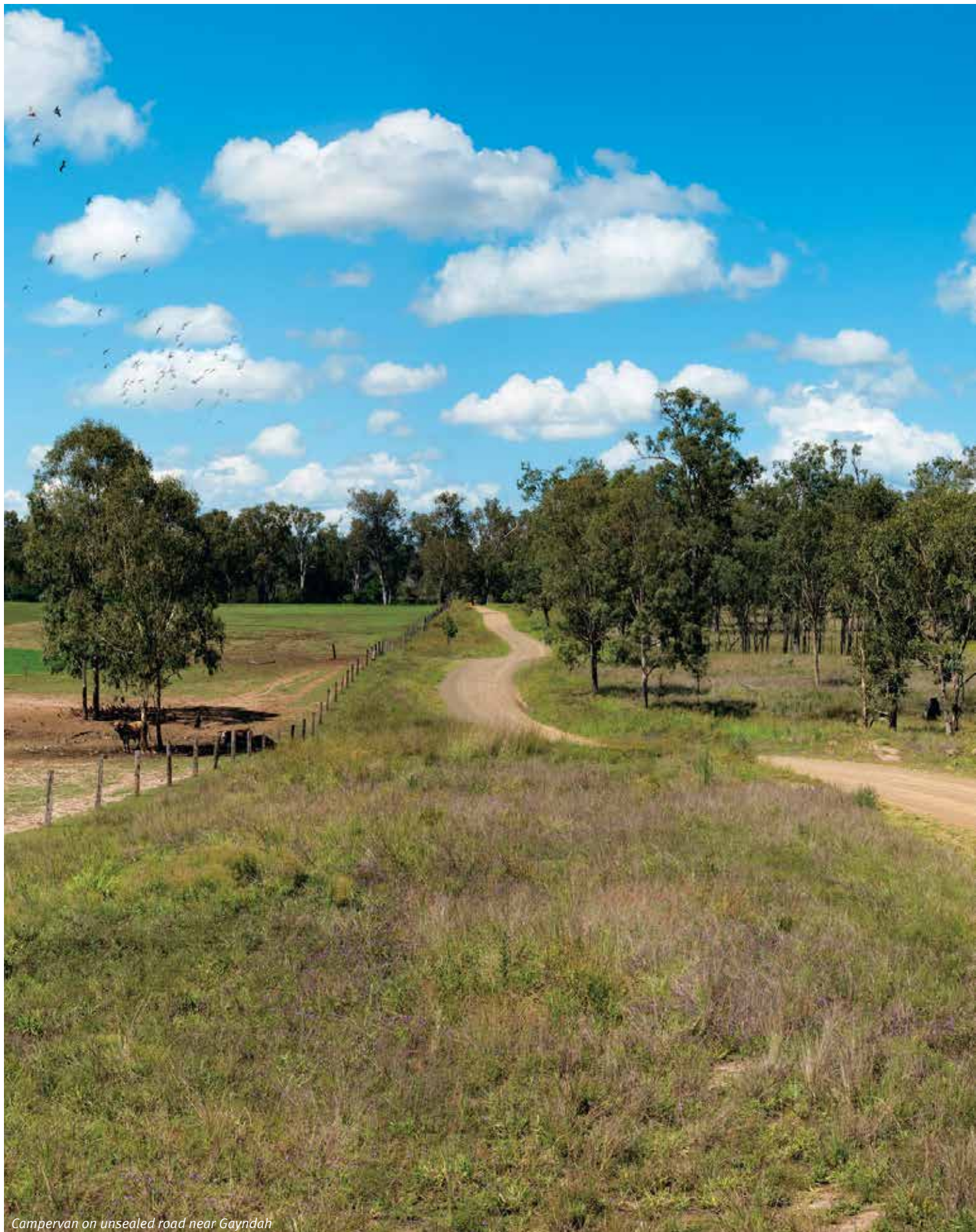


Sunset overlooking bay, Hervey Bay

³⁰ Bundaberg Regional Council. (2017). *Business Bundaberg Facts and Figures March 2017*.

³¹ Fraser Coast Regional Council. (2011). *2011-2031 Fraser Coast Airport Master Plan*.

³² Fraser Coast Regional Council. (2016). *2015-2016 Fraser Coast Regional Council Annual Report*.



Campervan on unsealed road near Gayndah

3. Goals, challenges and opportunities



3.1 Goals

Goals describe the region's desired economic, social and environmental outcomes that set the direction for all planning activities and initiatives in the region, not just for transport. Transport and Main Roads has engaged with the region's local governments, industry representatives and other state agencies to understand the high level goals for the region's future development.

Goals were developed for the *Wide Bay Burnett Regional Transport Plan* based on a review of local, regional, state and national planning documents and directions set by stakeholders. Goals help frame the priorities and actions for transport towards achieving regionally specific outcomes for the community, economy and environment.

The Plan's goals are as follows:

- Provide accessible and connected communities that promote healthy and inclusive lifestyles.
- Strengthen and grow the Wide Bay Burnett region's diverse and resilient economy.
- Ensure a safe and functional environment for all residents and visitors.
- Promote a cleaner, healthier and more liveable environment in the Wide Bay Burnett region.

The relationship between goals and priorities is presented in Figure 4. Priorities are the transport response to the region's goals in the context of addressing challenges and supporting the opportunities that present.

WIDE BAY BURNETT REGIONAL TRANSPORT PLAN GOALS

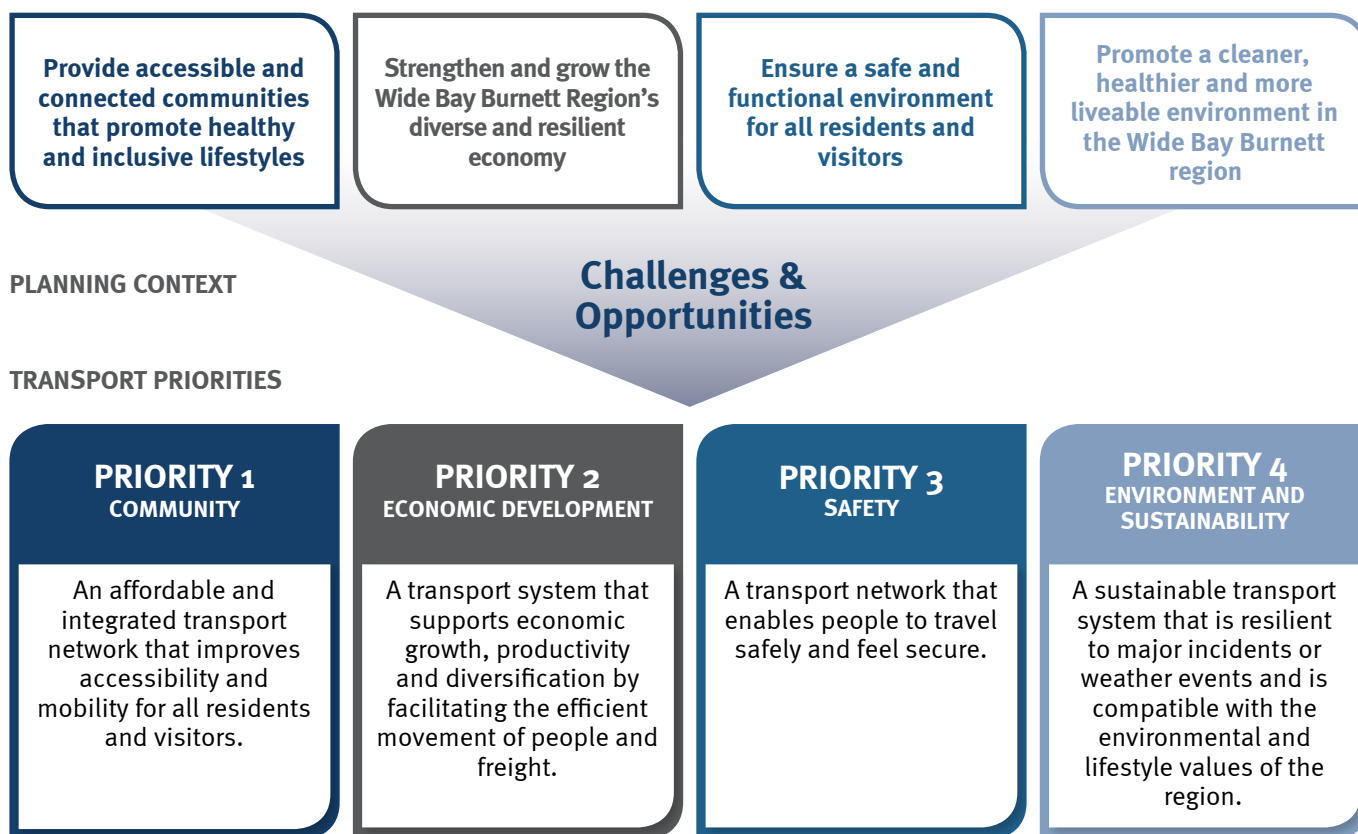


Figure 4: Regional goals and relationship to transport priorities

3.2 Challenges

Accessibility and community connectivity

The Wide Bay Burnett region covers an area of about 48,488 km², or around 2.8 per cent of Queensland's land area and is home to six per cent of the population. Bundaberg, Maryborough and Hervey Bay are principal regional activity centres offering a diverse range of urban activities and accommodating a significant proportion of the region's residents, services and community facilities.

The region has developed over time to accommodate a dispersed population across its principal regional activity centres and smaller urban centres, rural and coastal towns and rural residential areas. Some of the region's towns are closer to principal regional activity centres outside the region, such as Maroochydore for Gympie and Toowoomba for Kingaroy. This has seen the development of a network of east-west and north-south connections that provide access to principal regional activity centres. Stakeholder consultation indicates that variable road conditions on particular links within the region can limit accessibility and connectivity between some towns. Gravel unsealed roads to more remote communities and a lack of all-weather access were highlighted, with Cherbourg an example where flooding completely isolates the town.

Within the region, approximately 5.9 per cent of the region's households do not own a motor vehicle which is comparable to Queensland's average of six per cent. However, this is not the case for Cherbourg Aboriginal Shire Council, where almost half (45.7 per cent) of all households do not have access to a motor vehicle. The median weekly personal income for persons aged 15 years or over for Cherbourg is \$315 per week, less than half of the Queensland and Australian's average of \$660 and \$662.³³ This may illustrate a link between the difficulties in accessing employment opportunities and transport accessibility in the area.

The Wide Bay Burnett region is serviced by inter-regional long distance coach and intra-regional bus services. Urban bus services operate in Hervey Bay, Maryborough, Gympie and Bundaberg. Inter-regional services connect inland towns and centres to east coast centres and towns. Long distance inter-regional bus services service coastal towns in the region on the Bruce Highway with final destinations to the north and south such as Cairns and Brisbane. Bus and coach services between inland towns are limited.

The cost and infrequent nature of inter-regional services means that they are not intended for accessing regular employment opportunities. The North Burnett Bus Service provides an important community service, connecting towns to the major centres of Bundaberg and Maryborough, but is limited in supporting regular access to these centres for employment. For example, the bus service between Mundubbera and Gayndah only operates three times per week at a cost of \$19.20 per return journey.

Some North Burnett Bus Service routes connect to the Tilt Train, and Queensland Rail provide rail bus connection services to long distance rail at Gympie North and Maryborough West stations (from locations such as Gympie, Maryborough and Hervey Bay). Bundaberg, Howard, Maryborough West and Gympie North stations provide access to long-distance rail which could be serviced by improved bus connections. Stakeholders have indicated further opportunity to improve linkages to long distance passenger rail in the region from other smaller communities.

The coordination of bus and rail timetables and the location of bus stops relative to rail stations are key in providing access to long distance rail. An example of poor coordination between bus and rail services is illustrated by rail access from Rainbow Beach. Travellers are required to catch a daily bus service to Gympie and transfer to a rail bus connection service from Gympie to Gympie North station to access rail services.

Active transport infrastructure is important to support a reduction in motor vehicle movement and increase active transport mode choice for short local trips. Many regional towns and centres have invested in footpaths and cycle infrastructure to provide local connectivity and further planning and investment across the region will see the continued development of the principal cycle network.

Active transport connections between Cherbourg and Murgon are important for access to employment and goods and services for the Cherbourg community. Stakeholders indicate the current poor and limited formal pedestrian footpaths supporting this route, with residents required to walk on the road and sometimes within table drains.

33 Queensland Statistician Office, Queensland Treasury. (2017). *Queensland Regional Resident Profile Wide Bay Burnett region*.

Transport network safety

In the Wide Bay Burnett region, there were 152 fatalities and 1926 crashes requiring hospitalisation between 2012 and 2016. Alcohol, fatigue and speed, as well as road geometry and driver behaviour were contributing factors to these crashes. Due to the high speed and remote nature of many of the region's state controlled roads, 48 per cent of crashes occurred at a posted speed limit of 80–110km/h. Hitting objects, rear end and angle crashes are the major crash types which accounted for nearly 70 per cent of the total crashes over the five-year period.³⁴ Disruptions, damage, hospitalisations and fatalities due to crashes come at a high cost to the community.

Marine safety is also a key consideration with 26,900 registered boats in the region.³⁵ The Australian Transport Safety Bureau (ATSB) latest statistics published in 2013 documented that between 2005 and 2012 there were 245 people killed, missing or seriously injured from reported marine occurrences across Australia. The most common types of occurrence were damage to the ship or equipment, serious injury and equipment failure.³⁶

The efficient movement of freight

The region is heavily reliant on the freight industry and the transport network to connect key production areas to market, transport inputs to industry and in supplying the community with essential goods. The quality and efficiency of these connections influences the cost of living for residents, the productivity and profitability of industry and is a factor in the region's attractiveness for new investment. Network resilience and the consistency and condition of the transport network are also challenges for freight efficiency.

B-Doubles are the highest classification of heavy vehicle acceptable for use on heavy vehicle routes with the exception of a small section of Chinchilla–Wondai Road near the western boundary of the region, where Type 1 Road Trains access is provided. High productivity vehicles (HPV) may be used on heavy vehicle routes and other areas of the road network through application and approval of a permit. The National Heavy Vehicle Regulator coordinates a range of access applications liaising directly with Transport and Main Roads and relevant local governments.³⁷

Heavy vehicle access is limited to major routes across the region. As identified by the Wide Bay Burnett Regional Organisation of Councils, improving connections to these routes is crucial for the overall efficiency of supply chains. Improvements are required on first and last mile connection roads (typically local government roads) to enable complete origin to destination freight journeys in the desired heavy vehicle class.³⁸ Facilities that support the freight industry, such as decoupling facilities can benefit operations and the efficiency of the freight network. The provision of decoupling bays allows improved utilisation of HPV's by providing suitable locations for vehicle reconfiguration. By providing these facilities on the outskirts of major freight generating urban areas, incompatible heavy vehicles are removed from the local road network.³⁹

Improved coordination amongst producers, particularly in the agricultural industry, provides an opportunity to improve supply chain efficiency in the region. Supply chain coordination includes the implementation and control of the efficient and effective flow and storage of goods, services and information between origin and destination.⁴⁰ Currently, a lack of coordination and integration of the supply chain between individual producers in the region reduces the efficiency of freight movements to other parts of the state.⁴¹

Variations in the condition of the road network

The Wide Bay Burnett region has a large and diverse transport network that caters for the needs of residents, visitors and commercial users. Stakeholders indicate variability in the condition and age of the transport network presents a challenge in supporting future economic growth in the region.⁴⁰ Variability in road conditions in the Wide Bay Burnett region include a combination of unsealed and sealed roads with varying seal widths and bridge load limits. The B-Double heavy vehicle route connecting Bundaberg to Toowoomba through Booyal, Biggenden and Nanango is a good example of the variability in road conditions. This route includes sections of substandard seal widths, timber bridges, load limited and narrow bridges and roughness deficiencies.

34 Queensland Government. (2017). *Open Data* www.data.qld.gov.au/dataset/crash-data-from-queensland-roads/resource/e88943c0-5968-4972-a15f-38e120d72eco.

35 Department of Transport and Main Roads. (2016). *Recreational Vessel Census June 2016*.

36 Australian Transport Safety Bureau. (2013). *Australian Shipping Occurrence Statistics 2005 to 2012*.

37 National Heavy Vehicle Regulator. (2017). www.nhvr.gov.au/road-access/access-management/about-access-management.

38 Wide Bay Burnett Regional Organisation of Councils. (2016). *Positioning the Wide Bay Burnett Region for Future Growth: A Plan to Deliver Economic Prosperity*.

39 Australian Trucking Association. (2009). *Consultation Submission re Heavy Vehicle Safety and Productivity Program*.

40 M. Hall and J. Frew. (2016). *Supply Chain Coordination in Queensland's Agricultural Sector, Paper for the Australasian Transport Research Forum 2016*.

41 Wide Bay Burnett region Regional Transport Plan Stakeholder Workshop 2017.

Road condition is a contributing factor to road safety. Limited overtaking opportunities, pavement failure risks, narrow seals and unsealed roads all affect the safety of the road network. During and following weather events, flooded roads and river crossings also present safety risks. The resilience of the road network to weather events also affects the reliability of access to and within the region for industry and the community. Stakeholders report that even during weather events there is a strong reliance on major routes where the alternative routes are unsealed or of a lesser standard.⁴²

Variability in road conditions also impact the efficiency of freight to and from the region. Freight efficiency is dependent on the weakest link in the transport connection between production and market. These weakest links are often the 'first and last mile' that provide a connection for industry to the highway network, but also can be associated with narrow seals and bridge load limits

on higher order roads. These issues restrict the size of vehicles that can be used to transport freight and limits the use of HPVs. HPVs deliver greatest benefit if they can be used for the entire door to door journey as the costs of breaking down and assembling vehicles can easily exceed line haul savings if HPVs cannot be used for the whole journey.

The upgrade of roads, outside of minor works and maintenance, requires adherence to modern design standards applicable at a state-wide level.⁴³ To meet current design standards, projects such as widening and strengthening works can have a high cost such that sourcing funds to carry out improvement works can be challenging.



Wide Bay Creek bridge before replacement under the Regional Bridge Replacement Program

⁴² Wide Bay Burnett Region Regional Transport Plan Stakeholder Workshop 2017.

⁴³ Department of Transport and Main Roads. (2013). *Road Planning and Design Manual 2nd Edition*.

Network resilience

Transport network resilience was a key issue raised at the *Wide Bay Burnett Regional Transport Plan* stakeholder workshop.⁴⁴ Resilience is the ability of the transport system to retain performance during a disaster, or return to a normal state of operation (or a desired level of functioning) quickly following a disaster. Poor resilience prolongs disruptions for transport network users impacting reliability, accessibility, travel time and the efficient movement of freight. Where damage to the transport network occurs due to a weather event, these impacts continue as network restrictions are in place while road works are carried out to address damage.

Stakeholders identify that during some weather events, many routes across the transport network close or are affected by flooded waterways requiring road users to seek out alternative routes. The ability to access and move around the Bundaberg area is significantly impacted by flooding due to large rainfall events, as experienced in 2013 and 2017. Cherbourg can also be isolated during weather events with no alternative routes around flood affected areas. Delayed or non-existent signage on closed or flooded roads was also indicated as an issue that can contribute to road users making poor route choice decisions.

Several district and local network roads in the region provide alternative routes for when the Bruce Highway is closed due to weather event or a crash. Although this provides some resilience to the network by moving traffic past the blockage, these roads are not designed for high traffic volumes and heavy vehicle movements.

Closures can also affect the rail network. On several occasions, the North Coast line has been closed due to flooding. For example, Cyclone Oswald in 2013 resulted in the closure of the North Coast line within the Wide Bay Burnett Region.⁴⁵ Closures along the North Coast line in other regions also affect rail operations in the Wide Bay Burnett region.

Transport network resilience is particularly important for providing safe emergency response access immediately after a disaster event to allow first responders to address damage and community impacts. Routes with higher flood immunity, alternative routes and other transport modes (such as air) provide options for disaster management planning and response.

Changing demographics

Australia's aging population presents several challenges to productivity and economic growth and is placing increasing demand on health and welfare services. Regional and rural populations are especially impacted by an aging population due in large part to the geographic dispersion and supply of essential services such as health care. Travel distances can also be significant for residents requiring specialist treatment. Currently, the region's proportion of residents aged over 65 comprises 23.2 per cent of the population, much higher than the Queensland average (14.7 per cent).⁴⁶ Hervey Bay has a higher concentration of people over 65 with 28.1 per cent which aligns to its status as a popular retirement destination. Current projections indicate by 2036 the proportion of the region's population over 65 will increase to over 30 per cent.⁴⁷

The provision of suitable transport services for the increasing number of aged persons in the region is essential. Health, physical ability and willingness can be barriers to an aged persons' mobility.⁴⁸ Accordingly, affordable transport to access essential services within and external to the region is a key consideration in providing for an aging population. An absence of public or community transport services and inadequate accessible pathways and infrastructure can create a mobility disadvantage for older people that can lead to increasing social isolation and negative physical and mental health impacts.⁴⁹

⁴⁴ Wide Bay Burnett region Regional Transport Plan Stakeholder Workshop 2017.

⁴⁵ Queensland Rail. (2013). www.queenslandrail.com.au/about%20ous/Media%20Centre/Media%20Releases/Pages/BUNDABERGTLTTRAINDEPARTSBRISBANETODAY.aspx.

⁴⁶ Queensland Statistician Office, Queensland Treasury. (2017). *Queensland Regional Resident Profile Wide Bay Burnett region*.

⁴⁷ Department of Transport and Main Roads. (2017). *Wide Bay Burnett region Tableau data (based on 2011 Census projections)*.

⁴⁸ Monash University. (2007). *Transport and Social Disadvantage in Australian Communities*.

⁴⁹ Council of the Aging. (2016). *COTA NSW Submission for the Legislative Assembly Committee on Community Services, Inquiry into access to transport for seniors and disadvantaged people in rural and regional NSW*.

Reliance on road freight

The region relies on the road network for the transport of essential goods to communities and for the efficient movement of freight to market within and external to the region. Due to the proximity of the region to South East Queensland and the relative flexibility and cost of road freight, the movement of freight by rail is largely focussed on movements through the region rather than from within.

The preference of road over rail to meet freight movement needs is a statewide trend. The continued preference of road over rail impacts the region with high volumes of road freight passing through the region where rail is a potential alternative. Factors contributing to the decline in rail freight include innovation in the road transport industry which has resulted in road freight becoming more competitive, reliable, flexible and responsive than rail.⁵⁰ Continued preference of road-based transport may accelerate pavement damage, increase road safety risks and increase road maintenance costs for state and local government.

For the Bundaberg area, the fragmentation and diminishing use of the cane rail network is resulting in an increase in road transport to move sugar cane from farms to mill. This is due to the changing nature of agriculture in the region and a shift away from sugar cane farming to other agricultural production particularly small crops. In 2014, approximately 1.4 million tonnes of raw sugar were transported from mills to port via public rail, 0.5 million tonnes went by mill-owned railway system and 2 million tonnes by road transport.⁵¹

The proposed extension of the cane railway by Isis Mill is opposing this trend. The proposed extension involves three stages of development which plans to utilise existing rail corridor from Cordalba to Booyal and Booyal to Gayndah.⁵²

Challenges for the agricultural sector in the efficient allocation of freight to rail services include a lack of coordination amongst key stakeholders, suitability of the current agricultural rail network for freight services (such as the cane rail network), seasonal nature of products and comparative costs of rail and road freight.⁵³



Heavy vehicle on roundabout connecting Queen Street and Fairymead Road, North Bundaberg

50 Queensland Parliament. (2014). *Queensland Parliament Inquiry into Rail Freight Use by the Agriculture and Livestock Industries*.

51 Department of Infrastructure and Regional Development. (2015). *Freightline 3 – Australian Sugar Freight Transport* (original source: Australian Sugar Milling Council 2015 Private Correspondence).

52 Bundaberg Regional Council. (2017). *Council Considers Mill Request for Extension of Cane Tramline*.

53 M Hall & J Frew. (2016). *Supply Chain Coordination in Queensland's Agriculture Sector for Australasian Transport Research Forum 2016 Proceedings*.

Funding, planning and project assessment

The region's transport network is a combination of national, state and local government owned and managed infrastructure.

The development, upgrade and maintenance of the region's transport network is essential in delivering regional transport priorities. Attracting investment can be a challenge, particularly when comparing traffic volumes on rural and remote roads to that of urban roads. Alternative investment decision making tools could be utilised to augment traditional cost-benefit analysis techniques where economic return is often difficult to ascertain. In this regard, CSIRO has developed a Network Strategic Investment Tool (TraNSIT) to analyse transport and logistic options for agriculture to identify potential cost savings and Austroads have also released a tool designed to identify and support investment in 'Life Line' freight routes.⁵⁴⁻⁵⁵

Another challenge for the transport network in the Wide Bay Burnett region relates to submissions and assessment of the Australian Government's National Disaster Relief and Recovery Program (NDRRA). Following a disaster event, such as a cyclone or major flood, Commonwealth assistance is provided though funding (75 per cent provided by the Commonwealth with 25 per cent provided by state government) to reconstruct the affected network to pre-disaster standards through permitted design standards. Selected betterment projects prioritised and funded through NDRRA could improve the resilience of the network.

Local government transport infrastructure is vital to the connectivity of the region. For the Wide Bay Burnett region, local governments own and manage airports and manage approximately 16,276 kilometres of road or 85 per cent of the region's road network.⁵⁶ Regional and rural local governments, particularly those without major populations such as North Burnett, Cherbourg and South Burnett, have a limited rates base to fund essential services, including the management of the transport network. Queensland and Australian Government programs are essential in assisting local governments in the delivery of services.

The Wide Bay Burnett Regional Roads and Transport Group, under the Road and Transport Alliance, provides a forum in which local government and Transport and Main

Roads can work together to decide transport priorities and allocate Transport Infrastructure Development Scheme (TIDS) funding taking a 'one network' approach.

3.3 Opportunities

Growth in agriculture

The Wide Bay Burnett region has highly productive agricultural land, with agricultural production across the region accounting for 11 per cent of Queensland's total.⁵⁷ The region has a diverse agricultural base including sugarcane, fruit and nuts, vegetables, pork, feedlots, beef and timber industries. Pig livestock and products are one of the region's largest agricultural commodities with Kingaroy the only dedicated pig processing facility in the state. Sugarcane is a dominant crop in the Wide Bay Burnett region, with an established sugarcane supply chain which includes dedicated transport infrastructure and processing facilities. Sugar is the primary commodity exported through the Port of Bundaberg.⁵⁸ The Wide Bay Burnett region accounts for the production of 27 per cent of Queensland's total fruit and vegetable production. Fresh produce grown in the region targets both domestic and international markets, as well as supplying food processing and value adding operations.⁵⁹

There are five areas across the region (as shown in Figure 5) that are identified as important agricultural areas due to their strategic significance to the region or state — Northern and Inland Burnett, Bundaberg and Childers, Gayndah and Mundubbera as well as the Mary Valley, the Fraser Coast and South Burnett.⁶⁰

The *Wide Bay Burnett Agricultural Land Audit* identified opportunities for the Wide Bay Burnett region's agricultural sector. The diversity and capacity for agricultural production, coupled with the region's proximity to high growth domestic and international markets will enable the region to respond to increased demand for fresh fruit and vegetables as domestic markets and export opportunities increase. There are also opportunities to expand local value-adding to products (for example, ready-to-cook packaging of fresh vegetables and nut products) and the further processing of crops (for example, sweet potatoes processed into potato chips).⁶⁰ The efficient movement of produce from farm to processing facilities and markets underpin these opportunities.

54 CSIRO. (2016). *Transport Network Strategic Investment Tool (TraNSIT)*.

55 Austroads. (2016). www.austroads.com.au/news-events/item/358-supporting-life-line-freight-routes.

56 Total local roads divided by total National, State and Local roads multiplied by 100.

57 As measured by gross value; Australian Bureau of Statistics. (2016). *Value of Agricultural Commodities Produced 2015-16, Australia* (Catalogue No: 7503.0).

58 Department of Transport and Main Roads. (2015). *Trade Statistics for Queensland Ports for the five years ending 30 June 2014*.

59 Trade and Investment Queensland. (2014). *Wide Bay Burnett Regional Profile*.

60 Department of Agriculture and Fisheries. (2016). *Queensland Agricultural Land Audit*.

The export of time sensitive produce from the region is an opportunity with access to national and international air freight services. Toowoomba's Wellcamp Airport is in close proximity to the inland areas of the region and offers weekly international freight flights to Asia and links to southern centres.⁶¹ Bundaberg and Hervey Bay airports also have potential to offer domestic air-freight services to support goods with a time imperative for delivery, such as cut flowers and fresh seafood.⁶² The Port of Bundaberg may also offer improved efficiency in the transfer of time sensitive agricultural products to market with alternative road/rail linkages to the port.⁶³

According to the *Wide Bay Burnett Agricultural Land Audit*, there is significant potential for increased forestry production in the region. Growth in the industry is supported by potential access to existing timber processing facilities, domestic markets and port facilities (Port of Bundaberg); ensuring the transport network is reliable and resilient, with good accessibility and connectivity, will be crucial for the long-term future growth of the region's timber and forestry industry.⁶⁴

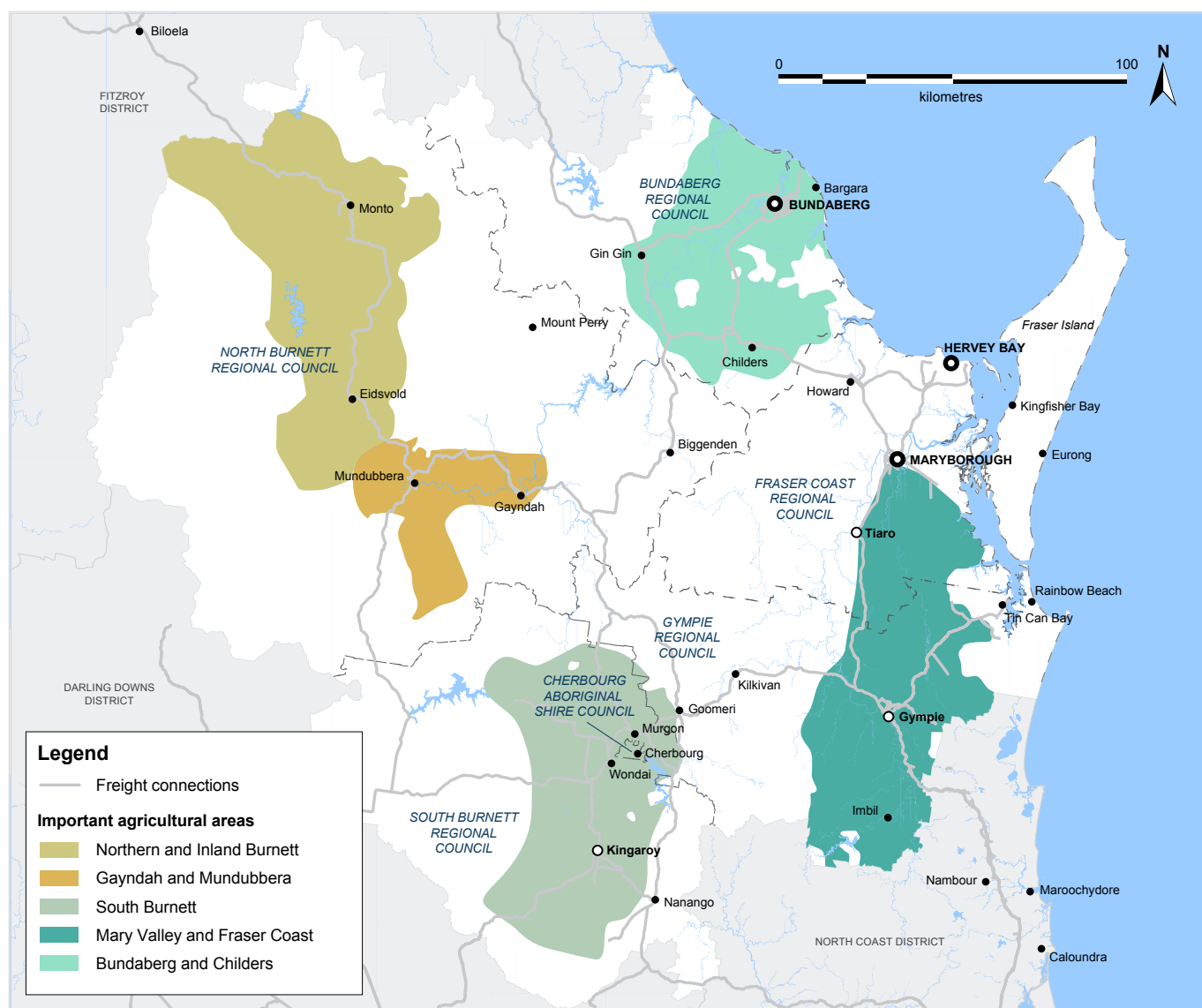


Figure 5: Important agricultural areas in the Wide Bay Burnett region⁶⁴

61 Brisbane West Wellcamp Airport. (2017). www.wellcamp.com.au/industry-pilot-info/overview.

62 Wide Bay Burnett Regional Organisation of Councils. (2016). *Regional Infrastructure and Investment Strategy*.

63 Department of Local Government and Planning. (2011). *Wide Bay Burnett Regional Plan*.

64 Department of Agriculture and Fisheries. (2016). *Queensland Agricultural Land Audit*.

Tourism growth

The Wide Bay Burnett region is recognised as the gateway to the Southern Great Barrier Reef, is home to the Fraser Island World Heritage Area and a range of heritage, coastal, hinterland and rural towns.⁶⁵ Destinations include coastal settlements such as Bundaberg City and Hervey Bay and small coastal towns including Mon Repos, Woodgate, Elliott Heads, Bargara, Tin Can Bay, Rainbow Beach and Burrum Heads. The western hinterland area extending from Monto through Eidsvold, Mundubbera, Gayndah, Biggenden and Childers offers recreational activity around gorges, dams, lakes and rivers, farms and heritage towns. Maryborough attracts visitors for its historic buildings and extensive rail heritage.⁶⁶ Tourism in the region is largely driven by domestic visitation, with inter and intra-state visitors accounting for around 95 per cent of all visitors.⁶⁷

Self-drive tourism is on the rise, with increasing numbers of 'grey nomads', caravans and recreational vehicles frequenting the region.⁶⁸ The region's tourism sector is targeted at the driving holiday market and nature-based and rural-themed tourist experiences. The self-drive tourism market encompasses those that travel long distances by road from other regions in Australia and those that fly into the region and then hire a vehicle to explore the area.

The Queensland Government, through the Business Queensland website, identifies the significant benefits self-drive tourism offers to business and communities in regional and rural areas. Tourists purchase local tourism products and services as well as basic travel necessities such as food, fuel and other supplies, contributing to a range of benefits to local economies including:

- increased profits
- job growth
- opportunities for new business start-up
- opportunities for business collaboration
- addressing skills shortages by tapping into the skills of temporary visitors.⁶⁹

Although a significant opportunity for the region, growth in self-drive tourism is also a challenge, particularly for the road network in catering for increased demand and conflicting network users. Heavy vehicle routes and tourist routes utilise common roads. High volumes of private vehicles (with many towing caravans) can interfere with the efficient movement of freight, particularly where limited overtaking lanes are available. Variable road conditions and high traffic volumes can result in travel time delays and safety risks. Tourist destinations such as Fraser Island and Hervey Bay experience a significant influx of visitors during holiday periods resulting in reduced travel time reliability in some isolated sections of the road network.⁷⁰

Fraser Island attracts thousands of tourists driving four wheel drive vehicles each year including both domestic and international visitors. Between 2011 and 2016, 25 crashes were reported with one of these fatal. Of these, 88 per cent of these were single vehicle accidents.⁷¹ Tourist skill and awareness of the unique driving conditions associated with beach and off road driving is important to the safety of visitors to Fraser Island.

Safety and condition of the road network, tourism signage and the provision of rest stops (separate from rest stops for freight vehicles) and scenic stops are important aspects in the ongoing development of the self-drive tourism sector and is especially important to smaller communities seeking to encourage tourism. These factors contribute to a positive experience as does improved mobile network coverage for safety, navigation and to access transport network real time information. Tourist education in driving to the unique conditions of regional roads and interacting with freight vehicles (including oversize overmass vehicles) is an opportunity to improve safety for self-drive tourists.



Mystery Craters, South Kolan

65 Department of Local Government and Planning. (2011). *Wide Bay Burnett Regional Plan*.

66 Trade and Investment Queensland. (2009). *Bundaberg-Fraser Coast Tourism Opportunity Plan 2009-2019*.

67 Tourism Research Australia. (2015). *Local Government Area Profiles*.

68 Grey nomads refer to retired people who travel independently for an extended period in a caravan or motor home.

69 Business Queensland. (2017). www.business.qld.gov.au/industries/hospitality-tourism-sport/tourism/qld/drive/qld.

70 Tourism and Events Queensland. (2009). *Bundaberg-Fraser Coast Tourism Opportunity Plan*.

71 Queensland Government. (2017). *Open Data data.qld.gov.au/dataset/crash-data-from-queensland-roads/resource/e88943c0-5968-4972-a15f-38e120d72eco*.

Other industries

Mining

Current mineral production and identified resources within the Wide Bay Burnett region include gold, silver, kaolin, limestone, coal, ilmenite, apatite, scandium, feldspar, siltstone, silica sand, black granite and clay, with quarrying and sand extraction activities key components of the region's mining activity.⁷²

Significant mineral exploration activity is occurring particularly in North Burnett (Biggenden, Gayndah, Mundubbera and Monto), while coal resource exploration is occurring in Tiaro, Monto and North of Bundaberg.⁷³ The emergence of the liquefied natural gas exporting industry through the Curtis Island facilities at Gladstone have also resulted in growing industry interest in exploration for coal seam gas in the Surat Basin and within the Wide Bay Burnett region, as industry looks to ensure a sufficient supply of gas to meet demand.

MRV Tarong Basin Coal Pty Ltd is currently preparing a draft environmental impact statement (EIS) for a potential coal mine and multi-use transport corridor in the region. The South Burnett Coal Project includes the development of a \$200–250 million open cut coal mine six kilometres south of Kingaroy and \$300–700 million transport corridor from the mine to Theebine. The project proposes to utilise existing road infrastructure for site access and transport plant and materials for construction. Transport networks to support operations will be investigated through the EIS process and will be considering landside transport options including a road corridor, a former rail corridor for potential reinstatement and a slurry pipeline as well as port options.⁷⁴

Renewable energy

The Queensland Government is committed to growing the state's renewable energy sector and has stated its intention to achieve 50 per cent renewable energy generation in Queensland by 2030.⁷⁵ The Wide Bay Burnett region has an opportunity to develop this industry following the AGL Energy Limited's EIS for the Coopers Gap wind farm being approved by the Coordinator General in March 2017. The \$500 million wind farm within the South Burnett and Western Downs local government areas could generate up to 460 Mega Watts (MW) of electricity and could potentially power more than 240,000 homes by as early as 2020.⁷⁶ Now under construction, the wind

farm will require the transport of components of the wind turbines, with the most challenging being the 70 metre blades from the Port of Brisbane. A route analysis study has identified a route from Port of Brisbane via Warrego Highway through Toowoomba and Dalby and then up the Bunya Highway to Niagara Road where the project site is located. For the Bunya Highway, investigations will occur to determine if pavement strength and widening is adequate to support the movement of oversize overmass freight during construction.⁷⁷

Gympie Regional Council has recently approved a solar farm and battery storage facility at Lower Wonga, approximately 30 kilometres north-west of Gympie adjacent to the Powerlink Woolooga Substation. The \$2 billion facility by Queensland company Solar Q will become Australia's largest solar farm that will aim to supply 15 per cent of South East Queensland's power and bring with it 450 jobs during construction.⁷⁸

⁷² Department of Natural Resources and Mines. (2017). *Queensland's mineral, coal and petroleum operations and resources, 17th Edition*.

⁷³ Wide Bay Burnett Regional Organisation of Councils (WBBROC). (2016). *Positioning the Wide Bay Burnett for Future Growth: A Plan to Deliver Economic Prosperity*.

⁷⁴ MRV Tarong Basin Coal. (2016). *South Burnett Coal Project Initial Advice Statement*.

⁷⁵ Minister for Main Roads, Road Safety and Ports and Minister for Energy, Biofuels and Water Supply. (2016). *Renewable Energy Taskforce releases draft report*.

⁷⁶ Department of State Development. (2017). *Coordinator General – Current Projects*.

⁷⁷ AECOM. (2017). *Coopers Gap Wind Farm TCo1-D Route Analysis*.

⁷⁸ The Gympie Times. (2017). Australia's biggest solar farm planned for Gympie.

Port of Bundaberg State Development Area

Increasing regional exports is a primary focus for the region. As detailed in the *Wide Bay Burnett Economic Development Strategy*, improvements in the capacity, cohesion and cost effectiveness of the supporting transport network, including the potential expansion of the Port of Bundaberg, could support increased demand for agricultural production and improve total supply chain efficiency.⁷⁹ In the short term, trade volume increases could come from raw sugar and related products.⁸⁰ In the long term, opportunities may arise at the Port of Bundaberg as capacity is reached at the Port of Gladstone. There is potential for major minerals exploration in the North Burnett area and some of these minerals could ultimately be exported through the Port of Bundaberg.

In February 2017, the Department of State Development declared a 6076 hectare State Development Area for the Port of Bundaberg. The site includes land proposed for port related industrial uses and sugar cane cultivation and rural landholdings. The State Development Area was developed in response to a demand for growing industrial activities that could help to facilitate economic growth in the region.⁸¹

While the Bundaberg region is currently an agricultural centre, its further growth as a major regional servicing centre will be assisted by the potential development of mineral deposits within the Wide Bay Burnett region and export opportunities through the Port of Bundaberg.⁸²

Independent modelling for the Port of Bundaberg suggests that productivity could increase from a base of 0.5 million tonnes per annum (mtpa) to over 1mtpa in the medium term with the opportunity to expand into bulk commodities in the future on the northern bank. The development also provides opportunities to develop and diversify the industry base within Bundaberg. This may include, support services for the agricultural industry, machinery and equipment management, specialised manufacturing and metal product manufacturing and fabrication.⁸³

The Bundaberg Port Gas Pipeline project was commissioned in February 2017.⁸⁴ The project will significantly enhance the distribution and gas capacity for the Port of Bundaberg attracting businesses to the developing hub and supports the new Knauf plasterboard facility.^{85,86}



Bundaberg State Development Area

79 Department of Local Government and Planning. (2011). *Wide Bay Burnett Regional Plan*.

80 Buningham and Associates for the Port of Bundaberg. (2014). *Port of Bundaberg – A review of potential trade and port development opportunities*.

81 Department of State Development. (2017). www.statedevelopment.qld.gov.au/coordinator-general/bundaberg-state-development-area.html.

82 Department of State Development. (2016). *Investigation into the potential for a State Development Area around the Port of Bundaberg*.

83 The Queensland Government Coordinator General. (2016). *Investigation into the potential for a State Development Area around the Port of Bundaberg*.

84 Australian Energy. (2017). www.australianenergyreview.com.au/bundaberg-gas-pipeline-reaching-milestones/.

85 The Office of the Coordinator General. (2017). *Wide Bay Burnett Factsheet*.

86 The Queensland Cabinet and Ministerial Directory. (2017). *Construction set to begin on Bundaberg gas pipeline*.

Transport infrastructure developments

There are a number of recent and potential major transport and supply chain infrastructure developments occurring around Toowoomba and the Darling Downs that offer new opportunities for the Wide Bay Burnett region.

The opening of Wellcamp Airport has provided improved access to domestic and international air freight capabilities for the inland areas of the region. The airport also offers passenger services to Townsville, Cairns, Sydney and Melbourne providing improved accessibility for the Wide Bay Burnett region.⁸⁷

Connecting supply chains to Inland Rail is also a potential opportunity. Inland Rail is the largest freight rail infrastructure project in Australia. The new 1700km line will complete the inland freight rail connection between Melbourne and Brisbane via regional Victoria, New South Wales and Queensland.⁸⁸ As part of the Inland Rail alignment, approximately 26 kilometres of new dual gauge track will be constructed between Gowrie and Helidon, traverse the steep terrain of the Toowoomba Range and will include a 6.4-kilometre tunnel.⁸⁹ By connecting the road freight network to Inland Rail, access to efficient movement of goods to Melbourne and Brisbane markets could be achieved.

InterLinkSQ

InterLinkSQ is a commercial venture and master-planned logistics, warehousing and industrial precinct, located 13 kilometres west of Toowoomba in southern Queensland, to maximise transportation and supply chain efficiencies.⁹⁰ Once constructed, InterLinkSQ will offer access to domestic and international markets through modal choice with:

- **Rail freight** – three kilometres of frontage to the existing West Moreton rail line connecting to the Port of Brisbane as well as direct connection to the Inland Rail alignment.
- **Road** – located at the junction of three major highways, the Gore, Warrego and New England, with connectivity to the Toowoomba Second Range Crossing.
- **Air freight** – eight kilometres from Wellcamp Airport with domestic and international passenger and freight flights.

Active transport and cycling tourism

Many trips for work, shopping, education, recreation and business in the region which are currently taken by car could be walked or cycled. Opportunities exist to provide more accessible active transport infrastructure that supports the mobility needs of the region's aging population. Fraser Coast Regional Council for example, has invested in a mobility corridor which uses a former railway alignment to provide dedicated infrastructure suitable for use by mobility scooters.⁹¹ Active transport infrastructure also provides opportunities for younger residents to travel independently or for those without access to a car to access education and employment. There is an opportunity to provide a better connection between Cherbourg and Murgon to provide improved access to employment and educational opportunities for the residents of Cherbourg.

Disused rail corridors provide an opportunity for the region as recreational active transport links. Potential future links could include Bundaberg to Gin Gin and Mount Perry, the Gayndah Heritage Rail Trail and extending existing rail trails such as the Mary to the Bay Rail Trail.

Cycling tourism, although still attracting a small market share, is an emerging trend with more domestic and international travellers looking for experiences that involve adventure and help maintain a healthy lifestyle.⁹² Continued investment in Wide Bay Burnett region's active transport networks and providing information targeted at tourists on suggested routes and itineraries, may assist in attracting cycling tourism to the region.

Kingaroy, Gayndah, Tin Can Bay/Cooloolo, Bundaberg and Bundaberg Rural have a higher than average number of residents completing trips by walking and cycling than the average for Queensland.⁹³ While many townships have provided local level infrastructure to facilitate active transport within the community, there is the opportunity to expand on this to further encourage the high active transport mode share across the region.

87 Brisbane West Wellcamp Airport. (2017). www.wellcamp.com.au/industry-pilot-info/overview.

88 Australian Government. (2017). minister.infrastructure.gov.au/chester/releases/2017/march/dco56_2017.aspx.

89 Australian Rail Track Corporation (2017). inlandrail.artc.com.au/programme.

90 Interlink SQ. (2017). www.interlinksq.com.au/.

91 Department of Transport and Main Roads. (2007). *Wide Bay Burnett Integrated Transport Plan Background Paper*.

92 Australian Government Austrade. (2015). *Growing Cycling Tourism in Victoria- Summary*.

93 Department of Transport and Main Roads. (2010). *Household Travel Survey*.

Better use of existing infrastructure

Through integration, coordination and targeted infrastructure upgrades there are opportunities to achieve improved outcomes through existing infrastructure. This is in line with the *State Infrastructure Plan* where there is a clear direction to consider non infrastructure solutions to 'better use' and 'improve existing' infrastructure to effectively delay the need for new infrastructure.⁹⁴ These include:

- improved collaboration and coordination between producers to achieve efficiencies in the movement of freight through establishing a regional or council led freight coordination initiative. This is likely to provide transport operators with better visibility of commercial opportunities arising from availability of a larger freight task originating from fewer locations.
- where possible utilise existing infrastructure when planning to progress delivery of rail trails and iconic cycle routes that support cycling tourism in the region.

Advancements in technology

Advancements in telecommunications and other technologies provide an opportunity to improve connectivity for communities in the region. Although mobile networks in the region do not provide complete coverage, communications technology can deliver a range of benefits to the transport system and its users.

Technology offers an opportunity for improved user experiences through the provision of real-time information, which reduces information asymmetries and improves the reliability and convenience of travel. Real-time information could provide road condition, road work and incident information to road users in advance of travel. This would allow users, including the freight industry, tourists and the local community, to retime their journey or select an alternative route, reducing delays and improving the efficiency of travel.

Cooperative Intelligent Transport Systems (CITS) are an emerging area that can be applied to motor vehicles and roadside infrastructure to enable direct two-way communication between them.⁹⁵ The integration of infrastructure and vehicles can be applied to improve safety outcomes at traffic lights and level crossings by alerting users to potential emerging safety issues.

Dedicated Short Range Communication (DSRC) is an example of a CITS which has been piloted by LaTrobe University by providing vehicles and drivers a 360-degree level of awareness of the surrounding traffic situation. Wireless communication between trains approaching a level crossing and vehicles approaching the crossing can notify drivers of a collision and provide a warning message to the driver's vehicle.⁹⁶

A recent study on the Bruce Highway between Pine Rivers, on the northern outskirts of Brisbane and Cairns, considered current gaps and opportunities for CITS investment to improve road safety and travel reliability.⁹⁷ The study identified the benefits of additional CITS infrastructure that could monitor flood prone areas and provide improved fore warning of incidents on the highway.

Technological advancements, such as electric and autonomous vehicles (AV) have the potential to change the way freight and people move and the type of vehicles travelling on the network. Potential benefits of using AV in freight transport services include lower costs for vehicles requiring no driver and reduction in fuel cost and increased safety, in terms of a reduction in driver error and greater opportunity for time shifting.⁹⁸

For regional areas, a significant challenge to the deployment of AVs is the provision of supporting infrastructure which could include requirements for physical infrastructure such as signage and road marking and digital infrastructure such as mapping data and communications infrastructure.⁹⁹ Drones, otherwise known as unmanned aerial vehicles (UAV) have been used as an emerging technology in supply chain operations. UAV's have the potential to make some tasks that were previously either very time-consuming or labour intensive more efficient and less expensive, while significantly improving worker safety when deployed. However, use of drones in transportation requires proper tools for reliable, safe and efficient operation.¹⁰⁰

Technology has also allowed for improved and automated data collection and vehicle tracking tools, providing the opportunity to more accurately and cost effectively understand and plan for freight movements and travel demand.

94 Department of Infrastructure, Local Government and Planning. (2016). *State Infrastructure Plan Part A: Strategy*.

95 Austroads, (2017). www.onlinepublications.austroads.com.au/items/AP-R413-12.

96 LaTrobe University. (2013). www.latrobe.edu.au/technology-infusion/innovation/transport/improving-safety-at-level-crossings.

97 Aurecon (for Transport and Main Roads). (2017). *Bruce Highway Road Operational Improvement Project Concept of Operations*.

98 Michael Browne, University of Gothenburg. (2016). *Freight Transport Services and Autonomous Vehicles*.

99 Australian Government Department of Infrastructure and Regional Development. (2017). *Submission to the Standing Committee on Industry, Innovation, Science and Resources Inquiry into the social issues related to land*.

100 Jim Dempsey for Panasonic Mobility. (2017). www.panasonicforbusiness.com/2017/01/rise-of-drone-use-in-transportation-and-logistics-requires-proper-tools-for-reliable-safe-and-efficient-operation/.

The region's lifestyle

With advancements in technology and the knowledge economy, it is becoming increasingly possible to work from anywhere. This technology allows individuals to work, access distance education, seek healthcare and socialise with others regardless of location.¹⁰¹ Housing affordability, amenity and natural values can be important factors in choosing where to settle, as can access to retail and entertainment options. The region's natural landscape and location, close to South East Queensland as well as their major centres such as Maryborough, Hervey Bay, Bundaberg, Kingaroy and Gympie, offers residents an idyllic lifestyle providing the opportunity for the region to attract a more diverse population.



Fraser Venture unloading at River Heads

¹⁰¹ National Broadband Network. (2016). *Super Connected Lifestyle Locations*.





4. Priorities and actions

Priorities set the direction for the region's transport network over the next 15 years. The four priorities established through the *Wide Bay Burnett Regional Transport Plan* development process are:

- **Priority 1:** An affordable and integrated transport network that improves accessibility and mobility for all residents and visitors.
- **Priority 2:** A transport system that supports economic growth, productivity and diversification, by facilitating the efficient movement of people and freight.
- **Priority 3:** A transport network that enables people to travel safely and feel secure.
- **Priority 4:** A sustainable transport system that is resilient to major incidents or weather events and is compatible with the environmental and lifestyle values of the region.

Actions are identified under each of the priorities. These are grouped into short-term and medium/long-term. Short-term actions identify the first steps needed to achieve the transport objectives and regional goals over the indicative 15-year life of the Plan. Medium/long-term actions identify possible responses to emerging or potential future transport planning needs.

Actions will be reviewed and updated periodically as part of the implementation, monitoring and review process described in Chapter 5.

Actions are primarily planning and partnership initiatives to be further scoped, defined and programmed in collaboration with partners and stakeholders. Transport and Main Roads through its planning, investment, management, operations and maintenance of the transport network gives priority to improving safety for our customers.

Actions and the subsequent project recommendations that follow, will inform future updates of investment plans and programs such as the *State Infrastructure Plan*, *Queensland Transport and Roads Investment Program (QTRIP)* and other relevant service and infrastructure investment strategies across all levels of government and transport service providers.

Each action under the four priorities are linked to transport objectives and measures of success. Transport objectives are key drivers for taking action. Measures of success have been selected where data to track performance is readily available. Base line data and performance metrics will be developed and used to indicate progress towards meeting the goals set out in this Plan.

Table 4 shows the relationship linking priorities, objectives and measures of success.



Four wheel drive on beach, Seventy Five Mile Beach, Fraser Island

Table 4: Relationship between priorities, transport objectives and measures of success

TRANSPORT SYSTEM				
The safety of all transport system customers is our primary priority as we create a single integrated transport network accessible to everyone.				
RTP PRIORITIES	PRIORITY 1 Community	PRIORITY 2 Economic development	PRIORITY 3 Safety	PRIORITY 4 Environment and sustainability
	An affordable and integrated transport network that improves accessibility and mobility for all residents and visitors.	A transport system that supports economic growth, productivity and diversification, by facilitating the efficient movement of people and freight.	A transport network that enables people to travel safely and feel secure.	A sustainable transport system that is resilient to major incidents or weather events and is compatible with the environmental and lifestyle values of the region.
ROLE OF TRANSPORT	Responding to the challenges of: <ul style="list-style-type: none"> accessibility and community connectivity changing demographics. And opportunities for: <ul style="list-style-type: none"> better use of existing infrastructure advances in technology the region's lifestyle. By taking action to: <ul style="list-style-type: none"> provide accessible and connected communities that promote healthy and inclusive lifestyles. 	Responding to the challenges of: <ul style="list-style-type: none"> freight efficiency network condition impacts on tourism and freight reliance on road freight. And opportunities for: <ul style="list-style-type: none"> growth in tourism and agriculture accessing new transport infrastructure mining and renewable energy developments better use of existing infrastructure advances in technology. By taking action to: <ul style="list-style-type: none"> strengthen and grow the region's diverse and resilient economy. 	Responding to the challenges of: <ul style="list-style-type: none"> transport network safety variability in network condition impacting on safety. And opportunities for: <ul style="list-style-type: none"> growth in key industries- tourism and agriculture advances in technology. By taking action to: <ul style="list-style-type: none"> promote a safe environment for all residents and visitors. 	Responding to the challenges of: <ul style="list-style-type: none"> geographically dispersed population variability in network condition and environmental impacts on the transport network network resilience. And opportunities for: <ul style="list-style-type: none"> advances in technology active transport and cycle tourism. By taking action to: <ul style="list-style-type: none"> promote a cleaner, healthier and more liveable environment in the Wide Bay Burnett region.
TRANSPORT OBJECTIVES	1.1 A transport network that provides reliable access to employment, education, recreational opportunities and goods and services. 1.2 An accessible multi-modal transport system that caters for the needs of all residents and visitors.	2.1 A transport system that optimises supply chain productivity through efficient links to industries and markets, within and external to the region. 2.2 A transport system that promotes multi-modal access to key tourist destinations. 2.3 Integrated land use and transport planning that optimises regional growth and interconnectivity between all transport modes. 2.4 A transport network that supports the region's economic development through smart infrastructure solutions and technological advances.	3.1 A transport network that addresses safety deficiencies and facilitates safer interactions between all users. 3.2 Promote awareness of safe travel behaviours for all transport network users.	4.1 Transport infrastructure that it is resilient and reliable during incidents and weather events. 4.2 Create a more sustainable transport system by reducing people's reliance on private vehicles and supporting more trips by walking, cycling and public transport. 4.3 Develop a sustainable transport system that supports the environmental and lifestyle values of the region.
MEASURES OF SUCCESS	<ul style="list-style-type: none"> Level of transport disadvantage decreases. Greater access and connectivity to places, services and information. 	<ul style="list-style-type: none"> Maintain or improve road network reliability. Freight productivity improves. Transport supports the region's tourism economy. 	<ul style="list-style-type: none"> Reduction in transport-related incidents, crashes, injuries and fatalities. 	<ul style="list-style-type: none"> Reduced frequency and duration of unplanned closures. Proportion of people choosing to walk, cycle and take public transport increases.

4.1 Priority 1: Community

An affordable and integrated transport network that improves accessibility and mobility for all residents and visitors.

Priority 1 supports:

- the *Transport Coordination Plan*'s objectives for transport that connects communities to employment and vital services and contributes to a healthier and more liveable environment
- the *State Infrastructure Plan*'s focus on transport infrastructure that improves prosperity and liveability by connecting regional communities with access to essential services and opportunities
- the *Wide Bay Burnett Regional Plan*'s intent for the region to have vibrant, inclusive, safe, active and healthy communities, where a range of social services are accessible by all and where unique cultural heritage and diversity is acknowledged, valued and celebrated.

The liveability of communities is shaped by a combination of factors, such as the amenity of the natural and built environments, economic prosperity, social stability and equity, accessibility and educational opportunity, as well as cultural, entertainment and recreational possibilities. Transport systems play an essential role in the mobility of communities by facilitating access to employment, education, goods and services, especially health services, as well as social and entertainment opportunities.

Providing affordable, convenient and accessible connections to where people want to go is a key objective for building and operating the transport system. Different communities and customers have diverse access needs and challenges. Regardless of age, ability or income all people should have reasonable access to basic goods and services.

Private vehicle travel is the predominant mode of transport across much of the region, particularly in areas where public transport is unavailable. For the region's residents, public and active transport can improve urban amenity, provide greater travel choice, affordability and independence. Transport accessibility and choice can be improved through a range of solutions incorporating the provision of infrastructure, transport services and funding schemes.



North Burnett Transport Service bus

Transport objectives and measures of success

Objective 1.1: A transport network that provides reliable access to employment, education, recreational opportunities and goods and services.

Liveability and lifestyle opportunities significantly impact on where individuals choose to reside. Improving access to employment, education, areas of recreation and essential goods and services, especially health services, will strengthen the region's sense of community and liveability.

Objective 1.2: An accessible multi-modal transport system that caters for the needs of all residents and visitors.

The Wide Bay Burnett region is home to a diverse range of people with various transport needs. Developing, maintaining and enhancing transport infrastructure and services assists all members of the community, regardless of age, ability or personal circumstances, safely traverse the network. Mobility for residents and visitors is heavily dependent on the availability and affordability of the transport network and services, especially when travelling for long distances.

Measures of success

Measure of success	Proposed indicator	Source	Objectives	
			1.1	1.2
Level of transport disadvantage decreases.	Proportion of population in areas of unmet transport need (high mobility disadvantage and not served by public transport).	Transport and Main Roads	✓	✓
Greater access and connectivity to places, services and information.	Proportion of the population with good accessibility to a range of essential services in urban areas (by walking or public transport).	Transport and Main Roads	✓	✓
	Frequency of services for long-distance rail, air and coach services connecting regional centres to local town centres in rural areas.	Operators	✓	✓
	Availability of 'mobility as a service' options (e.g. demand responsive transport, taxis, ride-share).	Operators	✓	✓



Mandarin farm, Gayndah

Actions

PRIORITY 1: COMMUNITY

OBJECTIVES

Objective 1.1: A transport network that provides reliable access to employment, education, recreational opportunities and goods and services.

Objective 1.2: An accessible multi-modal transport system that caters for the needs of all residents and visitors.

Actions – short-term	1.1	1.2
A1.01 Disability access Work in collaboration with partners and stakeholders to improve accessibility for people with a disability using passenger transport services in the Wide Bay Burnett region in accordance with the <i>Disability Action Plan 2017</i> . Key locations include Bundaberg, Hervey, Bay, Maryborough, Gympie and Kingaroy.	✓	
A1.02 Community based transport Partner with local government to investigate opportunities to better utilise existing transport assets, such as existing community and school buses to provide additional community based transport services in the region. The investigation should also identify opportunities to better utilise technology and increase on-demand community transport services to improve access to local and regional services, particularly in areas with higher than average aging populations such as Fraser Coast.	✓	✓
A1.03 Public transport plan Partner with local governments to develop a public transport plan for key activity centres in region (i.e. Bundaberg, Gympie, Hervey Bay and Maryborough), with a focus on investigating opportunities to: <ul style="list-style-type: none"> improve connectivity, efficiency and service frequency between residential areas, major centres and key employment and education nodes improve connections between active and public transport modes (bus and rail) to increase accessibility and promote patronage growth investigate alternative service models that meet different or changing customer needs improve passenger transport infrastructure. 	✓	✓
A1.04 Pedestrian Access and Mobility Plan Work with local government to develop a Pedestrian Access and Mobility Plan for key activity centres, towns and routes (i.e. Bundaberg, Hervey Bay, Gympie and Cherbourg to Murgon) to strengthen and preserve walkability, urban design and local amenity. The plan should consider access requirements for motorised mobility scooters and other mobility aids.	✓	✓
A1.05 Connectivity from Cherbourg Investigate opportunities to improve pedestrian and cycling connectivity along Cherbourg Road to facilitate safe accessibility from Cherbourg to Murgon.	✓	✓
Actions – medium/long-term	1.1	1.2
A1.06 Travel behaviour data Collect and evaluate region specific travel behaviour information in the Wide Bay Burnett region to inform integrated transport and land use planning and investment decision-making. Key focus areas are Bundaberg and Hervey Bay.	✓	✓
A1.07 Technology Partner with local government through the Wide Bay Burnett Regional Roads and Transport Group to identify facilitation requirements, responsibilities, network impacts and potential benefits of electric and autonomous vehicles in the Wide Bay Burnett region and to inform statewide strategic policy and planning. An example includes responding to <i>The Future is Electric: Queensland's Electric Vehicle Strategy</i> .	✓	✓

PRIORITY 1: COMMUNITY

OBJECTIVES

Objective 1.1: A transport network that provides reliable access to employment, education, recreational opportunities and goods and services.

Objective 1.2: An accessible multi-modal transport system that caters for the needs of all residents and visitors.

Actions – medium/long-term	1.1	1.2
A1.08 Principal cycle network Undertake options analysis and business case development for highest priority routes on the principal cycle network to support more cycling, more often, on safe, direct and connected routes.	✓	✓
A1.09 Principal Cycle Network Plan Review and update the Wide Bay Burnett Principal Cycle Network Plan every five years and accompanying Priority Route Maps every two years in collaboration with local government.	✓	✓
A1.10 Network and area studies Undertake and update multimodal network and area studies to plan for anticipated future transport demands, including those relating to population, employment and economic changes and growth. Priority areas include Bundaberg, Gympie, Maryborough and Hervey Bay.	✓	✓
A1.11 Personalised transport Investigate opportunities to adapt the region's transport system to take advantage of diversification in personalised transport services.	✓	✓

CASE STUDY: Bike friendly Barossa¹⁰²

In 2015, Barossa Council developed a cycle hub and a behaviour change initiative, encouraging increased uptake of cycling for transport and leisure for local residents and visitors to the area. These initiatives take advantage of the areas long-term commitment to bike and pedestrian-friendly town centres supported by appropriate on and off-road cycle infrastructure and connected by an increasing network of long distance sealed pedestrian and cycle shared trails.

The cycle hub is located in the town of Tanunda on the Jack Bobridge Track and Barossa Trail (previously a railway) and offers access to bicycle repair, hire and storage services, change rooms, water and local information. Shade, seating and community meeting areas complement the facility.

To encourage more trips by active transport, by both residents and tourists, Barossa Council signed up 30 bike-friendly businesses to encourage active transport.

Businesses were made aware of how cycle travel and tourism could enhance their activities and keep spending local. Bike-friendly businesses have provided free water and discounts on products or services as well as bicycle parking. Council has also developed four Cycle Friendly Workplaces through facilitation of cycle safety workshops supporting the Motor Accident Commission 'Be Safe, Be Seen' initiative with bicycle health checks and safety skills workshops.

A 'Barossa by Bike' map was produced to encourage and promote cycle tourism and enable self-directed cycling around the region, highlighting tourist attractions, a food trail and bike hire services.

Outcomes identified through these initiatives include increased participation in cycling for residents in accessing employment and services and further development of the Barossa area as a cycle tourism destination.

¹⁰² Heart Foundation. (2017). *Active Healthy By Design Program* www.healthyactivebydesign.com.au/case-studies/bike-friendly-barossa.

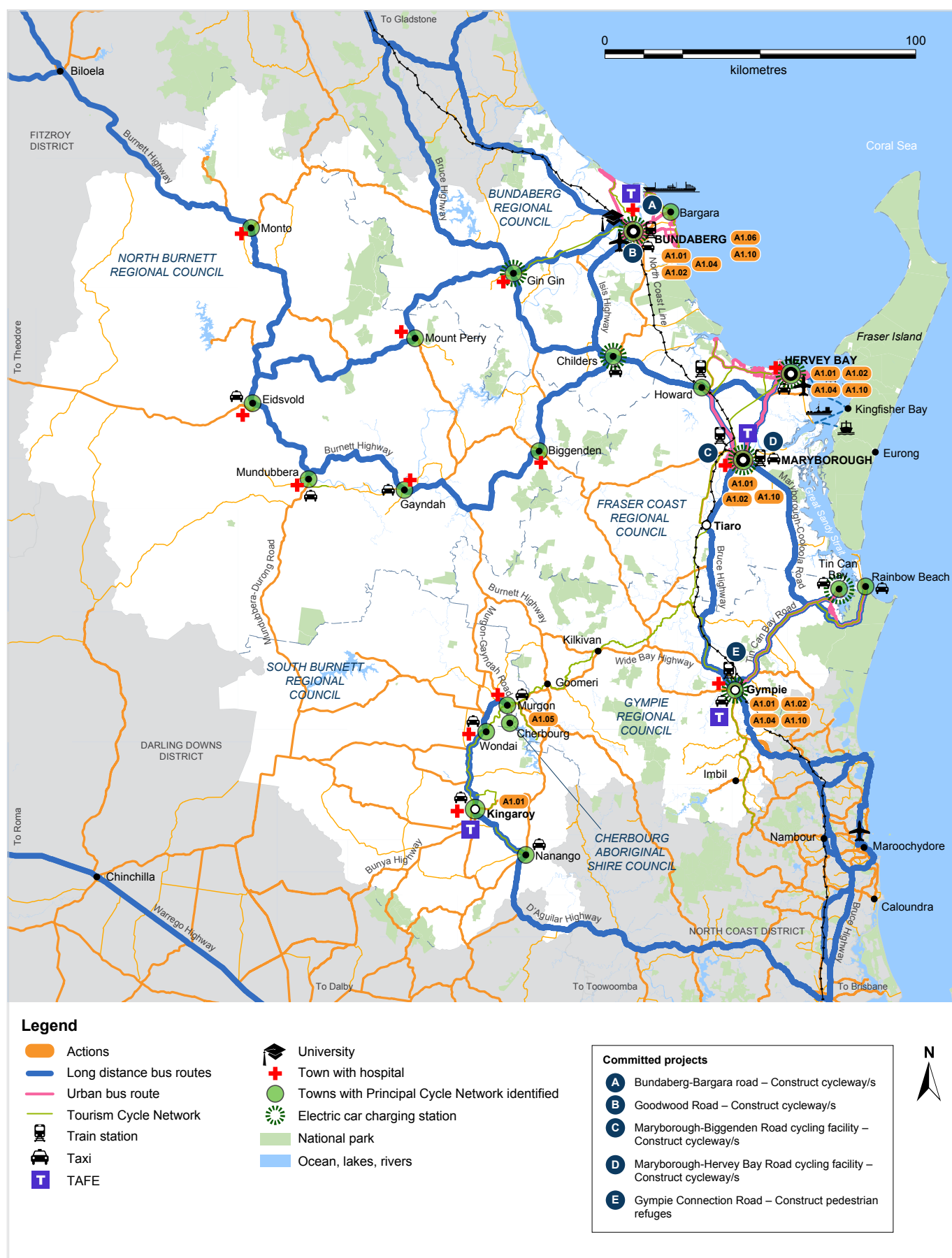
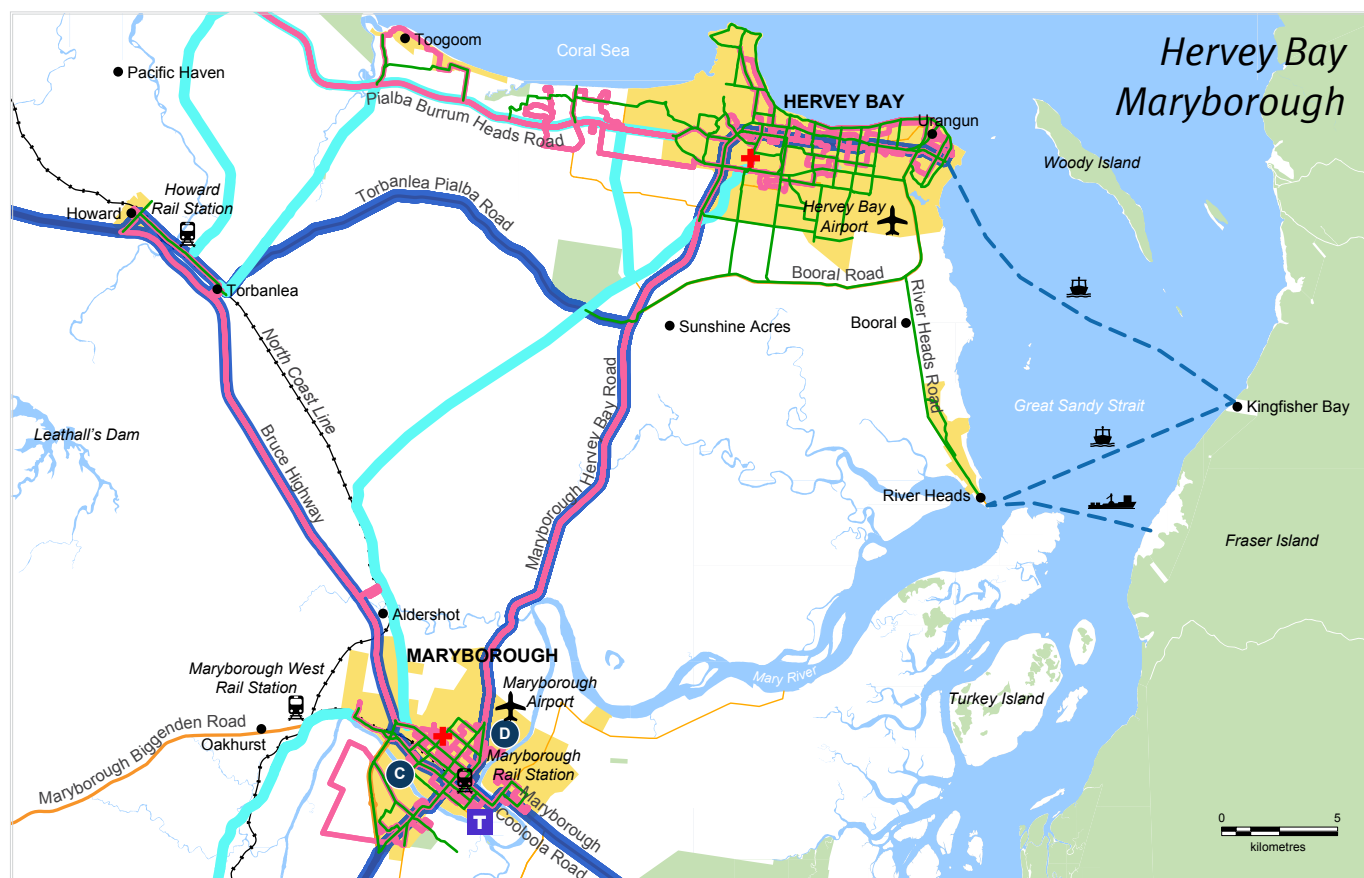


Figure 6: Priority 1 region map

This map is indicative to illustrate proposed strategies for the region and is not intended to be accurate in terms of exact geographic extent.



This map is indicative to illustrate proposed strategies for the region and is not intended to be accurate in terms of exact geographic extent.

4.2 Priority 2: Economic development

A transport system that supports economic growth, productivity and diversification by facilitating the efficient movement of people and freight.

Priority 2 supports:

- the *Transport Coordination Plan*'s objective for transport that facilitates the efficient movement of people and freight to grow Queensland's economy
- the *State Infrastructure Plan*'s focus on integrated transport infrastructure that improves the efficiency of freight and unlocks the potential of critical supply chains
- the *Wide Bay Burnett Regional Plan*'s intent for a thriving regional economy that is sustainable, resilient and robust and advances the prosperity and liveability of communities within the region.

A transport system that supports economic development and diversification will help position the region for a strong economic future. A sustainable and robust economy will support growth in jobs, enable businesses to expand and will support the development of new economic opportunities for the region's residents.

For freight, this is the efficient movement from origin, such as the farm gate for the agricultural industry, to port or market. Reliable and efficient supply chains are crucial in managing the freight task for the Wide Bay Burnett region. Productive supply chains, which can meet current and future demand, help attract business, investment and improve profitability for industry.

For tourism, the transport network needs to allow people to easily move around the region and conveniently reach key attractions and destinations. Efficient intermodal connectivity between air, rail, road or sea, as well as levels of service by transport providers, is essential to grow tourism. Ensuring the transport network supports a safe and positive experience for tourists is important in maintaining tourism demand and encouraging longer stays. Tourism, particularly self-drive tourism, benefits regional businesses through expenditure on leisure activities and attractions, overnight stopovers and basic travel necessities (such as fuel and food). This market is expected to experience growth due to Australia's ageing population and a corresponding increase in retirees who travel around Australia. For the region to share in this growth, the transport network must meet the needs of visitors.



Harvesting at a farm, Cordalba, Bundaberg Regional Council

Transport objectives and measures of success

Objective 2.1: A transport system that optimises supply chain productivity through efficient links to industries and markets, within and external to the region.

The efficient movement of people and goods throughout the network—both within and external to the region—contributes to economic growth and productivity. The supply chain between economic producers, manufacturers and customers should be enhanced to create a fully connected and efficient network. Broadly, the freight network must be developed and managed to optimise key routes and incorporate all modes of freight. An optimised supply chain will minimise unnecessary load transfers, splitting or handling allowing direct connections between producers and receivers; and will minimise transportation costs for producers, transporters, distributors and consumers.

Objective 2.2: A transport system that promotes multi-modal access to key tourist destinations.

An integrated and managed transport network can aid the tourism industry by ensuring that the region is easily accessible to all visitors, whether they are traveling via bus, coach, rail, air or sea. In addition to accessibility, regions which have obvious route choices and clear

wayfinding signage are more attractive to self-drive tourists and improve the overall driver experience. Road users also value facilities such as rest stops and scenic lookouts which can enhance the safety and amenity of long-distance travel.

Objective 2.3: Integrated land use and transport planning that optimises regional growth and interconnectivity between all transport modes.

Integrated and effective land use and transport planning ensures that the network can adapt and support demand as the economy of the region develops. Transport network planning should consider future industry and mining development and multi-modal supply chain objectives to optimise the region's long-term economic viability. This includes the provision of reliable and direct access to transport hubs such as air and sea ports.

Objective 2.4: A transport network that supports the region's economic development through smart infrastructure solutions and technological advances.

Smart infrastructure solutions and innovative technology should be utilised to further enhance the efficiency and resilience of the region's transport network in the long term. Early preparation for advancing technology allows the region to remain sophisticated and current.

Measures of success

Measure of success	Proposed indicator	Source	Objectives			
			2.1	2.2	2.3	2.4
Maintain or improve road network reliability.	Percentage variation from posted speed limit (state controlled roads and national highways).	Transport and Main Roads	✓			✓
Freight productivity improves.	Number and proportion of high productivity vehicles used on key road freight routes.	Transport and Main Roads	✓		✓	✓
	Number of pre-approved heavy vehicle routes.	National Heavy Vehicle Regulator	✓		✓	✓
Transport supports the region's tourism economy.	Evolving indicator to be further developed.	To be confirmed	✓	✓	✓	✓

Actions

PRIORITY 2: ECONOMIC DEVELOPMENT

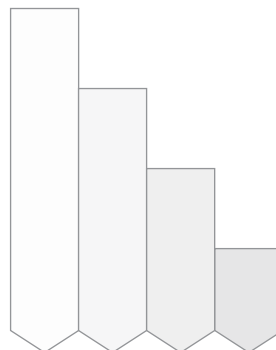
OBJECTIVES

Objective 2.1: A transport system that optimises supply chain productivity through efficient links to industries and markets, within and external to the region.

Objective 2.2: A transport system that promotes multi-modal access to key tourist destinations.

Objective 2.3: Integrated land use and transport planning that optimises regional growth and interconnectivity between all transport modes.

Objective 2.4: A transport network that supports the region's economic development through smart infrastructure solutions and technological advances.



Actions – short-term	2.1	2.2	2.3	2.4
A2.01 Freight model Build and progressively update a strategic freight model that can be used to identify, forecast and analyse multi-modal freight flows across the state.	✓			
A2.02 Freight data Develop strategies to improve the capture, storage, usability and application of freight and logistics data by working with the National Heavy Vehicle Regulator, industry and other sources of data to enhance its extent and depth.	✓			✓
A2.03 Tourism In partnership with state and local tourism agencies, undertake a regional transport needs analysis to identify the travel needs of tourists and visitors traveling to the region's key tourism destinations including Southern Great Barrier Reef, the Great Sandy Strait, Bundaberg, the Bunya Mountains National Park, Cania Gorge National Park, Cherbourg, Fraser Island, Gayndah, Hervey Bay, Kingaroy, Lady Elliot Island, Maryborough, Tiaro, Mon Repos Conservation Park, Rainbow Beach and Gympie.	✓	✓		
A2.04 North Coast Rail line Develop a North Coast Line Action Plan to prioritise planning that will support rail freight and passenger efficiency improvements. This may include opportunities to reduce the number of level crossings, increase the length of passing loops, improve flood resilience and re-align low speed sections of the North Coast line.	✓	✓		
A2.05 Port and airport access Work with industry to identify current and future transport access requirements to key sea and air ports within and external to the region, including the Port of Bundaberg and Brisbane West Wellcamp Airport.	✓	✓		
A2.06 Port of Bundaberg State Development Area Identify the transport network planning required to support and enable the growth of the Port of Bundaberg State Development Area and other key industrial precincts.			✓	
A2.07 Corridor, route and link planning Update corridor, route and link planning for the State Strategic and State Regional road network for: <ul style="list-style-type: none"> high priority inter-regional links such as the Bruce, D'Aguilar, Burnett and Bunya Highways and Chinchilla–Wondai Road key routes connecting the Bruce Highway to the coast such as Maryborough–Hervey Bay Road, Bundaberg–Gin Gin Road and Tin Can Bay Road important intra-regional links such as the Isis and Wide Bay Highways. 	✓	✓		

PRIORITY 2: ECONOMIC DEVELOPMENT

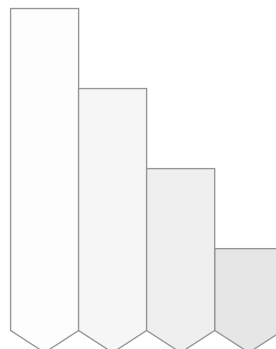
OBJECTIVES

Objective 2.1: A transport system that optimises supply chain productivity through efficient links to industries and markets, within and external to the region.

Objective 2.2: A transport system that promotes multi-modal access to key tourist destinations.

Objective 2.3: Integrated land use and transport planning that optimises regional growth and interconnectivity between all transport modes.

Objective 2.4: A transport network that supports the region's economic development through smart infrastructure solutions and technological advances.



Actions – medium/long-term

A2.08 Freight strategy

Develop a multi-modal regional freight strategy to identify and prioritise productivity and safety improvements throughout the region in response to statewide freight and heavy vehicle network strategies.

The strategy should consider:

- long-term competitiveness of rail freight (including sugarcane rail) and future opportunities for coastal shipping
- supply chain coordination models (particularly in agriculture, mining and manufacturing)
- the efficiency of cattle supply chains from primary cattle producing areas in Borders Rivers Maranoa Balonne and Burnett Mary catchments
- expansion of the road train network into South Burnett
- future resources sector freight requirements.

A2.09 Cycle tourism

Work with local government, other state government agencies and tourism bodies to identify and undertake planning to progress active transport projects that also have recreational values and contribute to the region's tourism industry. This includes projects, such as iconic cycle touring routes and rail trails (e.g. the Kilkivan to Kingaroy Rail Trail, Mary to the Bay Rail Trail and the Boolboona Rail Trail and Tunnel), throughout the region.

A2.10 Ferry services and facilities

Investigate opportunities to improve ferry facilities and services connecting Fraser Island to enhance social and economic outcomes.

2.1 2.2 2.3 2.4

✓				✓
	✓			
	✓			

CASE STUDY: Hunter Valley Coal Chain Coordinator

The Hunter Valley coal supply chain is the largest coal export operation in the world. Originally, planning and operating activities were undertaken by firms individually, leading to sub-optimal scheduling, issues with coordination of planned maintenance activities and a high rate of service cancellations.

A memorandum of understanding in mid-2005 outlining the implementation of a centralised planning model was agreed between all organisations responsible for the transport of coal from Hunter Valley mines to the port and onto ships for export. The formation of the Hunter Valley Coal Chain Logistics Team (HVCCLT) resulted, that is now the independent Hunter Valley Coal Chain Coordinator.¹⁰³

With a mix of federal, state and privately owned organisations operating individual components of the Coal Chain, the HVCCLT provided a single point of coordination for all planning decisions. The HVCCLT has proven that by planning the coal chain as a single system, increased throughput and coordinated investment can be achieved. This includes:

- **Day to day planning and scheduling:** maximised coal export volumes each and every day and coordinated planning for the provision of future coal chain infrastructure through coordinated vessel berthing, stockpile layouts and train sequencing to fulfil orders in the shortest possible timeframe.
- **Long-term capacity planning:** using simulation and optimisation modelling tools to assess the adequacy of the existing coal chain infrastructure to fulfil future export demand. By identifying future coal chain constraints and working to develop an integrated capital investment plan, members can optimise their investment decisions and focus capital expenditure on infrastructure required to meet future coal export growth.

A freight strategy for Wide Bay Burnett would potentially explore supply chain coordination models such as this to improve the efficiency of the region's freight network.



Cattle truck near road works, Middle Creek

¹⁰³ Hunter Valley Coal Chain Coordinator. (2017). www.hvccc.com.au/Pages/welcome.aspx.

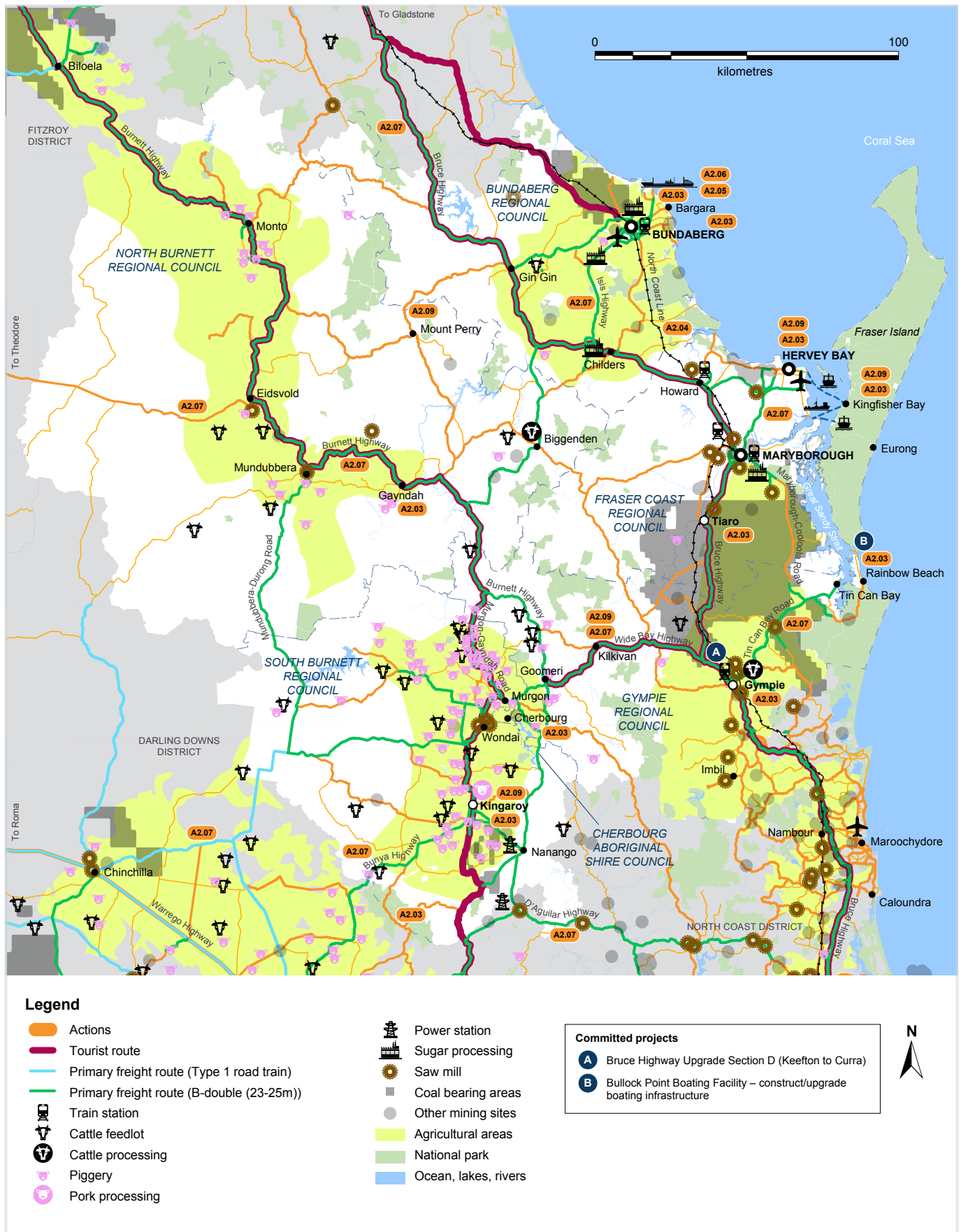


Figure 8: Priority 2 region map

This map is indicative to illustrate proposed strategies for the region and is not intended to be accurate in terms of exact geographic extent.

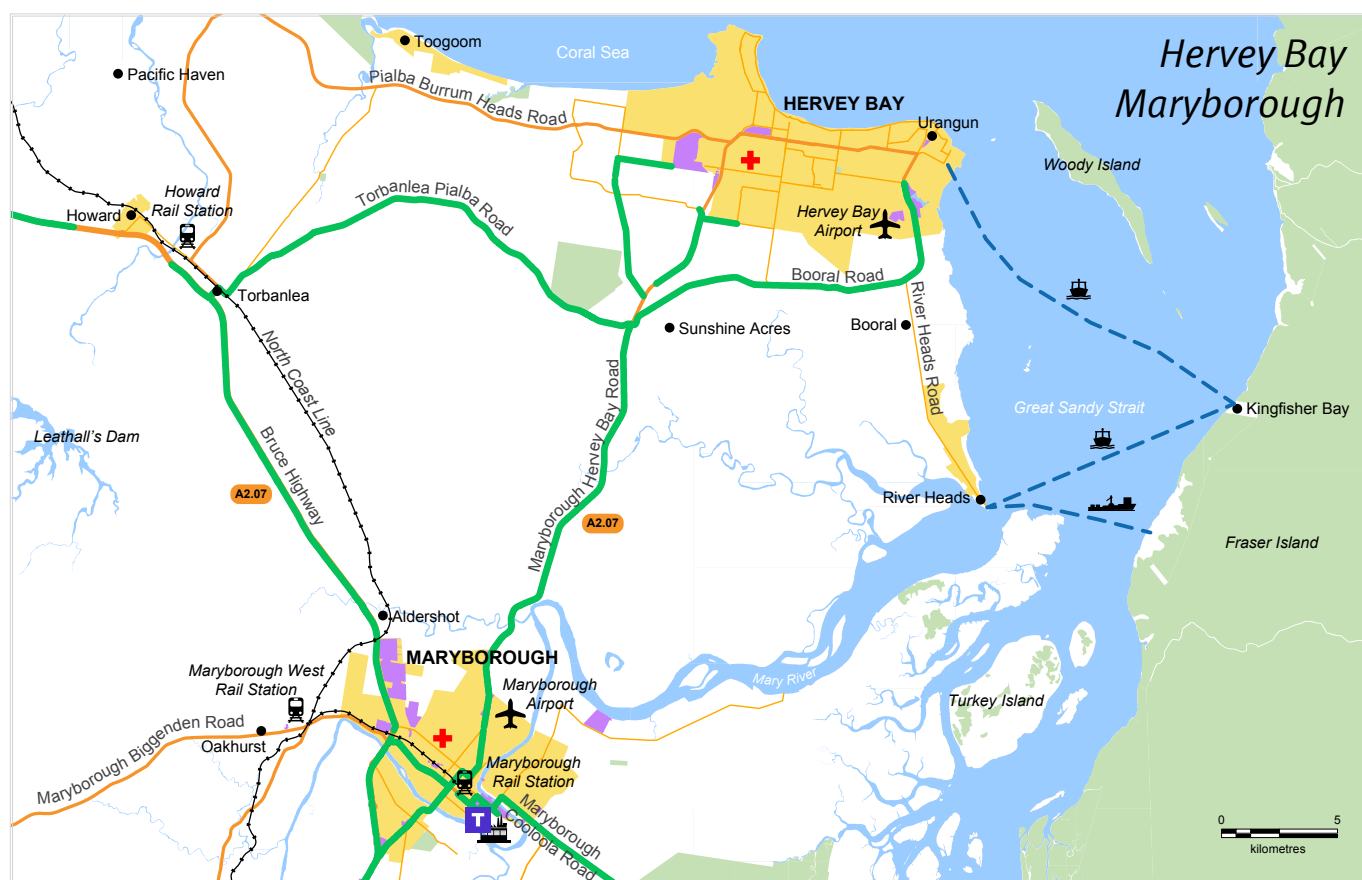
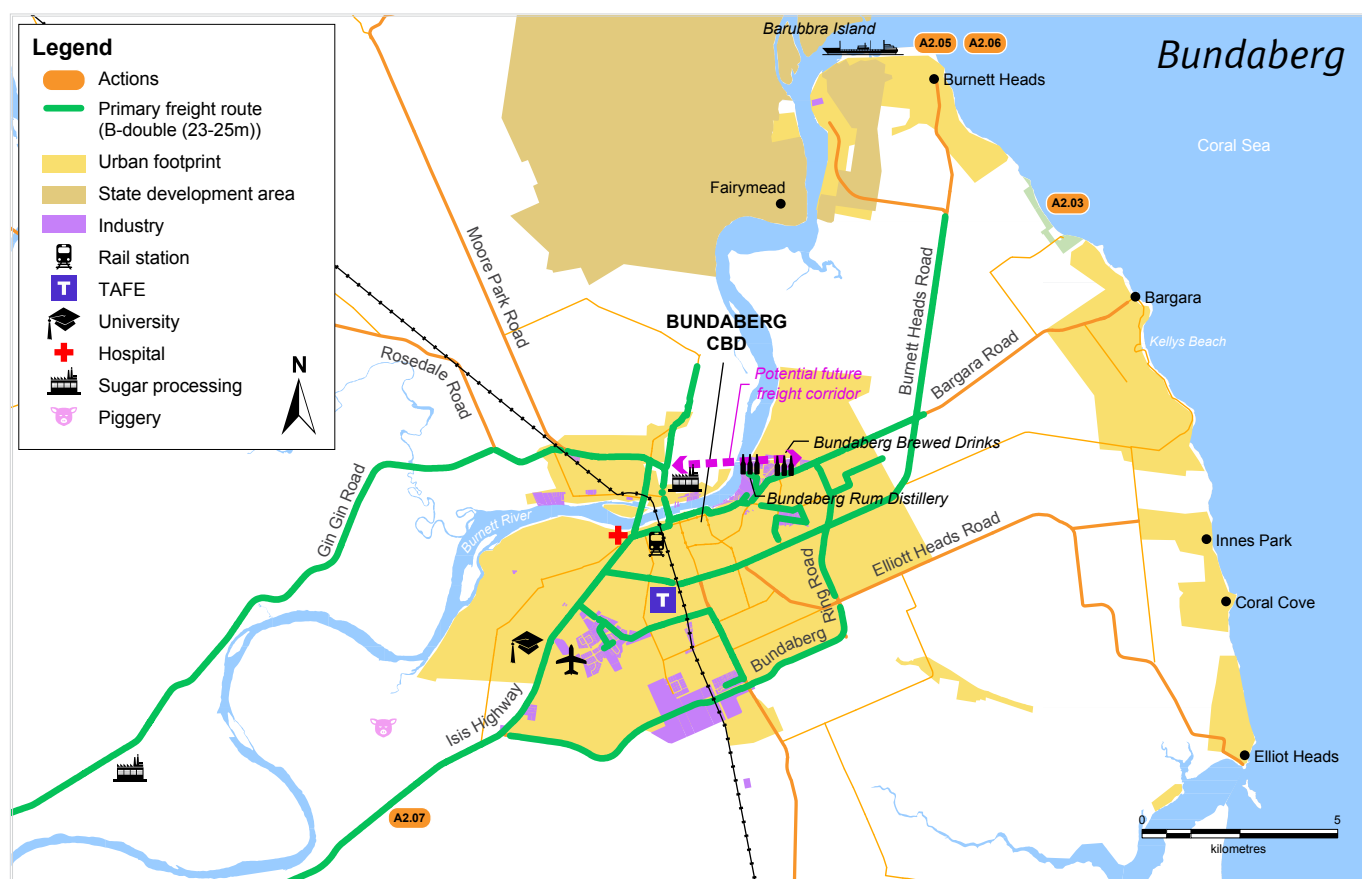


Figure 9: Priority 2 Bundaberg, Hervey Bay and Maryborough maps

This map is indicative to illustrate proposed strategies for the region and is not intended to be accurate in terms of exact geographic extent.

4.3 Priority 3: Safety

A transport network that enables people to travel safely and feel secure.

Priority 3 supports:

- the *Transport Coordination Plan's* objectives for transport that is safe and secure for customers and goods
- the *State Infrastructure Plan's* focus on infrastructure that improves the capacity, safety and security of the transport network
- the *Wide Bay Burnett Regional Plan's* policy that safety and well-being of road users are prioritised throughout the region.

A safe transport network is needed to assist the region's residents, visitors and freight to reach intended destinations without harm. Transport infrastructure that provides for safe travel is only one element of transport network safety. Transport user behaviour and vehicles also have significant impacts on the safety of the transport network. Transport users should feel safe using the transport system and behave in a way that promotes the safety of themselves and others. Examples of initiatives that support and encourage safety include rest areas to mitigate driver fatigue, way-finding to promote legibility on the roads, Wide Centreline Treatment to reduce the risk of head-on crashes and improved education for tourists visiting Fraser Island on the unique characteristics of driving off road.

Improving transport network safety can be achieved through a combination of improved infrastructure, information, communication technology and education. Intelligent Transport Systems (ITS) are an important component of the broader strategy to improve transport network safety. ITS empowers both motorists and road authorities to make more informed and timely decisions through greater situational awareness, reducing the likelihood and severity of incidents on the road network.



Heavy vehicle rest area, Burnett Highway near Eidsvold

Transport objectives and measures of success

Objective 3.1: A transport network that addresses safety deficiencies and facilitates safer interactions between all users.

The identification and management of transport safety risks is crucial in developing a safe network across all modes: road, maritime and air transport.

By upgrading existing road infrastructure to ensure there is consistency in network conditions and standards, the number of incidents in the region can be reduced. Appropriate planning, through a well-defined road hierarchy, contributes to maintaining safety through the provision of infrastructure suited to function, helping to minimise safety issues associated with incompatible uses.

The management of safety risks can be enhanced using innovative technology and available data. Use of early Flood Warning Systems for example, allow disaster management groups, road authorities and the Queensland Police Service to more quickly respond during and after extreme weather events.

A safe transport network provides a better travel experience for residents and visitors due to an increased perception of personal safety and security.

Objective 3.2: Promote awareness of safe travel behaviours for all transport network users.

Education and awareness programs address the transport user's role in the safety of the transport network by contributing to a change in culture and promoting a sense of accountability and responsibility for adhering to road and transport rules. Providing situational awareness through intelligent transport systems (ITS) can empower transport system users to make smarter decisions about how they travel, be proactive about safety and avoid unsafe situations, particularly during extreme weather events such as floods or cyclones.

CASE STUDY: RYDA

Rotary Youth Driver Awareness (RYDA) is a road safety program, delivered via the school curriculum targeted at 16 to 18 year old students at a time where students start to drive independently or are travelling as passengers of novice drivers.¹⁰⁴

RYDA is delivered as a community based initiative, relying on Rotary volunteers for logistical support and is funded through donations and student fees.

The program recognises that young people bring a unique set of factors to driving that puts them at high risk on the road: inexperience, factors associated with age such as cognitive development, strong peer influence and the fact they often drive unsafe cars at riskier times of the day and week.

The program seeks to assist participants to:

- understand road risks and reflect on long-term consequences of a crash
- identify crash factors and realise how they are preventable
- appreciate how personal factors affect risk
- develop personal strategies and plans, and consider self-monitoring of actions long term
- see driving as a social responsibility and recognise the protective measures.

The RYDA Program is delivered each year to over 50,000 senior high school students from more than 650 participating schools across Australia and New Zealand. RYDA provides an example of the type of education programs that can influence driver behaviour and contribute to the region's road safety.

¹⁰⁴ Road Safety Education. (2017). www.rse.org.au/programs/ryda/

Measures of success

Measure of success	Proposed indicator	Source	Objectives	
			3.1	3.2
Reduction in transport-related incidents, crashes, injuries and fatalities.	Number of road fatalities and hospitalised casualties.*	Transport and Main Roads	✓	✓
	Number of road fatalities and hospitalised casualties per 100 million vehicle kilometres travelled.*	Transport and Main Roads	✓	✓
	Number of killed or seriously injured in marine incidents per 10,000 registered vessels.	Transport and Main Roads	✓	✓

* on State-controlled network

Actions

PRIORITY 3: SAFETY

OBJECTIVES

Objective 3.1: A transport network that addresses safety deficiencies and facilitates safer interactions between all users.

Objective 3.2: Promote awareness of safe travel behaviours for all transport network users.

Actions – short-term

3.1

3.2

A3.01 Intelligent transport systems

Identify opportunities for increasing the use of ITS such as for signage, communicating real-time information, road freight prioritisation and road condition monitoring to improve the accuracy and timeliness of information on network closures, weather and safety events.

✓

✓

A3.02 Education

Continue to develop education, promotion and communication campaigns in partnership with community, industry and other authorities to provide driver information specific to the region (e.g. Fraser Island) and to encourage safe travel behaviour on roads, public transport, active transport pathways and waterways.

✓

✓

A3.03 Road safety

Continue to identify, prioritise and nominate locations, links and networks for road safety treatments, such as additional overtaking lanes, wide centre line treatments and audio-tactile line markings, as part of Safer Roads Sooner and Black Spot programs and through other opportunities such as planned upgrades.

✓

A3.04 Bridge renewal

Using the outputs of regional bridge renewal investigations, commence planning for necessary bridge replacements or structural enhancements across the state controlled road network for the high priority structures in the region.

✓

Actions – medium/long-term

3.1

3.2

A3.05 Rest stops

Determine investment priorities for new or upgraded rest areas to address driver fatigue risks, encourage safe travel and to provide sufficient capacity and amenities to enhance customer experiences particularly on drive tourism routes. Ensure planning and provision of rest areas addresses safety risks associated with potential for incompatibility or conflicts between trucks and recreation vehicles.

✓

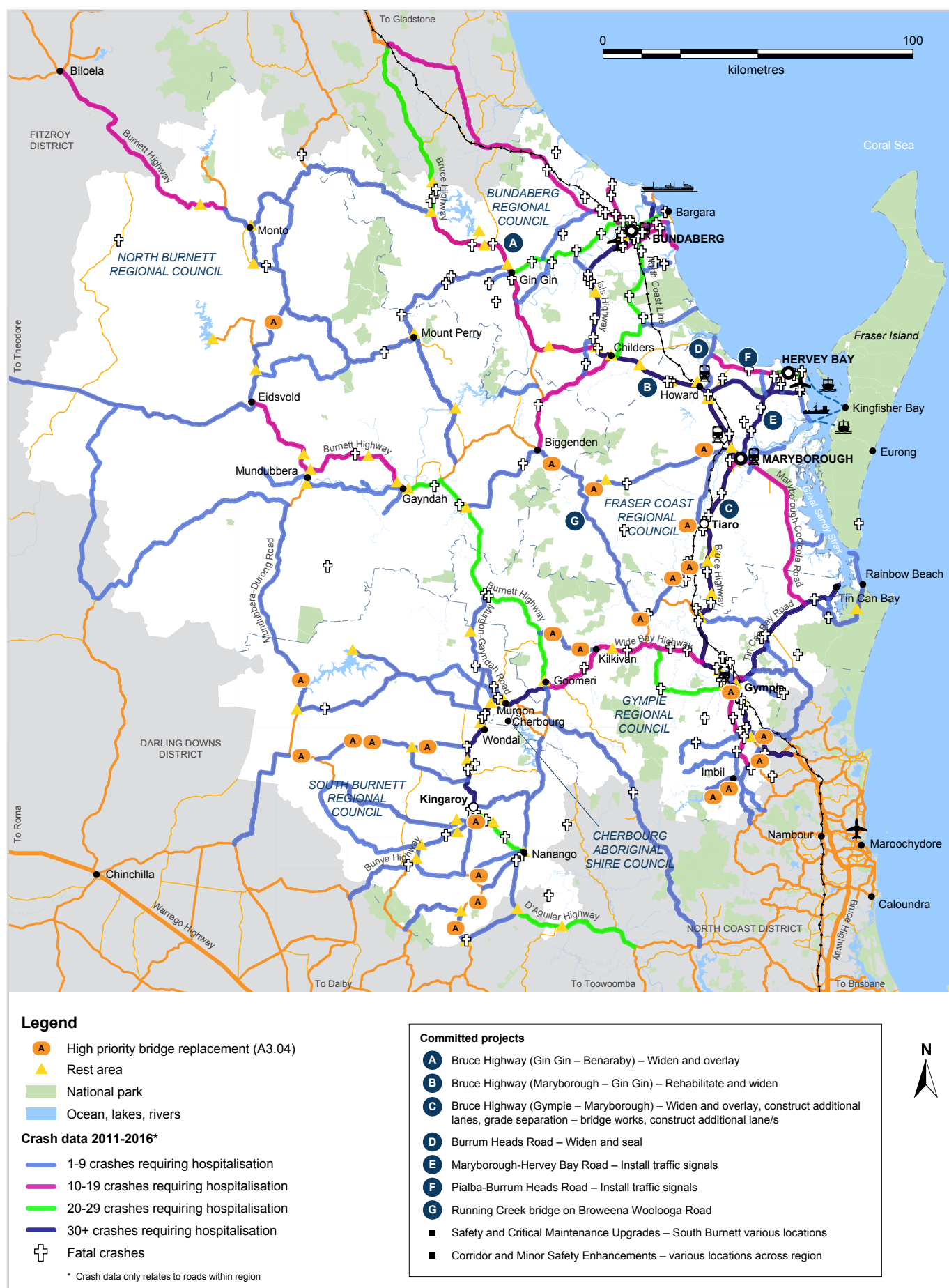


Figure 12: Priority 3 region map

This map is indicative to illustrate proposed strategies for the region and is not intended to be accurate in terms of exact geographic extent.

4.4 Priority 4: Sustainability and resilience

A sustainable transport system that is resilient to major incidents or weather events and is compatible with the environmental and lifestyle values of the region.

Sustainability is an important consideration when meeting the region's transport needs, to ensure the region's historical and natural values are not compromised for future generations. Protecting natural values is important to the community and the ongoing success of the region's tourism industry. Sustainable development and management of the transport system supports both liveability and the economy. The effective prioritisation, coordination and management of transport infrastructure and operations contribute to achieving a sustainable, efficient and connected transport network. A more sustainable transport network can be achieved through better integration of land use and transport planning, supporting a more compact urban form, encouraging a shift towards more sustainable travel behaviours and applying best practice in planning, design and delivery of transport projects.

Resilience is the ability of the transport system to retain performance during a disaster, or return to a normal state of operation (or a desired level of functioning) quickly following a disaster or incident. The resilience of the transport network is critical in emergency response immediately after a disaster with first responders requiring safe access to address damage and community impacts.

Priority 4 supports:

- the *Transport Coordination Plan's* objectives for transport that meets the needs of all Queenslanders, now and into the future and is resilient to Queensland's weather extremes
- the *State Infrastructure Plan's* focus on reliable transport infrastructure that is resilient and adaptive to weather events and climate change
- the *Wide Bay Burnett Regional Plan* intent for the region to grow and change in a sustainable manner — generating prosperity, maintaining and enhancing quality of life, minimising the use of resources, providing high levels of environmental protection, reducing greenhouse gas emissions and increasing resilience to natural hazards and the anticipated effects of climate change.

Extreme weather can lead to road closures, infrastructure damage and delays across the region. Travel time reliability impacts are not isolated to the period the road is closed due to inundation or damage, but also the time it takes for road or bridge inspection prior to reopening, speed and weight restrictions until damage is addressed and potential delays associated with road works to repair damage. Resilience is also important in improving the reliability of the transport network, as well as decreasing repeat maintenance costs.



Burnett River, Bundaberg

Transport objectives and measures of success

Objective 4.1: Transport infrastructure that it is resilient and reliable during incidents and weather events.

The Wide Bay Burnett region experiences an array of weather events in any given year. These events often result in the closure of major roads, railways and ports, which has significant impacts on the movement of freight, residents, visitors and commercial road users. Network closures can create widespread delays throughout the region and within neighbouring regions. Importantly, network closures are not only inconvenient, but can also be unsafe. Reliable access is required to support emergency connections and enable safe network use.

The innovative use of technology and application of smart infrastructure systems can be used to communicate with network users (including emergency services) to keep them informed and safe. By providing customers with the information to make better decisions, smart infrastructure solutions allow customers to more efficiently and safely use the transport network.

Objective 4.2: Create a more sustainable transport system by reducing reliance on private vehicles and supporting more trips by walking, cycling and public transport.

A well-planned and maintained multi-modal transport network underpins economic activity in the region while ensuring that the needs of the community are met and that the impact on the local environment is managed.

A sustainable transport system offers a range of viable transport options ranging from private vehicle use through to public and active transport. Improving the accessibility of active and public transport facilities supports the mobility of the community, while also promoting a healthier and more active lifestyle in the region.

Land use planning has an important role in the efficiency of the transport network and the attractiveness of public and active transport in meeting everyday transport needs. Integrated land use and transport planning which provides for close and convenient access to basic goods and services and employment, combined with convenient and affordable transport options can lessen private vehicle dependence and encourage more trips by walking, cycling and public transport.

Objective 4.3: Develop a sustainable transport system that supports the environmental and lifestyle values of the region.

The transport network needs to be developed in a way that contributes to the values of the region, its communities and visitors. Protecting lifestyle and environmental values is critical to the prosperity of the region, including attracting people to live in or visit the region. A transport network that is compatible with the environmental and lifestyle values of the region will lessen impacts on the environment, protect community amenity and support lifestyle and tourism values in the region promoting a cleaner, healthier and more liveable environment.

Measures of success

Measure of success	Proposed indicator	Source	Objectives		
			4.1	4.2	4.3
Reduced frequency and duration of unplanned closures.	Frequency and total duration of road closures on the transport network during flooding events.*	Transport and Main Roads	✓		
	Total frequency and duration of unplanned closures on the transport network.*	Transport and Main Roads	✓		
Proportion of people choosing to walk, cycle and take public transport increases.	Proportion of people choosing to walk, cycle and take public transport.	Transport and Main Roads		✓	✓

* on State controlled network

Actions

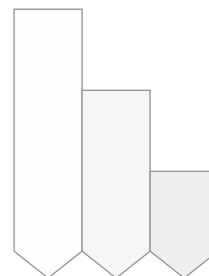
PRIORITY 4: ENVIRONMENT AND SUSTAINABILITY

OBJECTIVES

Objective 4.1: Transport infrastructure that it is resilient and reliable during incidents and weather events.

Objective 4.2: Create a more sustainable transport system by reducing reliance on private vehicles and supporting more trips by walking, cycling and public transport.

Objective 4.3: Develop a sustainable transport system that supports the environmental and lifestyle values of the region.



Actions – short-term	4.1	4.2	4.3
A4.01 Network response planning Undertake critical transport network response planning that supports local and district disaster management groups in improving accessibility and safety during and following major weather events, including the reliability of communication systems along key links.	✓		
A4.02 Resilience Undertake road network resilience investigations across the region to identify key locations susceptible to weather events and understand requirements to manage, mitigate and avoid network impacts. For example, the investigations should explore locations and key routes susceptible to flooding resulting from major weather events, such as the Bruce Highway, Burnett Highway and sections along Tin Can Bay Road.	✓		
A4.03 Sustainable infrastructure planning and design Ensure natural systems and environmental processes are a key consideration when undertaking planning, design and business cases for major transport infrastructure projects. This includes, for example, minimising impacts on sensitive receiving environments and coastal ecosystems around the Great Sandy Strait, Fraser Island, national parks and other important conservation areas.			✓
Actions – medium/long-term	4.1	4.2	4.3
A4.04 Climate change Consider the impact of climate change in the planning of the transport network in the Wide Bay Burnett region, through long-term scenario modelling and analysis.	✓		
A4.05 Minimising emissions Work with local governments and state government agencies to develop a strategy to reduce greenhouse gas emissions in the Wide Bay Burnett region. The strategy should investigate: <ul style="list-style-type: none"> how to encourage more sustainable transport choices how to optimise the efficiency of the transport network opportunities to encourage operators to use more efficient heavy vehicle configurations (high productivity vehicles) opportunities to develop transit oriented communities in Hervey Bay, Bundaberg, Maryborough and Gympie. 		✓	✓
A4.06 Network optimisations solutions Investigate opportunities to trial and implement network optimisation solutions within the region, particularly along the Bruce Highway and congested major urban arterial routes in Bundaberg, Hervey Bay, Maryborough and Gympie. The investigations should include smarter solutions such as lane use management systems and improved signal coordination.			✓

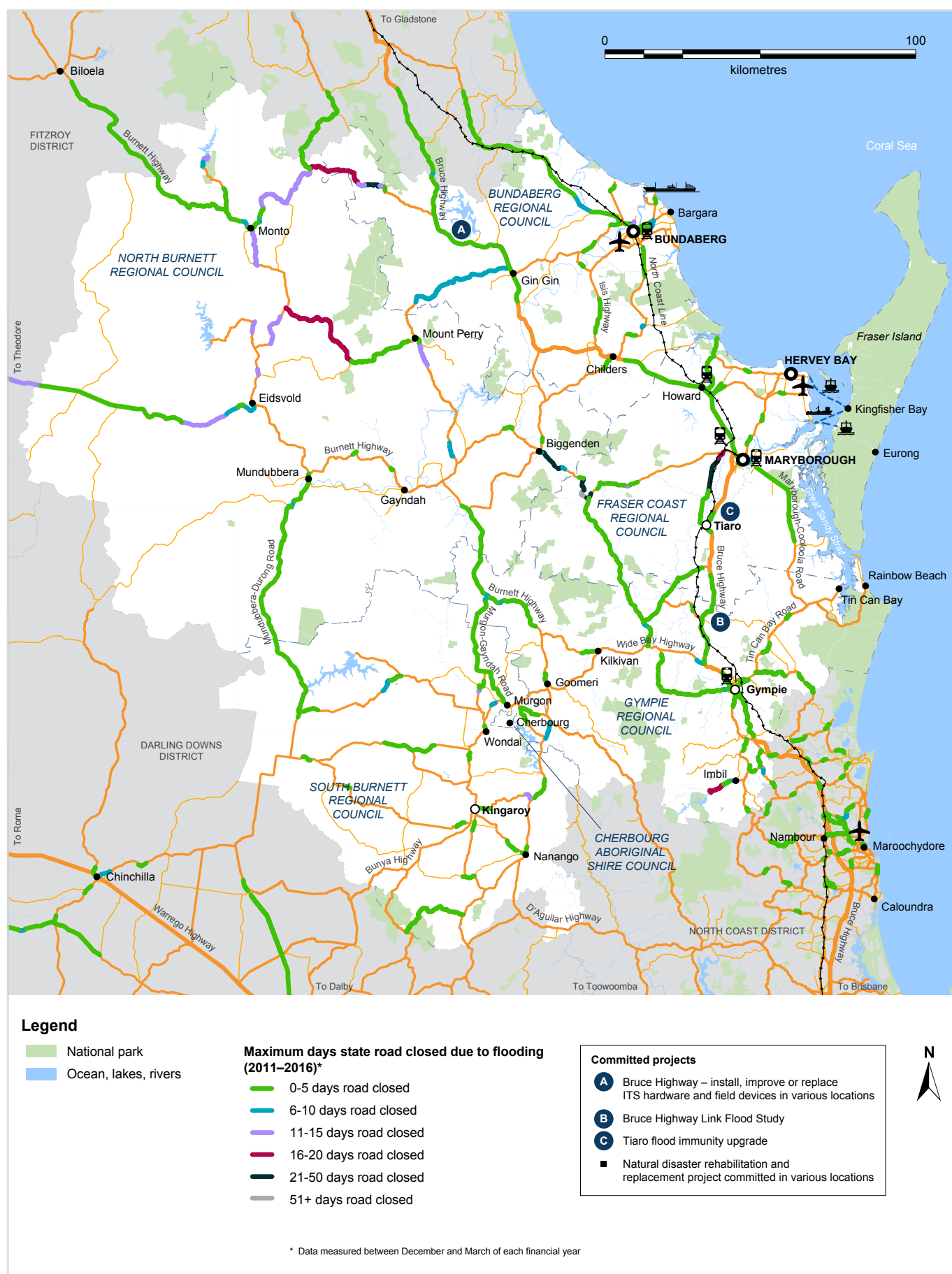


Figure 11: Priority 4 region map

This map is indicative to illustrate proposed strategies for the region and is not intended to be accurate in terms of exact geographic extent.

CASE STUDY:

Foamed bitumen pavements thwart Tropical Cyclone Debbie

Tropical Cyclone Debbie crossed the Queensland coast near Airlie Beach in late March 2017 unleashing damaging winds and torrential rain. It then tracked south to deliver wide spread flooding in several regions including Rockhampton and areas in south-east Queensland and northern New South Wales.

Innovations in pavement technology have provided for a more resilient transport network. The flooding aftermath of Cyclone Debbie tested the practical effectiveness of foamed bitumen pavement when three-metre floodwaters inundated Camp Cable Road and the Mt Lindesay Highway. There were concerns with the extent of the flooding, road condition would be compromised. When waters receded, the foamed bitumen pavement was found completely intact.

Recent heavy rainfall has demonstrated the resilience of the pavement on the Bruce Highway near Bowen,

in Warrill View, south of Ipswich and on the Yeppen floodway in Rockhampton.

Foamed bitumen pavements are an innovation of the Department of Transport and Main Roads and when constructed in the right environment with appropriate stabilisation, are more resilient to flooding. They survived unscathed in some of the worst-hit parts of Queensland and displayed impressive strength in the face of catastrophic weather. While some conventional thin asphalt/granular pavements suffered catastrophic damage from flooding, foamed bitumen pavements in similar circumstances have shown to be highly resilient.

By utilising foamed bitumen, Transport and Main Roads is not only saving on the cost of construction—foamed bitumen costs less per cubic metre than asphalt—but also on the cost of maintaining and rehabilitating roads after natural disasters like ex-Tropical Cyclone Debbie.



Camp Cable Road, Jimboomba during flooding



Maheno Wreck, Fraser Island

5. Implementation



5.1 Taking action

Delivering the *Wide Bay Burnett Regional Transport Plan* will require:

- further integration with the strategic direction of the region's local governments
- continued engagement with our stakeholders and customers
- collaborative and considered decision making
- a drive from all partners to deliver a safer, more efficient, reliable and integrated transport network.

This Plan will be used to inform transport planning priorities and investment decision making for the region. The Plan will ensure that future investments address the priorities of customers, stakeholders and the community.

Figure 12 shows the importance of Regional Transport Plans in the Transport and Main Roads investment lifecycle.

Transport and Main Roads provides opportunities for customers to provide input into planning actions outlined in the Plan via the department's website. Information on our projects including planning, studies and construction projects can be found at www.tmr.qld.gov.au/Projects.

Transport and Main Roads and its planning partners are responsible for ensuring the priorities and actions in this Plan are realised. They will be delivered by:

- **Informing the *Queensland Transport and Roads Investment Program (QTRIP)***
QTRIP is released annually. It is a funded program of work that will be delivered over the upcoming four years. Projects are listed on QTRIP after having gone through an investment prioritisation process that will be informed by this Plan.
- **Aligning with the *State Infrastructure Plan***
Regional Transport Plans will inform the programs of work within the *State Infrastructure Plan*. QTRIP informs the *State Infrastructure Plan's* construction pipeline. Regional Transport Plans align planning and investment frameworks with the region's challenges and opportunities.
- **Being considered in local and federal government investment decisions and plans**
This Plan has been prepared in consultation with other levels of government and considers their strategic planning and policy documents.

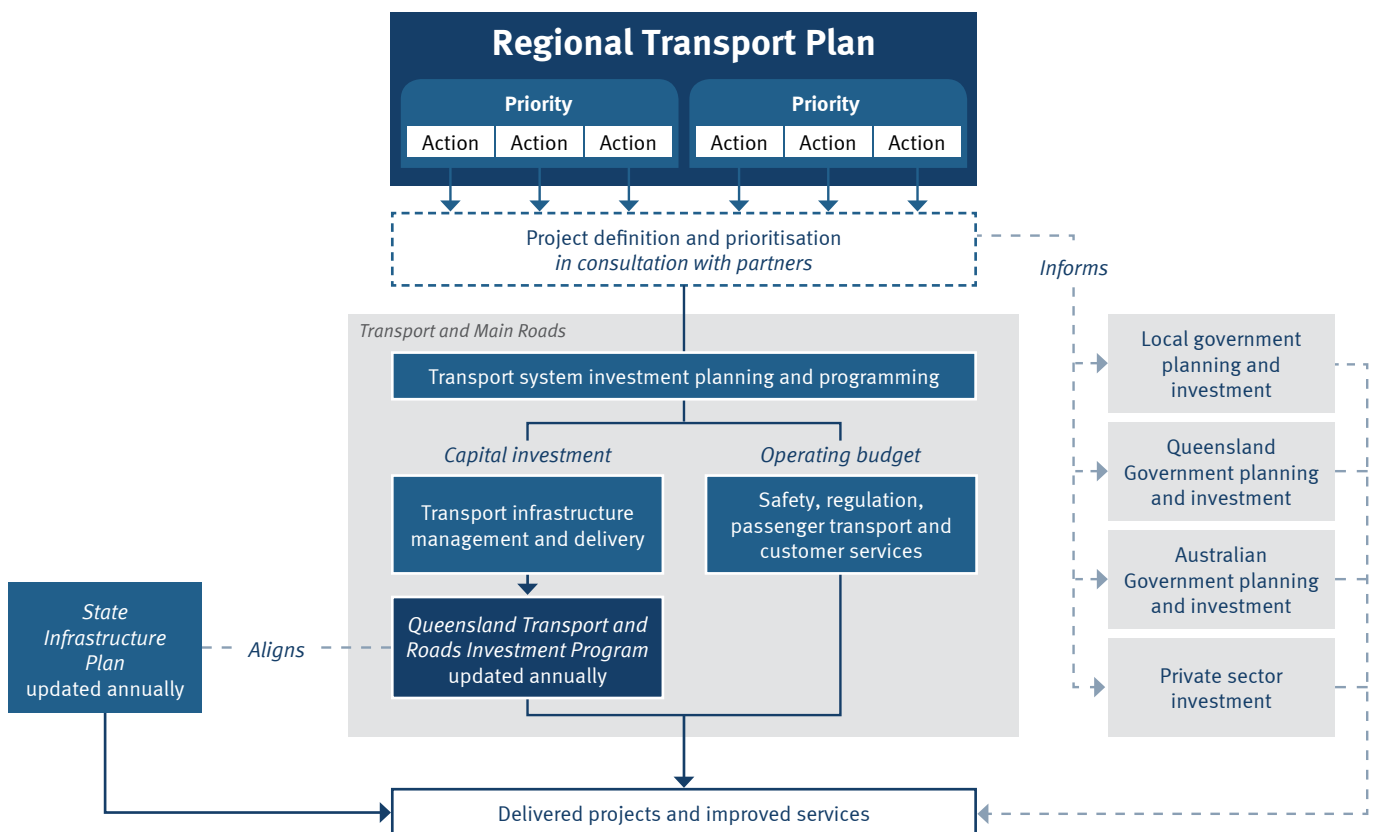


Figure 12: Regional Transport Plans are a critical step in Transport and Main Roads investment lifecycle

5.2 Delivering in partnership

More can be achieved when partnering with stakeholders to deliver shared goals using collective expertise and resources. Throughout the development of the *Wide Bay Burnett Regional Transport Plan*, Transport and Main Roads has built relationships with stakeholders from all levels of government, business and industry. These relationships will be further developed in delivering the actions and opportunities outlined in this Plan. Opportunities for partnering include:

- collaborative planning leveraging knowledge from researchers, universities and education providers
- inviting project development support from individuals or organisations with an interest in implementing an initiative or action
- establishing funding partnerships to accelerate action delivery and realise economic or commercial benefits, for example, through market-led proposals or public-private partnerships
- providing resource support such as human resources, equipment or material.

Cooperative transport planning is the foundation for delivery of Regional Transport Plans. Each Plan will be delivered with a focus on cooperation, coordination and collaboration. This approach builds on the framework for inter-agency cooperation established within the Roads and Transport Alliance (RTA). The RTA is a partnership between Transport and Main Roads and the Local Government Association of Queensland, on behalf of local governments, for the stewardship of Queensland's regional road and transport network.

Local governments together with Transport and Main Roads form Regional Roads and Transport Groups (RRTGs). RRTGs work collaboratively to prioritise investment on road and transport infrastructure and should evolve further to influence the strategic planning and management of regional transport networks.

The priorities and actions outlined in this Regional Transport Plan will help focus the RRTG in their approach to strategic transport planning and local transport infrastructure investments.



Boat on shore at Elliott Heads

5.3 Monitoring and review

This Plan will be monitored, periodically reviewed and updated to ensure it remains current and relevant.

In the short term, monitoring will focus on ensuring the actions put forward are prioritised and progressed through departmental and local planning programs. As the Plan matures and planning and delivery is completed, monitoring will focus on tracking progress against objectives and measures of success (Figure 13).

It is intended that a review of the Plan will be carried out every three to five years to maintain its alignment with other government and non-government plans, programs and initiatives.

This review will also consider changes to land use, the region's economy, environmental considerations, demography, technological innovations, the progress of significant infrastructure projects and any other factors which may require a shift in the priorities or objectives for the region.

Overall, the effectiveness of the Plan within the region will be measured against the measures of success outlined for each priority. These align to Transport and Main Roads' *Transport Coordination Plan* and will allow the department to track if Regional Transport Plans are meeting transport system objectives.

It is important to note that some of the measures of success may be updated as required to ensure they continue to provide an effective measurement of performance.

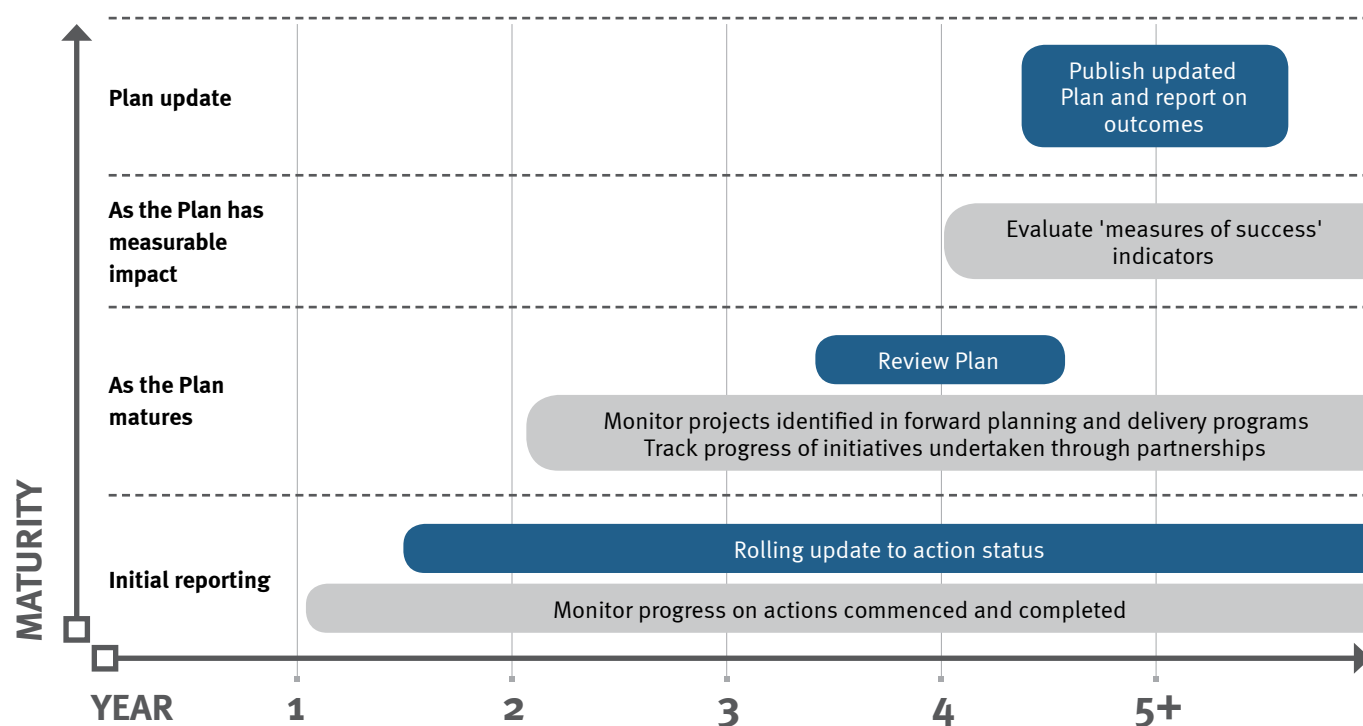


Figure 13: Monitoring, reporting and review as the Plan matures

Further information

Please email TMR_Regional_Transport_Plans@tmr.qld.gov.au for further details on this or other Regional Transport Plans.



Aboriginal midden site, Fraser Island

PHOTO CREDITS

Front cover, Lake McKenzie, Fraser Island (background), Tourism and Events Queensland; Kingaroy peanut silos (inset, left), Tourism and Events Queensland; Boats on river, Maryborough (inset, centre), Tourism and Events Queensland; Old Monto Shire Hall (inset, right), Tourism and Events Queensland.

Inside cover, Sugarcane fields, Tourism and Events Queensland.

Page 4, Bundaberg Post Office, Tourism and Events Queensland.

Page 10, Sea turtles at Lady Elliot Island, Tourism and Events Queensland.

Page 12, Burrum Heads recreational boating facility, Fraser Coast Regional Council.

Page 17, Activity on beach in the early evening, Hervey Bay, Tourism and Events Queensland.

Page 18, Urangan Pier, Hervey Bay, Tourism and Events Queensland.

Page 20, Pelicans on beach, Tourism and Events Queensland.

Page 21, Aerial view of the Burnett River, Tourism and Events Queensland; Ration Shed, Cherbourg, Ration Shed Museum.

Page 22, Aerial view of Hervey Bay, Fraser Coast Regional Council; Jacarandas in Nielson Reserve, Gympie, Tourism and Events Queensland.

Page 23, Gayndah town centre, North Burnett Regional Council; South Burnett farm, South Burnett Regional Council.

Page 25, Burnett River Bridge, Tourism and Events Queensland.

Page 31, Sunset overlooking bay, Hervey Bay, Tourism and Events Queensland.

Page 32, Campervan on unsealed road near Gayndah, Tourism and Events Queensland.

Page 42, Mystery Craters Leisure Park, Tourism and Events Queensland.

Page 44, Bundaberg State Development Area, Gladstone Ports Corporation.

Page 47, Fraser Venture unloading at River Heads, Tourism and Events Queensland/Darren Jew.

Page 48, Rural road near Gayndah, Tourism and Events Queensland.

Page 50, Four wheel drive on beach, Seventy Five Mile Beach, Fraser Island, Tourism and Events Queensland.

Page 52, North Burnett Transport Service bus, North Burnett Regional Council.

Page 53, Mandarin farm, Gayndah, Tourism and Events Queensland.

Page 58, Harvesting at a Cordalba farm, Tourism and Events Queensland.

Page 69, Burnett River, Bundaberg, Tourism and Events Queensland.

Page 74, Maheno Wreck, Fraser Island, Tourism and Events Queensland.

Page 77, Boat on shore at Elliot Heads, Tourism and Events Queensland.

Page 78, Aboriginal midden site, Fraser Island, Tourism and Events Queensland.

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