

CENTRAL WEST QUEENSLAND

REGIONAL TRANSPORT PLAN

2019



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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. Aboriginal and Torres Strait Islander readers are warned, images in this document may contain or represent deceased persons which may cause sadness or distress.

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

- Barcaldine Regional Council
- Barcoo Shire Council
- Blackall-Tambo Regional Council
- Boulia Shire Council
- Diamantina Shire Council
- Longreach Regional Council
- Winton Shire Council

*Cover images: The Big Red Bash (music festival), Birdsville (background); Road train, Boulia (inset, left); Memorial Park, Blackall (inset, centre); Thomson River Cruises, Longreach (inset, right).
Inside cover image: Water tower at sunset, Windorah.*



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Simpson Desert near Birdsville

1. Introduction



1.1 A shared direction for transport

The *Central West Queensland 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 connections that are vital to Central West's social and economic prosperity.

Central West (the region) is home to over 10,300 people and covers an area of more than 395,000km² which includes the local government areas of Barcaldine, Barcoo, Blackall-Tambo, Boulia, Diamantina, Longreach and Winton.¹

1.2 What is a Regional Transport Plan

The purpose of the *Central West Queensland 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 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.

Regional Transport Plans have a clearly defined role in Transport and Main Road's planning process. They are not intended to specify new infrastructure solutions or funding commitments, as that is the role of the *Queensland Transport and Roads Investment Program* (QTRIP).

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).

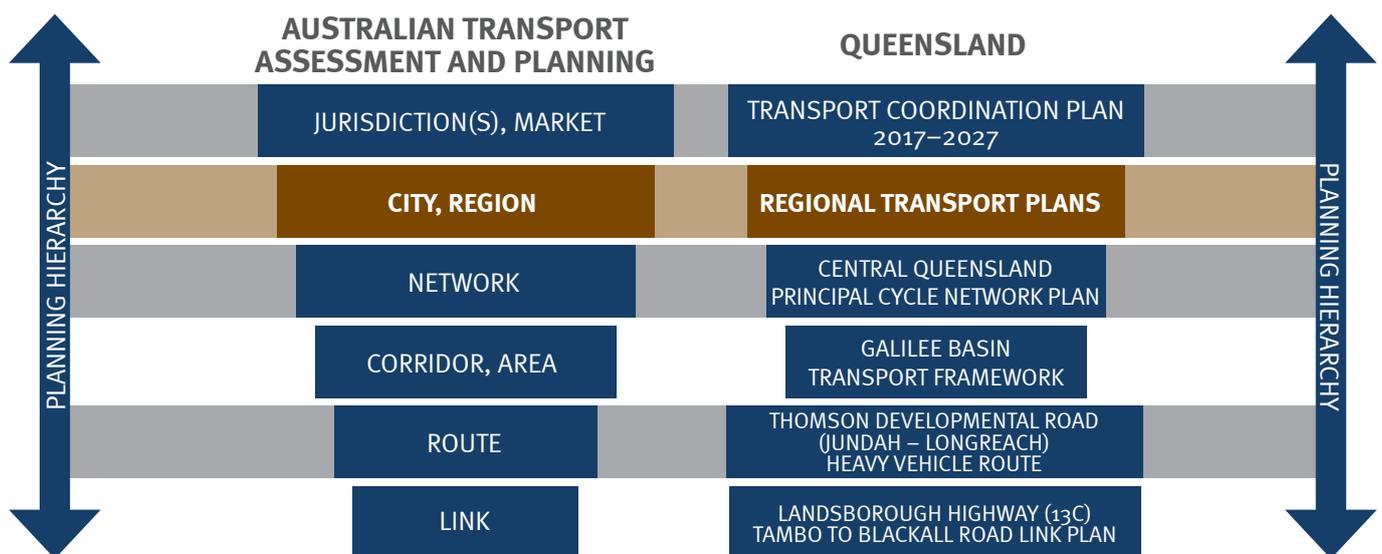


Figure 1: Examples of how Queensland responds to the Australian Transport Assessment and Planning hierarchy

¹ Australian Bureau of Statistics. (2019). *Regional Population Growth, Australia, 2017-18* (Catalogue No. 3218.0).

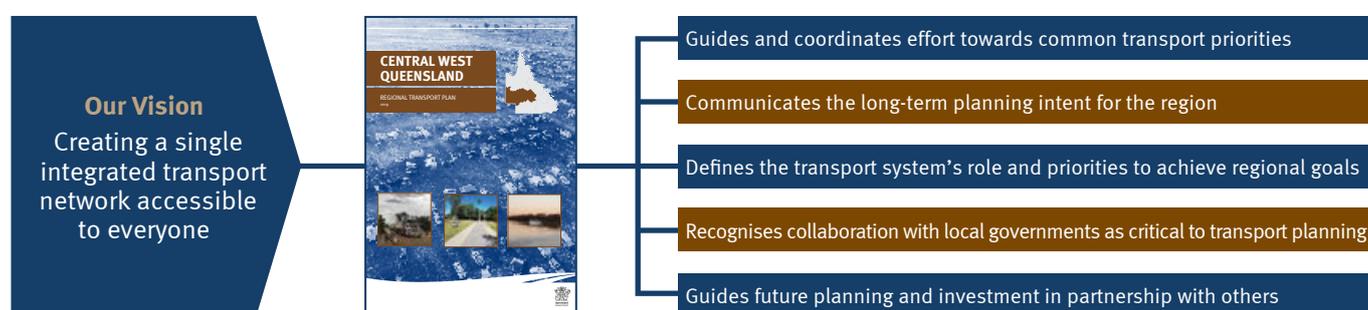
The regional policy choices and system strategies expressed in the Plan are used to:

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

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

The Regional Transport Plan has been developed in the context of relevant policies, strategies, plans and investment frameworks across all levels of government. These policy and planning documents are reflected in the objectives, challenges, opportunities and priorities identified in the Plan.

The Plan has a strategic alignment with:

- *State Infrastructure Plan*
- *State Planning Policy*
- *Central West Regional Plan 2009*
- *A Strategic Blueprint for Queensland's North West Minerals Province*
- local government land use and 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 2019–2023*
- *Queensland Freight Strategy*
- *Queensland Walking Strategy 2019–2029*
- *Safer Roads, Safer Queensland: Queensland's Road Safety Strategy 2015–2021*
- *Queensland Cycling Strategy 2017–2027*
- *Queensland Tourism and Transport Strategy*

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 and future updates to the Plan will reflect these outcomes.

The future of transport

Queensland Transport Strategy (draft)

The draft Queensland Transport Strategy (QTS) provides a 30-year vision for Queensland's transport system that is designed to respond to, and maximise the benefits from, current and emerging trends and technologies for Queensland households, businesses and the wider community.

The draft QTS identifies five high-level customer-focused outcomes for the future transport system:

1. Accessible, convenient transport
2. Safe journeys for all
3. Seamless, personalised journeys
4. Efficient, reliable and productive transport for people and goods
5. Sustainable, resilient and liveable communities.

The draft QTS sets a high-level policy platform for the Department of Transport and Main Roads (TMR) to realise its vision of creating a single integrated transport network accessible to everyone. It complements other strategic planning documents by setting longer-term outcomes and directions for TMR which are directly aligned to the short-term priorities in the *TMR Strategic Plan 2019–2023* and the medium-term objectives of the *Transport Coordination Plan 2017–2027*.

Regional Transport Plans are consistent with and support the draft QTS and will play a key role in achieving its outcomes by setting regional priorities and identifying and coordinating key actions to develop our future transport system.

The future of mobility

The popularity of new transport services, such as on-demand transport and car sharing, is increasing globally. Enabling the introduction of new mobility providers and technology and prioritising investment in shared transport services are two directions from the draft QTS in which Mobility-as-a-Service (MaaS) will play a key role.

Transport and Main Roads is exploring the concept of MaaS which embodies a shift away from personally owned modes of transportation and towards aggregated mobility solutions that are consumed as a service.

MaaS is a combination of public and private transport services accessed digitally to provide personalised journey planning, booking and payment, and offers choice and dynamic travel options to influence behaviour and better optimise the network.

MaaS will not be a 'one-size fits all' approach and will look different across the state, based on community needs, availability of transport options and infrastructure.

In rural and regional Queensland, MaaS could be used to increase travel opportunities connecting rural communities to health, education and other social services to maintain an appropriate level of service and improve transport accessibility. Specific transport solutions for rural communities could involve long haul transport services, low technology options and the repurposing of under-utilised assets in the community.

Climate change and a low emissions future

In Queensland, the transport system has recently been impacted by extreme weather events such as cyclones, floods, severe and prolonged drought and fires, and climate change may exacerbate existing conditions, leading to even greater impact in future. Building a more resilient transport system is a priority in all Regional Transport Plans for Queensland.

A key part of taking action in response to climate change is the journey to zero net emissions. *The Pathways to a clean growth economy: Queensland Climate Transition Strategy* outlines how the Queensland Government proposes to prepare for the transition to a clean growth economy and a zero net emissions future.

The transport sector will play a significant role in this transition, including:

- enabling low carbon transport options using emerging alternative fuel technologies, to ensure Queensland is in the best position to capture the benefits and opportunities these vehicles will bring. The Queensland Government has developed *The Future is Electric: Queensland's Electric Vehicle Strategy* and is also exploring potential uses of hydrogen fuel cell vehicles.
- reflecting zero net emissions goals in infrastructure planning
- supporting low-carbon construction, infrastructure and transport systems
- improving passenger transport systems to be low emission, well-maintained, affordable, reliable, frequent and integrated.

Regional Transport Plans recognise opportunities for increased use of low carbon technology across the transport system in a way that responds to the local context and provide a pathway for an increased mode shift to sustainable transport options such as walking, cycling and passenger transport.

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 1). 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 1: *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 2017–2027*

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 Central West Queensland 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 state transport interests: state transport infrastructure; strategic airports and aviation facilities; and strategic ports.

The *State Planning Policy* identifies the Longreach Airport as the only strategic airport within the region.

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.

Central West Regional Plan 2009

In 2009, the Queensland Government published the *Central West Regional Plan 2009* (the regional plan). The regional plan sets a vision for the Central West Queensland region and provides a blueprint for the region's future. The *Central West Queensland Regional Transport Plan* covers the same area as the regional plan.

Recognising that local government is best placed to undertake local planning, the regional plan does not respond to all matters in the region but plays a focussed role in addressing and resolving competing state interests on a regional scale.

The regional plan has five high level regional strategic directions:

- create a more sustainable future
- protect regional biodiversity and support agricultural production values
- enhance identity of regional communities
- provide infrastructure and services
- integrate land use, transport, and economic activity.

Identified under infrastructure planning is the desired regional outcome 'infrastructure leads and supports desired regional growth, and helps create sustainable rural communities and regional economic development'. With a focus on 'transport networks' the regional plan provides two objectives: 'to provide integrated regional transport services and facilities to meet the economic, social, health, and environmental needs of the region' and 'to improve the services, safety, efficiency, and patronage of public transport systems'.

Population projections in the regional plan indicated a decline mainly associated with a shift from farming sheep to cattle. Cattle farming requires less labour than sheep farming causing a flow-on effect on the region's towns where shearers and other sheep industry workers live. Cluster fencing is supporting the return of sheep to the region, with sheep numbers across the 18 clusters expected to rise from 270,925 to 509,372, however, the expected increase in sheep numbers has not yet seen an associated measurable increase in population.²

More recent data indicates a higher rate of decline than the regional plan which utilised 2006 data. Although population projections are no longer up-to-date, the broad goals and intent of the regional plan are, and have been, used with updated population forecasts to inform the *Central West Queensland Regional Transport Plan*.



Australian Stockman's Hall of Fame, Longreach

² Remote Area Planning and Development Board. (2016). *Annual Report 2015-16*.



Sealing works, Blackall-Jericho Road, February 2019.

1.8 Achievements to date

The Department of Transport and Main Roads has reflected on the objectives outlined in the *Central West Regional Plan 2009*, along with other strategic direction setting documents. The following transport network improvements have been delivered in the region that align with the objectives set out in the regional plan and other strategic directions.

Sealing of the Diamantina Developmental Road between Bedourie and Boulia

An important milestone was achieved in May 2017, with the completion of sealing the Diamantina Developmental Road between Bedourie and Boulia. The final \$5 million project included eight kilometres of paving and sealing and took eight months to construct, with the project being completed on time and on budget. The project completed the seal on the 190-kilometre link from Bedourie to Boulia, providing fully sealed access to Bedourie for the first time. This all-weather road is helping increase the safety of motorists while reducing road maintenance costs and travel time for the many transport operators, tourists and community members who rely on this road. In addition, regional businesses and industry are experiencing the benefits of being more readily accessible by road.

Jericho–Yaraka Rail Replacement Program

The Jericho–Yaraka Rail Line Replacement Program was initiated by the state government after a request in 2004 from the shire councils of Isisford, Jericho, Blackall, Barcaldine and Barcoo in regards to the closure of the Jericho–Yaraka branch line and diversion of cost savings to improving regional road access. The Jericho–Yaraka Rail Replacement Program was completed in June 2016, delivering \$51 million over 10 years towards upgrading

the Jericho–Blackall–Yaraka–Windorah road link as an offset for closing the rail line. Under this program and in partnership with Barcaldine Regional Council, Blackall–Tambo Regional Council, Longreach Regional Council and Barcoo Shire Council, 256 kilometres of the link was paved and sealed.

Eastmere Road Rehabilitation

Eastmere Road, in the Barcaldine Regional Council area, is heavily used by the resource, tourism and grazing industries throughout the region. The road has been severely degraded by large heavy vehicle use, particularly during mining exploration activities. The project saw the rehabilitation of a 28-kilometre section of the link through realignment, resealing and overall improved conditions to benefit these industries as well as the local community. The upgrade also enables Eastmere Road to serve as a major transport link for future resource activities.

Blackall–Jericho Road and Jundah–Quilpie Road sealing projects

Paving and sealing of more than eight kilometres of the Blackall-Jericho Road and more than six kilometres of the Jundah-Quilpie Road was completed in June 2019. These projects are delivering improvements to the overall safety, efficiency and wet weather accessibility of the roads. In addition, the projects are delivering reduced whole-of-life asset management costs by strengthening and sealing the pavement which reduces accelerated wear and damage. The additional surfaced sections will also support the movement of cattle-loaded road trains, improving the process of transporting cattle to market, as well as improving access to services for residents in the region.

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 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 installing road-side fencing to allow removal of cattle grids from roads.

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.

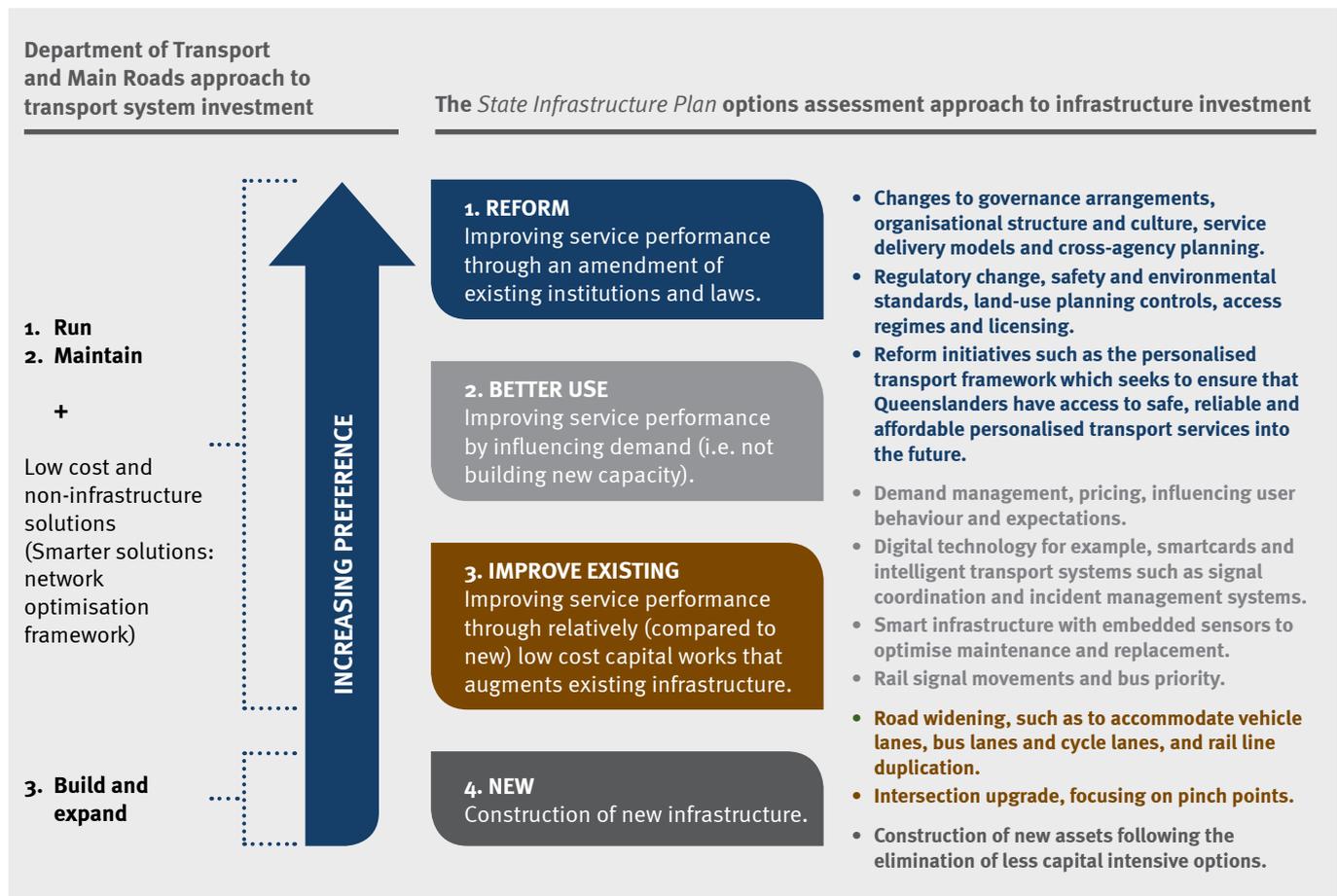
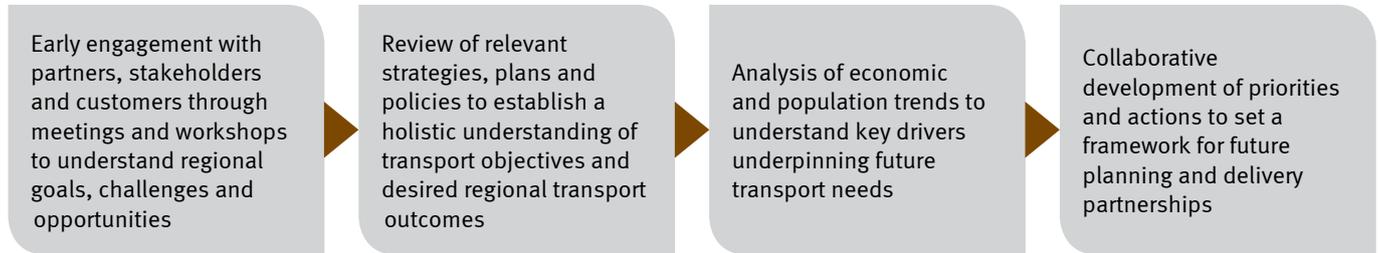


Figure 2: Alignment between the departmental and government approaches to infrastructure investment

Process

The *Central West Queensland 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.



Public art, Windorah

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 the experiences of our customers.

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 2 outlines the key components of the Regional Transport Plan.

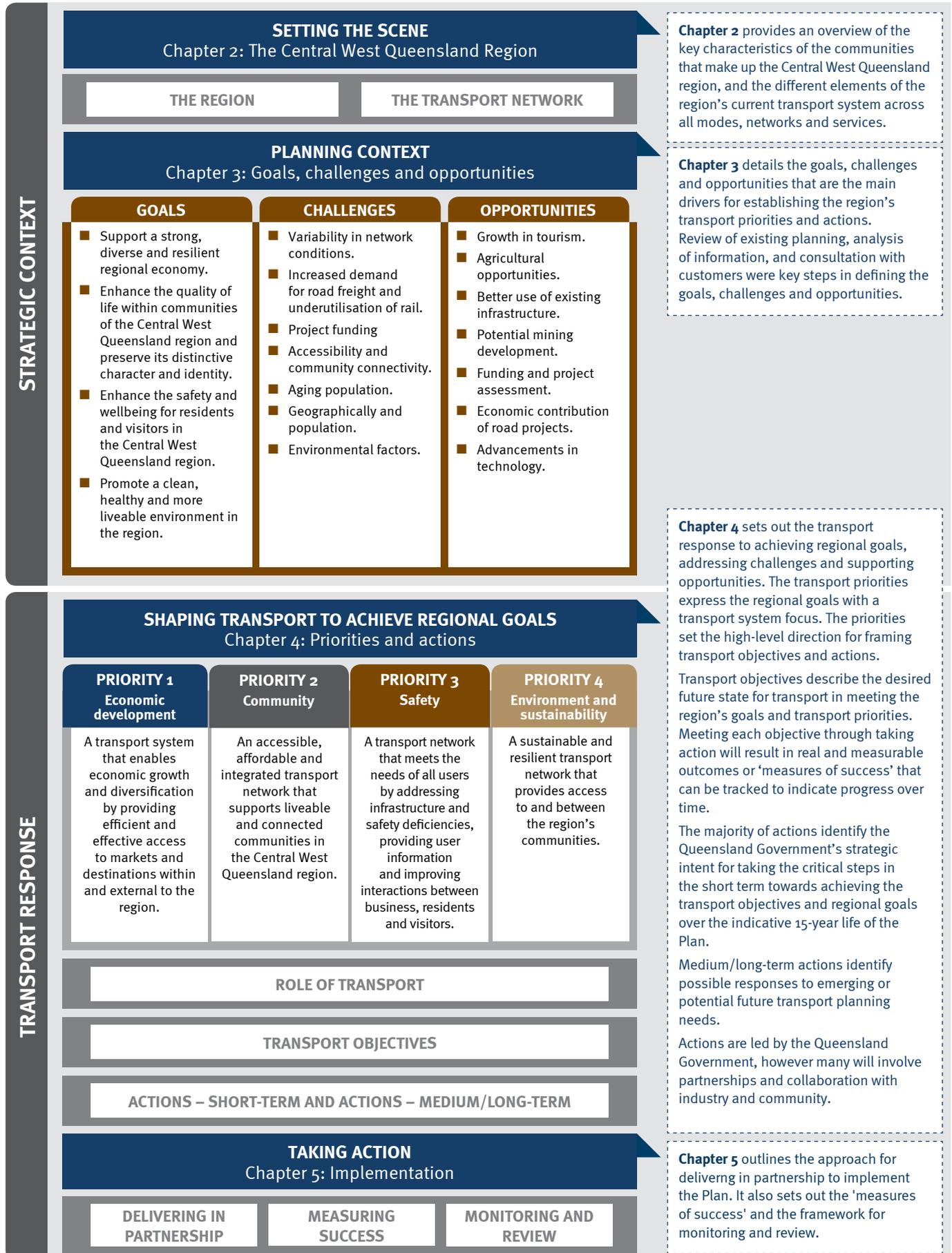
Engaging with our customers

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 agriculture, health, tourism and small business. 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:

- Transport network accessibility, reliability, efficiency and safety can be impacted by differing standards and conditions. Some areas of the region are only accessible via unsealed roads, where residents and visitors require a four-wheel drive vehicle for access.
- There are currently no regular passenger air services that connect the Central West Queensland region to Rockhampton which is the destination for Royal Flying Doctor medical patient transfers out of the region. Many young residents in the region also require access to Rockhampton to attend secondary boarding schools.
- Changing climate and seasonal weather patterns intermittently restrict the reliability of the existing transport network.
- The great distances between many Central West Queensland region towns to centres outside of the region makes it challenging to maintain an efficient transport system and minimise environmental impacts.

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

Table 2: Structure of the Central West Queensland Regional Transport Plan





Birdsville Races, Birdsville

2. The Central West Queensland Region



2.1 Region overview

CENTRAL WEST QUEENSLAND REGION COVERS AN AREA OF
395,772 KM²
OR **22.9%** OF QUEENSLAND'S LAND AREA³



POPULATION⁴
10,386
PEOPLE LIVE IN THE CENTRAL WEST
(0.2% OF QUEENSLAND'S POPULATION)



CENTRAL WEST IS PART OF THE OUTBACK QUEENSLAND TOURISM REGION WHICH ATTRACTS
2.8 MILLION
VISITOR NIGHTS PER YEAR⁵



CENTRAL WEST QUEENSLAND HAS ENTIRELY BEEN

DROUGHT DECLARED

FROM JAN 2014⁶

LOCAL GOVERNMENT AREAS INCLUDE:

- 1 BARCALDINE REGIONAL COUNCIL
- 2 BARCOO SHIRE COUNCIL
- 3 BLACKALL-TAMBO REGIONAL COUNCIL
- 4 BOULIA SHIRE COUNCIL
- 5 DIAMANTINA SHIRE COUNCIL
- 6 LONGREACH REGIONAL COUNCIL
- 7 WINTON SHIRE COUNCIL

PREDOMINANT LAND USE IN THE CENTRAL WEST QUEENSLAND REGION IS

AGRICULTURAL
WITH **93.5%** OF TOTAL AVAILABLE LAND IDENTIFIED AS GRAZING⁷



KEY FEATURES OF THE REGIONAL ECONOMY



The region's strongest industry is agriculture contributing **37%** to the gross regional value⁸



Agriculture employs **24.6%** of workers followed by Public Administration at **10.6%** of workers⁹



Agriculture is a key industry valued at **\$597.1 million** to the local economy in 2015–2016¹⁰



Gross regional product totalled **\$786 million** in 2017-18 at **0.26%** of Queensland's total economic output⁸



2016 regional tourism expenditure totalled **\$361 million** and continues to grow⁵

- 3 Queensland Government Statisticians' Office, Queensland Treasury. (2017). *Queensland Regional Profiles: Resident Profile for Central West region*.
- 4 Australian Bureau of Statistics. (2019). *Regional Population Growth, Australia, 2017-18, (Catalogue No. 3218.0)*.
- 5 Tourism Research Australia. (2019). *Tourism Region Profiles, 2015 – Outback Queensland*.
- 6 Queensland Government. (2019). www.longpaddock.qld.gov.au/drought/drought-declarations/.
- 7 Department of Agriculture and Fisheries. (2013). *Queensland Agricultural Land Audit*.
- 8 National Institute of Economic and Industry Research. (2019). *National economic indicators for local government areas, 2017/2018*. Retrieved from economic-indicators.id.com.au/?es=6&StatId=3&Year=2018.
- 9 Australian Bureau of Statistics. (2017). *Census of Population and Housing, Australia, 2016, Working Population Profile - Wo9 (place of work) (Catalogue No. 2006.0)*.
- 10 Australian Bureau of Statistics. (2017). *Value of Agricultural Commodities Produced, Australia, 2015–16 (Catalogue No. 7503.0)*.

Local government areas

Local government areas and main population centres*	2018 estimated resident population	2036 projected population
<p>BARCALDINE REGIONAL COUNCIL – Alpha, Aramac, Barcaldine, Jericho, Muttaborra</p> 	<p>2018 Pop'n 2852</p>	<p>2036 Projected Pop'n 2329</p>
<p>Major employing industries are agriculture, forestry and fishing (31.9 per cent), health care and social assistance (9.4 per cent), and public administration and safety (8.7 per cent).</p> <p>Barcaldine sits on the junction of the Landsborough Highway (connecting to Blackall to the south and Longreach to the west), the Capricorn Highway (connecting east to Rockhampton) and Barcaldine–Aramac Road (connecting north to Aramac). The Landsborough and</p>	<p>Capricorn Highways are fully sealed two lane highways with Barcaldine–Aramac Road being majority two lane sealed, reducing to a one-lane sealed road within the immediate vicinity of Aramac. The local government area is accessible via air through Barcaldine Airport and via rail on the Spirit of the Outback service (linking Brisbane to Longreach and onto Winton by rail bus). Passenger and freight rail is also available from the townships of Jericho and Alpha.</p>	
<p>BARCOO SHIRE COUNCIL – Jundah, Stonehenge, Windorah</p> 	<p>2018 Pop'n 267</p>	<p>2036 Projected Pop'n 224</p>
<p>Major employing industries are agriculture, forestry and fishing (40.7 per cent), and public administration and safety (31.1 per cent).</p> <p>The Thomson Developmental Road (north–south connector) provides access to Longreach via Stonehenge and Jundah to Windorah in the south. The main east–</p>	<p>west connecting route is provided by Diamantina Developmental Road, connecting the region to Quilpie in the south and towards Bedourie in the west. The Birdsville Developmental Road provides access to Birdsville in the west from Windorah. Passenger air services are available from Windorah Airport.</p>	

* Employment statistics in this section are sourced from Australian Bureau of Statistics. (2017). *Census of Population and Housing, Australia, 2016 – General Community Profile – G51 (place of usual residence)*, (Catalogue No. 2916.0) 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). 2018 population is sourced from Australian Bureau of Statistics. (2019). *Regional Population Growth, Australia, 2017-18* (Catalogue No. 3218.0). Projected population is sourced from Queensland Government Statisticians' Office. (2018). *Projected population (medium series), by local government area, Queensland, 2016 to 2041, 2018 edition*.

Local government areas and main population centres*	2018 estimated resident population	2036 projected population
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BLACKALL-TAMBO REGIONAL – COUNCIL – Blackall, Tambo

2018 Pop'n
1863

2036 Projected Pop'n
1680



Major employing industries are agriculture, forestry and fishing (31.8 per cent), public administration and safety (11.2 per cent), and health care and social assistance (9.2 per cent).

The townships of Blackall and Tambo sit on the Landsborough Highway, which is the primary north-south route through the area. To reach coastal centres, transport users must either travel north to the Capricorn Highway or south to either Morven

or Charleville to connect with the Warrego Highway. From Blackall, connections exist to Barcoo Shire Council in the west linking to the Thomson and Diamantina Developmental Roads. These roads providing connections to the west vary in standard from unsealed to narrow sealed to two-lanes sealed bitumen. Blackall Airport provides passenger connections to Brisbane.

BOULIA SHIRE COUNCIL – Boulia, Urandangi

2018 Pop'n
425

2036 Projected Pop'n
408



Major employing industries are agriculture, forestry and fishing (49.5 per cent), and public administration and safety (17.4 per cent).

Boulia sits near the junction of a number of roads and highways. Connecting north to Mount Isa (Diamantina Developmental Road), east to Winton (Kennedy Developmental Road), west to Alice Springs (Donohue Highway) and south to Bedourie (Diamantina

Developmental Road). Mount Isa is an important centre for Boulia Shire residents to access services, with the exception of Central West Queensland Health services which are in Longreach. There is no resident doctor in town with residents reliant on travel elsewhere and overnight stays to access services. Royal Flying Doctor Service and volunteer driven ambulance transport are available to those not able to transport themselves. Passenger air services are available from Boulia Airport.

* Employment statistics in this section are sourced from Australian Bureau of Statistics. (2017). *Census of Population and Housing, Australia, 2016 – General Community Profile – G51 (place of usual residence)*, (Catalogue No. 2916.0) 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). 2018 population is sourced from Australian Bureau of Statistics. (2019). *Regional Population Growth, Australia, 2017-18* (Catalogue No. 3218.0). Projected population is sourced from Queensland Government Statisticians' Office. (2018). *Projected population (medium series), by local government area, Queensland, 2016 to 2041, 2018 edition*.

Local government areas and main population centres*

2018
estimated resident population2036
projected population**DIAMANTINA SHIRE COUNCIL –**
Bedourie, Birdsville2018 Pop'n
2922036 Projected Pop'n
296

Major employing industries are agriculture, forestry and fishing (31.7 per cent), public administration and safety (24.4 per cent), and accommodation and food services (10.4 per cent).

Access between Birdsville and Bedourie is provided by the Eyre Developmental Road which continues to Mount Isa via the Diamantina Developmental Road. Birdsville to

the south connects to Port Augusta in South Australia via the Birdsville Track. Both townships connect to Windorah in the east. Bedourie connects via the Diamantina Developmental Road, and Birdsville via the Birdsville Developmental Road. The shire supports two airports offering passenger services located in Bedourie and Birdsville.

LONGREACH REGIONAL COUNCIL –
Ilfracombe, Isisford, Longreach2018 Pop'n
35302036 Projected Pop'n
2844

Major employing industries are agriculture, forestry and fishing (14.4 per cent), health care and social assistance (13 per cent), and public administration and safety (10.2 per cent).

Longreach sits on a junction of the Landsborough Highway that connects to coastal centres in the east and to Mount Isa in the north-west. The Thomson Developmental Road

connects south to Windorah. Longreach connects to Muttaborra in the north via the Cramsie–Muttaborra Road and to Isisford in the south-east via Isisford–Ilfracombe Road (this route is accessible from Ilfracombe). Longreach Airport provides passenger air services. The Spirit of the Outback rail service stops at Longreach and Ilfracombe within the local government area.

* Employment statistics in this section are sourced from Australian Bureau of Statistics. (2017). *Census of Population and Housing, Australia, 2016 – General Community Profile – G51 (place of usual residence)*, (Catalogue No. 2916.0) 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). 2018 population is sourced from Australian Bureau of Statistics. (2019). *Regional Population Growth, Australia, 2017-18* (Catalogue No. 3218.0). Projected population is sourced from Queensland Government Statisticians' Office. (2018). *Projected population (medium series), by local government area, Queensland, 2016 to 2041, 2018 edition*.



CENTRAL WEST QUEENSLAND REGION TOTAL

2018
estimated resident population

10,386

2036
projected population

8606

* Employment statistics in this section are sourced from Australian Bureau of Statistics. (2017). *Census of Population and Housing, Australia, 2016 – General Community Profile – G51 (place of usual residence)*, (Catalogue No. 2916.0) 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). 2018 population is sourced from Australian Bureau of Statistics. (2019). *Regional Population Growth, Australia, 2017-18* (Catalogue No. 3218.0). Projected population is sourced from Queensland Government Statisticians' Office. (2018). *Projected population (medium series), by local government area, Queensland, 2016 to 2041, 2018 edition*.



Traditional Aboriginal dance at the Outback Festival, Winton

2.2 Transport network

The region’s transport network is characterised by inter-regional road and rail connecting to centres on the central Queensland east coast and by the interstate road connection into north-west Queensland and the Northern Territory. Route options are limited particularly

in the western parts of the region. Air services provide the shortest travel times to Brisbane.

An overview of the region’s transport network is shown in Figure 3.

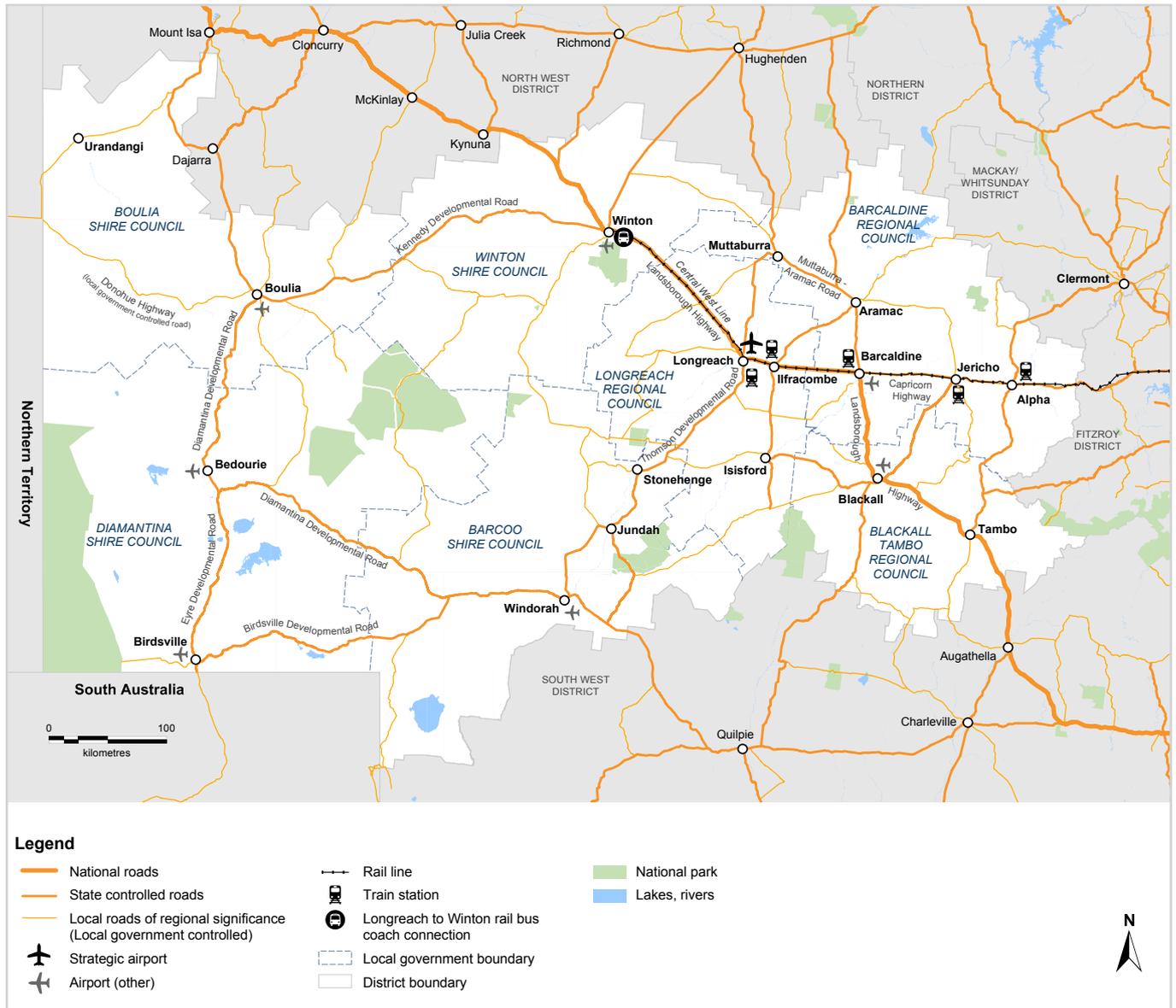


Figure 3: Overview of Central West Queensland region transport network

IN THE 2017–2018
FINANCIAL YEAR
33,747
PASSENGERS PASSED
THROUGH LONGREACH AIRPORT¹¹



THERE WERE
198 CRASHES
198 CRASHES IN THE REGION
IN THE 5 YEARS TO THE END OF
2017 WITH 9 FATALITIES¹²



HEAVY VEHICLES MOVEMENTS ARE
HIGH, CONTRIBUTING BETWEEN
20–30%
OF TOTAL ANNUAL AVERAGE
DAILY TRAFFIC
ON THE REGION'S
STATE-CONTROLLED ROADS¹³



THE QUEENSLAND GOVERNMENT
REGULATES
**THREE AIR SERVICE
ROUTES**
TO CENTRAL WEST COMMUNITIES¹⁴



TRAFFIC VOLUMES ACROSS
THE REGION ARE LOW
LANDSBOROUGH HIGHWAY
SUPPORTS AN ANNUAL AVERAGE
DAILY TRAFFIC OF 600–900
VEHICLES PER DAY BETWEEN
BARCOLDINE AND LONGREACH¹⁵



693 KM
NATIONAL LAND
TRANSPORT NETWORK¹⁹
3682 KM
STATE-CONTROLLED ROADS¹⁹
14,145 KM
LOCAL GOVERNMENT
MANAGED ROADS¹⁶



DWELLINGS WITHOUT A
PRIVATE VEHICLE VARY BY
LOCAL GOVERNMENT AREA,
RANGING BETWEEN
4.7% AND 15.1%
IN THE CENTRAL WEST
QUEENSLAND REGION¹⁷



THE CENTRAL WEST RAIL LINE
SUPPORTED
**85 MILLION
GROSS TONNE**
KILOMETRES IN THE 2015–2016
FINANCIAL YEAR¹⁸



IN THE CENTRAL WEST
QUEENSLAND REGION
17.5%
OF WORKERS WALK OR CYCLE
TO WORK, HIGHER THAN
QUEENSLAND'S AVERAGE OF 4.3%¹⁷



11 Queensland Airports Limited (2018). *Annual Report 2018*.

12 Department of Transport and Main Roads. (2019). *Road Crash Locations (updated 30 January 2019)*.

13 Department of Transport and Main Roads. (2018). *2017 Traffic Census Data (updated 14 June 2018)*.

14 Department of Transport and Main Roads. (2015). *Long Distance Aviation Services* www.tmr.qld.gov.au/regionalconnect.

15 Department of Transport and Main Roads. (2018). *2017 Traffic Census Data (updated 14 June 2018)*.

16 Department of Local Government, Racing and Multicultural Affairs. (2018). *Local Government Comparative Reports 2016–17 – Road data*.

17 Australian Bureau of Statistics. (2017). *Census of Population and Housing, Australia, 2016, Working Population Profile – W22 (place of work) (Catalogue No. 2006.0)*.

18 Queensland Rail. (2016). *Queensland Rail Annual and Financial Report 2015-16*.

19 Department of Transport and Main Roads. (2018). *Queensland Transport and Roads Investment Program 2018-19 to 2021-22 (Central West District Profile)*.

Roads

The road network provides the primary mode of transport for passenger and freight movement across the region. The region's road network also forms a significant part of Queensland's stock route network vital for moving stock on foot, using water facilities and accessing grazing pastures. The national road network includes the Landsborough Highway, connecting Tambo, Blackall, Barcaldine, Longreach and Winton north-west towards Cloncurry and to Roma to the south-east. The state strategic road network includes the Capricorn Highway connecting Barcaldine to Rockhampton through Alpha. These routes are complemented by many regional and district roads providing town-to-town connections and include the Eyre, Birdsville, Kennedy, Diamantina and Thomson developmental roads. In the north of the region, the Kennedy Developmental Road runs from Boulia to Winton, becoming the Kennedy Highway, as it continues north to Cairns, via Hughenden. Local government roads make up the remainder of the network enabling other town-to-town connections and supporting access to farm gates, tourism attractions and other destinations.

Average annual daily traffic volumes on the region's highways are low (less than 1000 vehicles per day). The Landsborough Highway between Longreach and Barcaldine is the busiest with between 600 and 900 vehicles per day. Heavy vehicles contribute a significant proportion of traffic (between 20–30 per cent) on major freight routes which demonstrates the importance of the region's highways for carrying freight.²⁰

Bus and coach

There is limited public transport in the region, with bus services generally limited to school bus runs and long-distance coach services. School bus services are monitored and reviewed to ensure students who are located far from school have their travel needs met for journeys to and from school. Tour coaches operate to bring visitors into the region to visit places of interest and attend special events.

Bus Queensland operates a long-distance coach service from Brisbane to Mount Isa which passes through the region with stops at Tambo, Blackall, Barcaldine, Longreach and Winton. Greyhound Australia operates a long-distance coach service from Rockhampton to Longreach via Alpha, Jericho, Barcaldine and Ilfracombe twice a week. These services are subsidised by the Queensland Government and also support the transport of some freight.

Tourism is supported by a rail-bus-coach connection between Longreach and Winton, departing from Longreach on Wednesdays and Sundays and returning from Winton on Thursdays and Mondays. This two-hour bus service operates twice a week coordinating with the Spirit of the Outback passenger rail service.

Several local governments in the region provide community buses that can be used (on request) to transport groups attending sporting or special events.



Road train, Barcaldine

²⁰ Department of Transport and Main Roads. (2018). *2017 Traffic Census Data (updated 14 June 2018)*.



Tourist coaches near Birdsville

The Roads and Transport Alliance and Regional Road and Transport Groups

The Roads and Transport Alliance (the Alliance) is a cooperative governance arrangement between Transport and Main Roads, the Local Government Association of Queensland 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.

In the Central West Queensland region, the Outback Regional Roads and Transport Group (ORRTG) is a strong and active leadership group which prepared the *ORRTG Regional Investment Strategy* and regional route hierarchy. This key plan identifies the routes within the region that are of significance to all ORRTG members and outlines the collective priorities for investment to strategically assist the ORRTG apply for and allocate funding.

Rail

Queensland Rail manages the Central West system, where rail freight services are contracted and operated by private companies. The Central West system joins the Blackwater system at Nogoa near Emerald and runs from Emerald to Winton via Longreach. The Central West system carries grain, livestock and containerised freight. The private sector currently operates livestock and general freight rail services in the Central West Queensland region under Queensland Government transport service contracts. The region's loading yards at Winton and Longreach facilitates livestock movement on the Central West Rail system. Livestock in the southern areas of the region is transported initially to the loading yards at Quilpie then transported on the South West system to abattoirs at Oakey, Ipswich and Logan.

Aurizon currently is contracted to run 184 services per year on the Central West system and 27 services per year (between May and November) on the South West system dedicated to moving livestock.²¹

Spirit of the Outback is a long-distance passenger rail service that travels 1325 kilometres from Brisbane to Longreach. This 26-hour rail journey passes through a range of historic regional centres, such as Blackwater, Emerald and Barcardine, before arriving at its final destination of Longreach. Queensland Rail operates this service twice a week, departing Brisbane on Tuesdays and Saturdays and leaving Longreach on Mondays and Thursdays. This rail service functions primarily as a long-distance tourist route rather than a local or regional travel route.

Air

The Central West Queensland region is serviced by eight airports supporting passenger services, including:

- Longreach Airport, which is serviced by QantasLink and Regional Express
- Barcardine Airport and Blackall Airport, which are serviced by QantasLink
- Winton Airport, Windorah Airport, Birdsville Airport, Bedourie Airport and Boulia Airport, which are serviced by Regional Express.

The region has three regulated air routes that are subsidised. These provide connections between:

- Mount Isa and Brisbane with stops at Boulia, Bedourie, Birdsville, Windorah, Quilpie, Charleville, and Toowoomba
- Townsville to Longreach with a stop at Winton
- Longreach to Brisbane with stops at Barcardine or Blackall

Figure 4 provides an overview of the connectivity of the Central West Queensland regional airports.

Longreach Airport is the largest airport in the region and is operated by Queensland Airport Limited, under a 99-year lease from Longreach Regional Council. In the 2017–2018 financial year, 33,747 passengers travelled through Longreach Airport.²³

Other airports in the region are owned and operated by local governments. A number of airfields across the region, also by maintained local government, provide access for the Royal Flying Doctor Service on a call-out basis.

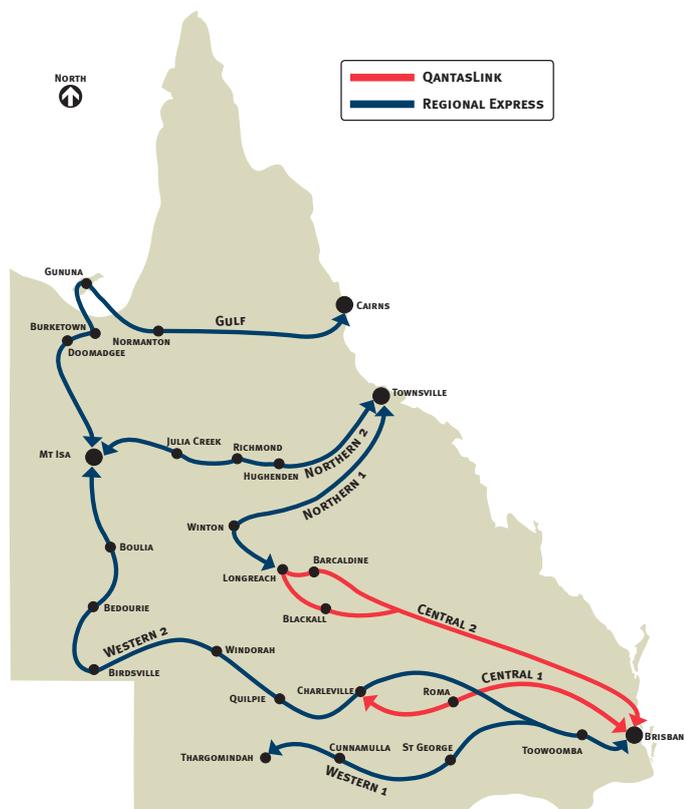


Figure 4: Queensland regulated flight map²²

21 Aurizon. (2019). *Factsheet: Livestock Transport Services*.

22 Queensland Airports Limited. (2018). *Annual Report 2018*.

23 Department of Transport and Main Roads. (2015). *Long Distance Aviation Services* www.tmr.qld.gov.au/regionalconnect.

Active transport

Active transport refers to non-motorised travel such as walking and cycling. Active transport infrastructure is provided across the region in the form of kerbside and other paths shared by pedestrians and cyclists.

In most Central West Queensland region's towns there are established pathways along main streets and other parts of towns. These pathways support short-distance cycling and walking access to businesses, community facilities and services, tourism and recreational attractions, and residential areas.

Significant active transport infrastructure has been delivered in some Central West Queensland region's towns. Within Longreach, a two-kilometre shared pedestrian and cycle pathway connects the airport to the central business district. This pathway runs adjacent to Ilfracombe Road and supports walking and cycling between accommodation and businesses.

In Blackall, a new two-kilometre pathway joins the existing link to connect the central business district, the campground and the Blackall Hospital.²⁴ The pathway is suitable for use by mobility aids, cyclists and pedestrians and also features exercise stations to encourage exercise and promote health.

Overall, the Central West Queensland region has significantly higher mode share for walking and cycling to work when compared to Queensland, as shown in Table 3. This can be attributed to the size of major centres in the region and the relatively short distances between home and work.

Outside of the region's towns, dedicated active transport infrastructure is limited. Other than during special and managed events, cycling and walking between the region's towns attracts very low overall volumes of users, primarily due to the great distances between most of the region's towns, high day time temperatures for most of the year and remoteness of many of the region's transport corridors.

Table 3: Central West Queensland region's active transport mode share for journey to work compared to Queensland²⁵

MODE	CENTRAL WEST	QUEENSLAND
 Walk	15.7%	3.3%
 Cycle	1.8%	1.0%



Central West rail system, Longreach

²⁴ Department of State Development, Manufacturing, Infrastructure and Planning. (2017). www.statedevelopment.qld.gov.au/index.php/regional-development/regional-economic-development/building-our-regions/remote-communities-infrastructure-fund/1345-blackall-s-pathway-to-health.

²⁵ Australian Bureau of Statistics. (2017). *Census of Population and Housing, Australia, 2016, Working Population Profile - W22 (place of work) (Catalogue No. 2006.0)*



Diamantina Developmental Road, Boulia Shire

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 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 *Central West Queensland Regional Transport Plan's* goals are as follows:

- support a strong, diverse and resilient regional economy
- enhance the quality of life within communities of the Central West Queensland region and preserve its distinctive character and identity
- enhance the safety and wellbeing for residents and visitors in the Central West Queensland region
- promote a clean, healthy and more liveable environment in the region.

The relationship between goals and priorities is presented in Figure 5. Priorities are the transport response to the region's goals in the context of addressing the region's challenges and supporting the opportunities that present.

CENTRAL WEST QUEENSLAND REGIONAL TRANSPORT PLAN GOALS

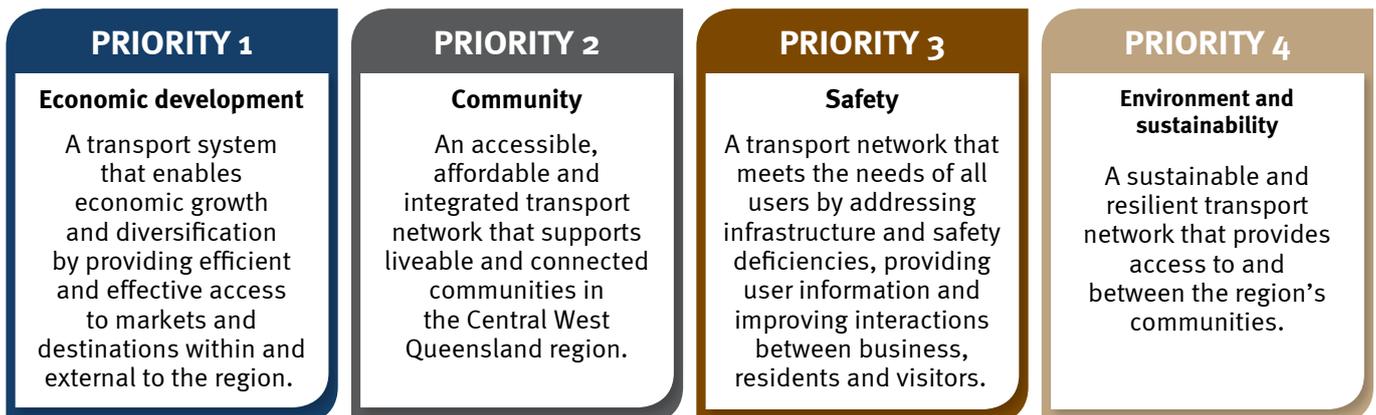


Figure 5: Regional goals and relationship to transport priorities

3.2 Challenges

Variability in network conditions

The geography, climate and size of the region, combined with jurisdictional boundaries, asset ownership and funding availability has contributed to inconsistent network standards and conditions across the region.

Some areas, such as Birdsville, are only accessible via unsealed or narrow sealed roads, where use of a four wheel drive vehicle for access is strongly preferred. Roughness, sharp bends, crests and narrow pavement seals are other deficient characteristics evident in areas across the network.²⁶ Transport network accessibility, reliability, efficiency and safety can be impacted by differing road conditions.

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' connections which link industry to the highway network and can be associated with narrow seals and bridge load limits on higher order roads. These issues restrict the size and type of vehicles used to transport freight and limits the use of high productivity freight vehicles (HPVs) across the region. As shown in Figure 6, HPVs differ in size and

consequently weight and carrying capacity compared to a B-double. HPVs can significantly improve supply chain productivity with greatest benefits realised if they can be used for the entire, door-to-door journey. The costs of breaking down and assembling HPVs can easily exceed line haul savings if the HPVs cannot be used for the whole journey.

There are currently around 900 to 1000 kilometres of unsealed roads on the region's Priority Road Network and limited overtaking lanes in the region also impacts freight movements.^{27,28} The Landsborough Highway is a heavy vehicle route supporting Type 1 and Type 2 road trains. Its vision width is nine metres, which represents a seal width that is appropriate to its function and traffic volumes. However, over 500 kilometres of the Landsborough Highway does not meet this standard.



Figure 6: Size difference between B-double, Type 1 and Type 2 road trains



Diamantina Developmental Road between Bedourie and Boulia, February 2019

²⁶ Outback Regional Road and Transport Group. (2015). *Central West Region Transport and Freight Plan*.

²⁷ The Priority Road Network for the Central West Queensland region as defined by the Outback Regional Road and Transport Group including the Landsborough and Capricorn Highways and a number of state-controlled and local government roads.

²⁸ Outback Regional Road and Transport Group. (2015). *Central West Region Transport and Freight Plan*.

Road condition is also a contributing factor to road safety. Limited overtaking opportunities, pavement failure risks, narrow seals and unsealed roads all affect safety.

The reliability and resilience of the rail network is also an issue with the long recovery time after flood events, ongoing problems with heat buckling the track and/or movements of track requiring levelling due to moisture movements of black soil subgrades. During the summer months, speed restrictions are in place when the air temperature is over 38 degrees Celsius; all trains are limited to 60 km/h and over 40 degrees Celsius, 40 km/h, significantly impacting the reliability and efficiency of rail freight and passenger movements.²⁹

The infrastructure characteristics of the airports in the region that receive regular passengers transport movements varies. Differences in sizes and standards of airport runway and terminal characteristics impact the type and size of the passenger aircraft that can access an airport. All the airports in the region are serviced by routes with multiple stops. As an aircraft must not exceed the access restrictions of the airport along the route with the lowest standard of runway and terminal, this results in some airports receiving small aircraft where they have the ability to support larger aircraft.

Project funding

Funding investment in the region's transport network is essential to deliver regional transport priorities. Prioritising investment can be a challenge, particularly when comparing traffic volumes on rural and remote roads to that of urban roads. Local governments in these areas are also tasked with the management of thousands of kilometres of roads, despite having limited revenue.

It is acknowledged that the need to fund for remote and regional projects cannot be directly compared to those in metropolitan and inner regional areas because the benefits differ and are often difficult to quantify in dollar terms.

The traditional cost-benefit analysis is largely unsuitable because of the higher construction costs in remote areas (excluding land acquisition) and the lower volume of users. As a result, achieving a positive cost-benefit analysis can be challenging.³⁰

Increased demand for road freight and underutilisation of rail

Across Queensland, road freight accounted for 67 per cent of domestic freight by volume in 2015-16, with freight volumes forecasted to increase by 24 per cent from 2016 to 2026.³¹ The region relies heavily on the road network for the transport of essential goods to communities, and the efficient movement of freight to market within and external to the region. Nationally, the freight industry is using larger and more efficient freight vehicle combinations to meet demand and improve productivity. Their use is limited in the region due to inconsistent road conditions and network reliability.

The Central West Queensland region has limited freight movements occurring by rail. General freight and livestock services moved by rail on the Central West system and those accessed via Quilpie on the South West system are subsidised under a Queensland Government Transport Services Contract. In line with the strategic direction set by the *Queensland Freight Strategy (2019)*, there is a desire for maximising rail freight use along strategic corridors through strategic planning. Benefits to industry, community and government associated with improved utilisation of rail include a potential reduction in road maintenance costs due to the alleviation or reduction in heavy vehicle movements on the road network and improved safety as crash risk associated with road freight are significantly less for rail freight.³²

Quality measures influencing freight mode choice include cost, transit time, reliability and service availability and frequency.³³ Currently in the Central West Queensland region, the competitiveness of rail services, where available, is limited across many of these measures. The competitiveness of rail against road transport is affected by track speed which varies between 50 km/h and 70 km/h and track axle loads, as well as the number of transfers between road and rail necessary in the supply chain.³³ The efficiency of loading and unloading facilities in the region is critical in managing intermodal transfers, particularly for the transportation of cattle. The availability of such facilities also provides the opportunity to gather freight volumes in sufficient quantities to make rail services viable.

29 Queensland Rail. (2016). *Central West System Information Pack*

30 Austroads. (2016). *Identification of a Risk Indicator to Support a 'Life Line' Freight Routes*.

31 The Centre for Transport, Energy and Environment, and Pekol Traffic and Transport. (2018). *Queensland Transport Facts 2018*.

32 Queensland Parliamentary Committee Transport, Housing and Local Government Committee. (2015). *Rail freight use by the agriculture and livestock industries*

33 Bureau of Infrastructure, Transport and Regional Economics. (2009). *Information Sheet 34 Road and rail freight competitors or complements?*

Accessibility and community connectivity

A key task of the transport network is to provide convenient and accessible connections to where people want to go for activities, such as employment, education, leisure and community services. Through consultation with local government and regional stakeholders it is apparent that residents of the Central West Queensland region access at great distance, destinations outside the region to meet social, health, educational and recreational needs. These destinations and purposes include Mount Isa for health, Townsville for health, education and sport, Rockhampton for education, health and as a transit hub, and Brisbane for access to higher order services. Due to significant distances between these centres and the Central West Queensland region, travel times and costs for residents to access these centres and the necessary services they provide are significantly higher than those who reside in regional cities and metropolitan areas.

Private vehicles, long-distance rail and coach provide overland connections between the region and Rockhampton, but currently no regular passenger air services connect the Central West Queensland region to Rockhampton. This was raised as an issue by stakeholders as the Rockhampton Base Hospital is the destination for Flying Doctor service transfers out of the region. Many of the region's young people also attend secondary boarding schools in Rockhampton and have limited transport choices of lengthy private vehicle, train or coach trips.

Access to Brisbane and Townsville is provided through regulated flights from Longreach and Winton. Regulated flights to Brisbane are available from Barcaldine, Blackall, Windorah, Bedourie, Boulia and Birdsville. The Queensland Government regulates passenger transport air services so residents of rural and remote communities can be guaranteed services to larger centres. Although regulation and subsidies exist, the affordability of regular air travel for some residents is limited.



Road train crossing Burke River, Boulia

In addition to regulated air services, there are several travel subsidies that improve accessibility in the region by assisting residents with the cost of travel to access community and health services. These include:

- patient travel subsidies to those requiring medical treatment and their accompanying escort to assist with meeting the transport and accommodation costs to the locations where their treatment will be provided
- Queensland Government subsidised long-distance coach routes
- discounted rail travel for social security recipients.

At a local level, public transport is not available in the region's towns outside limited school bus routes and some community bus services. Rural taxi service areas exist for Longreach, Barcaldine, Blackall and Winton, although taxis currently only operate in Longreach and Blackall.³⁴ Subsidised taxi travel for the elderly assists them to travel to appointments and complete their weekly shopping by making taxi travel more affordable. Community transport services such as those provided through Home and Community Care (Longreach) support people with special needs to access basic needs and services.³⁵

Cycling and walking between towns in the region is limited primarily due to the great distances involved. Within towns in the region distances between places are generally short, however, the standard of walking and cycling infrastructure varies from separated walking and cycling paths to streets with no form of cycling or walking infrastructure. Gaps in infrastructure along with high day time temperatures experienced through most of the year present barriers to more utilisation of cycling and walking, particularly amongst elderly and mobility impaired persons.

Queensland Walking Strategy

The *Queensland Walking Strategy 2019–2029* provides a framework for promoting walking as an accessible, active transport mode across Queensland, delivering health benefits for Queenslanders and access to important destinations such as schools, shops, and public transport.

The strategy sets out the vision for the next 10 years and directly contributes to the vision for a single integrated transport network accessible to everyone. The strategy is accompanied by an action plan that identifies areas for further investment over the next two years.

³⁴ Department of Transport and Main Roads. (2017). www.tmr.qld.gov.au/business-industry/Taxi-and-limousine/Industry-information/Taxi/Taxi-fares-service-areas-and-maps/Central-Queensland.

³⁵ Longreach Regional Council. (2017). www.longreach.qld.gov.au/health-services.

Aging population

Australia's aging population presents a number of 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 to geographic dispersion and supply of essential services. Travel distances can also be significant for residents requiring specialist treatments. Currently, the region's proportion of residents aged over 65 (17.5 per cent) is comparative to the Queensland average (15 per cent)³⁶; however, by 2036 this is projected to increase to 27.4 per cent.³⁷

Affordable transport to access essential services within and external to the region is a key consideration in providing for an aging population. Health, physical ability, willingness and confidence can be barriers to an older persons' ability to drive. The absence or limited accessibility of public or community transport services can create a mobility disadvantage for older people that can lead to negative impacts such as increasing social isolation and depression.

Geography and population

With only 0.2 per cent of Queensland's population occupying almost a quarter (22.9 per cent) of its land area, the Central West Queensland region is vast and remote from urban centres on the east coast of the state.³⁸ Forty-eight per cent of the region's population is located in the towns of Longreach, Barcaldine and Blackall.³⁹ These

townships provide access to essential goods, services and entertainment, with Longreach the most significant activity centre.⁴⁰ Access to higher order services requires travel outside the region to larger regional centres including Mount Isa, Rockhampton, Emerald, Townsville, Toowoomba and Brisbane.

The geographically dispersed nature of the population creates significant challenges in delivering transport services and providing transport infrastructure. Distance and service demand affect frequency and affordability of passenger transport. This impacts the mobility of residents. Significant sections of the road network have low traffic volumes (noting increase in volumes during tourism peak season), indirect connections and lack of resilience to adverse environmental conditions. These challenges affect the availability and reliability of the transport network.

Local government owned and/or managed transport infrastructure is vital to the connectivity of the region. In the Central West Queensland region, local governments own, operate or maintain the region's airports, and manage approximately 14,145 kilometres (76 per cent) of the region's road network.^{41,42} Small populations mean a limited rates base for local government to fund essential services, including the management of the transport network. Accordingly, Queensland and Australian Government programs are essential to assisting rural and remote local governments in the delivery and maintenance of the road network and transport services.



Sunset near Winton

36 Australian Bureau of Statistics. (2018). *Regional Population Growth, Australia, 2016-17 (Catalogue No. 3218.0)*.

37 Queensland Government Statisticians' Office (2018), *Projected population (medium series), by five-year age group and sex, by local government area, Queensland, 2016 to 2041, 2018 edition*.

38 Queensland Government Statisticians' Office, Queensland Treasury. (2019). *Queensland Regional Profiles: Resident Profile for Central West region*.

39 Australian Bureau of Statistics. (2019). *Regional Population Growth, Australia, 2017-18 (Catalogue No. 3218.0)*, unpublished data.

40 Longreach is identified as a Major Rural Activity Centre in the *Central West Regional Plan 2009* (Department of Infrastructure, Local Government and Planning).

41 Longreach Airport is the exception. Longreach Regional Council owns the airport but it is managed by Queensland Airports Limited under a 99-year lease.

42 Department of Local Government, Racing and Multicultural Affairs. (2018). *Local Government Comparative Reports 2016-17 – Road data*

The region has experienced a decline in resident population of 13.3 per cent between 2013 and 2018.⁴³ With population decline, the retention and viability of services can be at risk, especially in some remote communities. Given the travel distances required to access the same services elsewhere, the implications of losing these essential services are significant. Retaining and attracting residents and workers is important to maintaining services and the liveability of rural centres.

Environmental factors

The region forms part of the Lake Eyre catchment and includes the Mitchell Downs, Channel Country and Desert Uplands biogeographic regions. Extreme temperatures, droughts and floods are characteristic of the region's climate which includes grasslands and desert classifications—rainfall and temperatures are highly variable.⁴⁴ The annual rainfall average is less than 200 mm in the far west to more than 400 mm in the eastern areas. In recent years, the region has undergone an extensive period of drought, significantly impacting the region's economy and community.⁴⁵

The Department of Environment and Science has modelled changing climatic conditions for the Central West Queensland region.⁴⁶ Although differing in severity across various climate change scenarios and timeframes, the draft impact summary indicates the region can expect hotter and more frequent hot days, increased bushfire risks and more intense downpours as a result of climate change.

During and following weather events, flooded roads and bridges present safety risks where drivers take undue risks crossing flooded roads. 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.

Extreme weather and flooding can lead to regular and lengthy transport network closures, particularly for the region's road and rail networks. Network closures can occur both during and following the event due to damage. With few alternative routes, particularly in the western half of the region (due to the larger distances between towns and the varying conditions of the roads), road closures can isolate communities for extensive periods of time

This can also be the case for the rail network in the region. Depending on the location of flooding, airports, air and rail services can play an important role in emergency access and network resilience during and in the aftermath of extreme weather events.

Black soils are widespread across the Central West Queensland region. This soil type contains a type of expansive clay that shrinks and swells dramatically in changing weather patterns and is subsequently problematic as a subgrade material for transport infrastructure. Each cycle of cracking and swelling contributes to a gradual mound and trough effect which can compromise the condition of transport infrastructure, in particular the quality of road surfaces.⁴⁷

Transport and climate change

The *Queensland Climate Transition Strategy* outlines how the state proposes to prepare for the transition to zero emissions industries of the future. Much of what Queenslanders said in the strategy about the future relates to transport:

- the future should be powered by clean and renewable energy and technology
- we need low-carbon construction, infrastructure and transport systems
- key opportunities are in renewable energy, battery and power storage, cleaner technologies and electric vehicle industries
- improve public transport systems to be low-emission, well-maintained, affordable, reliable, frequent and integrated.

Action 2.5 of the Strategy identifies that the Government will develop a Zero Net Emissions Transport Roadmap. This will consider better integration of transport policy with land use planning to reduce travel demand and optimise public and active transport infrastructure and services. It will also look at ways to reduce emissions from private, passenger and freight transport, such as through improved vehicle and fuel efficiency, technology and innovation, and fuel shift.

43 Australian Bureau of Statistics. (2019). *Regional Population Growth, Australia, 2017-18 (Catalogue No. 3218.0)*.

44 Bureau of Meteorology. (2005). *Climate classification of Australia*.

45 Queensland Government. (2017). www.longpaddock.qld.gov.au/queenslanddroughtmonitor/queenslanddroughtreport/.

46 Department of Environment and Heritage Protection. (2016). *Draft Climate Change in the Central West Queensland Region*.

47 Schaetzl and Anderson. (2007). *Soils: genesis and geomorphology*.

3.3 Opportunities

Growth in tourism

Self-drive tourism is popular in the Central West Queensland region, with a steady stream of caravans and recreational vehicles frequenting the region particularly in tourism peak seasons.⁴⁸ This market is expected to experience growth due to Australia's aging population and a corresponding increase in retirees who travel around Australia.⁴⁹ The region's 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 drive to explore the area.

Tourism in the region is typically represented by domestic and international visitors looking to experience 'outback' and regional Queensland, attracted to the remoteness and unique cultural and environmental characteristics of the region. Given the variation in outback temperatures, visitation tends to be seasonal with visitation numbers growing in the cooler winter months.

Visitor survey figures show that for the three-year average ending December 2017, the Outback Queensland region enjoyed record highs in domestic visitor nights (up 9.2 per cent to 3.9 million nights). During the same period, expenditure from domestic tourism in Outback Queensland increased by 12.7 per cent to a record high for the region of \$584.8 million.⁵⁰

Growth in self-drive tourism is a significant economic opportunity for the region but is also a challenge, particularly for the region's road network that must cater for increasing demand from tourist traffic and conflicts with freight movements. The influx of private vehicles (many towing caravans) during peak tourist season, and to access events such as the Birdsville Races, Big Red Bash, Boulia Camel Races and Outback Festival (Winton) can interfere with the efficient movement of freight.

Safety and condition of the road network, tourism signage, mobile and internet reception, and the provision of rest stops (separate from rest stops for freight vehicles) and scenic stops are important to the growth of the self-drive tourism sector and to support establishment of more short-distance walking and cycle paths to places of interest. This is especially important for smaller communities seeking to encourage growth in the tourism industry, but do not have the facilities that larger towns have.

The accuracy of travel information available online is also a factor to attracting tourists to the region and in assisting them in planning their trip. Currently, the accuracy of travel time estimates through tools such as Google Maps is limited. For example, Google Maps currently identifies the 191-kilometre trip between Bedourie and Birdsville would take four hours and 53 minutes while local knowledge estimates the trip to take only two hours and 15 minutes.^{51,52}



The Australian Age of Dinosaurs Museum of Natural History, Winton

48 The peak travel season is during the cooler months, because in summer the temperature is usually 35-40°C source: Outback Queensland Tourism Association Inc. (2019). www.outbackqueensland.com.au/outback-faqs/.

49 Queensland Government. (2016). *Business and Industry Portal Drive Tourism in Queensland*.

50 Tourism and Events Queensland. (2019). *Outback Regional Snapshot: Three-Year Average – Year Ending December 2017*.

51 Google Map estimated travel time accessed on the 25 January 2018.

52 Travel times were sourced from Bedourie Visitor Information Centre on 17 July 2017.

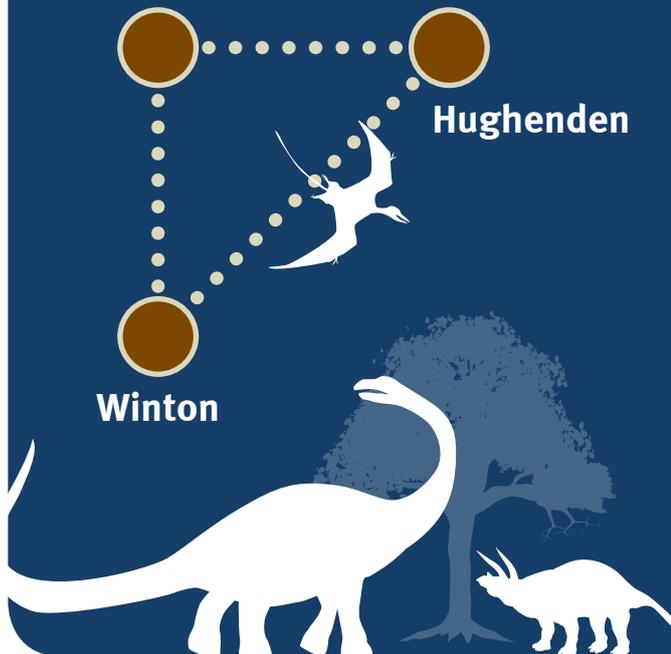
AUSTRALIA'S DINOSAUR TRAIL⁵³

The Central West Queensland region's town of Winton along with the towns of Richmond and Hughenden in the north make up Australia's Dinosaur Trail. The area is rich with dinosaur fossils with museums, fossicking sites and heritage trails providing visitors the opportunity to learn and experience the region's age of dinosaurs history. Suggested itineraries and the Australia's Dinosaur Trail Pass, providing discounted entry to the four major ticketed attractions, encourage visitors to follow the trail.

Australia's Dinosaur Trail travel distances and estimated travel times

Journey	Approximate distance	Time
Winton to Richmond	218 km	3 hrs
Richmond to Hughenden	112 km	1 hrs 10 min
Hughenden to Winton	215 km	2 hrs 30 min

Richmond



Hughenden

Winton

Major tourism events

Promoted as the world's most remote music festival, the Big Red Bash, is a three day event held every July on a desert dune, near Birdsville.⁵⁴ The Big Red Bash has grown since the inaugural event in 2013 and now attracts around 9000 people⁵⁵ to the edge of the Simpson Desert and offers a program of well-known artists each year.

Camping is the only form of accommodation at Big Red Bash and the event attracts many towing caravans and camper trailers. Acknowledging the risks associated with outback roads for those towing trailers and are unfamiliar with driving on unsealed roads, event organisers have worked closely with Queensland Police and the Stay on Track Outback road safety initiative to raise awareness and develop resources to ensure travellers are appropriately prepared for the conditions. Stay on Track Outback police officers also attend the event with an information tent to engage with and provide advice to travellers. Birdsville is also home to the Birdsville Races held every September, which attracts over 6000 visitors to the town.⁵⁶ The Boulia Camel Races, held each July is another event that attracts thousands of visitors to the region.



The Big Red Bash (music festival) near Birdsville

⁵³ Australia's Dinosaur Trail. (2017). www.australiasdinosaurtrail.com/home.

⁵⁴ Big Red Bash. (2017). www.bigredbash.com.au/bigredbash/index.

⁵⁵ The Morning Bulletin. (2018). www.themorningbulletin.com.au/news/guinness-world-record-broken-at-the-birdsville-big/3466195/#/o.

⁵⁶ Birdsville Race Club. (2019). www.birdsvillerraces.com/about-the-races/race-day/

Within the Central West Queensland region's towns, active transport infrastructure such as pathways and signage, support visitors' short-distance movements to access accommodation, camp grounds, town centres, transport hubs and natural and cultural attractions. With the closures of branch railway lines, such as Jericho to Yaraka in 2005 and Winton to Hughenden in 2008, an opportunity exists for active transport to also support growth in tourism through undertaking planning to establish and manage rail trails. Planning and delivery of other iconic and scenic walking and cycling routes, and additional special events, like Winton's biennial Outback Century Cycle Challenge, present further opportunities to attract additional tourism to the region.

Rail, coach and air passenger services also provide access for visitors to the region. Access to the region's major events and attractions by coach services is an opportunity to encourage more tourists who do not wish to self-drive to explore the region.

Agricultural opportunities

The agricultural industry offers significant export opportunities, particularly for agricultural and livestock products including beef and sheep (meat and wool). The value of agricultural production in the Central West Queensland region was \$597.1 million in 2015–16, primarily from the slaughter of cattle valued at \$556.3 million.⁵⁷

There are opportunities in the region to support the growth and productivity of the agricultural sector through improved herd and flock reproductive and feeding processes. Further opportunities exist such as increasing throughput of cattle in Central West saleyards, localised meat processing, and enhanced production specifications and branding, for example certified organic beef products, to target higher value niche markets.⁵⁸ The Blackall Saleyards is one of two saleyards in Australia, and the only one in Queensland, accredited to sell organically certified cattle.⁵⁹

The return of the Longreach Saleyards (now known as the Western Queensland Livestock Exchange) to operations presents another opportunity to increase local economic activity, expand the region's cattle sales market and add value to beef products through the redevelopment of facilities to enhance cattle welfare and safety. By 2022, this exchange has the potential to sell 100,000 cattle annually, with the redevelopment of facilities, accessing a catchment area for cattle production from western Queensland to the Northern Territory.⁶⁰

Adding value to goods produced as well as increasing the volume of goods produced and sold in the Central West Queensland region will assist significantly in growing the economy of the region.

The continued construction of wild dog cluster fencing will improve the viability of the sheep and wool industry in the region.⁶¹ Cluster fencing is an essential element in the revitalisation of the sheep and wool industry after a rapid decline in the sector due to wild dog attacks. An additional 238,447 sheep are now being farmed in the Central West Queensland region as a result of the 18 clusters delivered to date, generating more jobs to provide shearing, crutching, lamb marking and fencing.⁶²

Improving supply chain efficiency is crucial in supporting growth of the region's agricultural industry and its profitability. Transport costs are impacted by vehicle capacity and total travel time which are both influenced by route reliability and network conditions. Market price is directly related to product condition which is also impacted by transit duration and network conditions. Duration of travel impacts the food and water intake of cattle, leading to loss of weight.⁶³ The Central West Queensland region's supply chain efficiency is currently impacted by the conditions of the rail and road networks as outlined in Section 3.2 Challenges.

Better use of existing infrastructure

In accordance with the direction set by the *State Infrastructure Plan*, there are opportunities in the region for non-infrastructure and low cost improvements to existing infrastructure (compared to new infrastructure) solutions to be used to respond to key challenges in the region. These solutions are examples of making better use of infrastructure and consider high-cost capital expenditure on transport infrastructure as the 'last resort' in solving a challenge. In this regard, key opportunities include:

- improving collaboration and coordination between producers to achieve efficiencies in the movement of freight
- upgrades to pastoral industry facilities to support efficient intermodal freight movements such as loading facilities
- optimising access for high productivity freight vehicles on key links to move more freight with less vehicle movements on more direct routes

57 Australian Bureau of Statistics. (2017). *Value of Agricultural Commodities Produced, Australia, 2015-16 (Catalogue No. 7503.0)*.

58 Department of Agriculture and Fisheries. (2013). *Agricultural Land Audit Chapter 9 Central West*.

59 Queensland Country Life. (2017). www.queenslandcountrylife.com.au/story/4743670/blackalls-organic-certification-a-queensland-first/bouliacattle-to-christen-blackalls-organic-yards/.

60 Australian Broadcasting Corporation News. (2017). www.abc.net.au/news/rural/2017-05-31/cattle-sales-to-return-to-longreach-after-four-year-spell/8575188.

61 Queensland Government. (2017). www.statements.qld.gov.au/Statement/2017/3/23/wild-dog-fencing-unlocking-the-potential-of-the-west.

62 Remote Area Planning and Development Board. (2016). *RAPAD Annual Report 2015-16*.

63 Future Beef. (2011). www.futurebeef.com.au/knowledge-centre/liveweight-loss-and-recovery-in-cattle/.

- improving the competitiveness of moving freight by rail, better utilising the rail network and managing the growth in road freight.
- establishing a complete and connected active transport network to provide improved travel options within communities, encourage physical activity, health and wellbeing, and reduce environmental impacts by replacing more short-distance vehicle trips with walking and cycling.

Potential mining development

The activation of the Galilee Basin would trigger some impacts on the region's transport network. During the mine mobilisation and construction phases, a significant number of oversize overmass vehicles would be required to transport heavy machinery and equipment to the region increasing the risk of deterioration of frequently used roads. However, once operational, due to the geographic location of the proposed mines to the east/north-east of the region, the bulk of material to port is expected to be transported on dedicated rail corridors through adjacent regions.

Geologists have recently found evidence of rare minerals in the region. Referred to as the Diamantina Minerals Province, the area stretches from Fifield in central New South Wales, across the Central West Queensland region into the North West Queensland region and up to the Merlin diamond mine in the Northern Territory. Minerals likely to be in the rare geological pipes formations include scandium, cobalt, nickel, copper, light and heavy rare earth elements, yttrium, niobium, hafnium, zirconium, tantalum, phosphorus, silver, gold and platinum, as well as potential for diamonds. These rare earth elements have special or unique properties which are used in many modern technologies such as fuel cells and mobile phones, and are in high demand around the world.⁶⁴

Road network consistency and reliability will be required to effectively cater for an increase in heavy and commercial vehicle demand, and to maintain the safety of the network and manage user conflicts with other traffic. The level of flood immunity and resilience of key links such as the Capricorn Highway will determine reliability of access.

Project assessment

In recognition of characteristics of rural and remote transport particularly for the beef industry, CSIRO developed the Transport Network Strategic Investment Tool (TraNSIT) to inform the Northern Australia Beef Roads initiative. Transport and Main Roads continue to provide advice to CSIRO to build on TraNSIT's capability and commodity base. Austroads have also released a tool designed to identify and support investment in 'Life Line' freight routes.⁶⁵

Life Line freight routes

The *National Remote and Regional Transport Strategy* identifies the need to explore 'alternative models' for considering the priority for investment in remote and regional roads. Evaluation and prioritisation of investment in road projects is generally through cost-benefit analysis, and based on usage of the route, which favours routes with high annual average daily traffic volumes, regardless of being light vehicles or larger freight vehicles.

In mid-2016, Austroads released a tool designed to identify and support investment in 'Life Line' freight routes.⁶⁵ 'Life Line' freight routes are highly valued by local communities and regions but due to traffic volumes may not deliver positive outcomes in traditional upgrade project priority assessments. A risk indicator tool, has been developed for use by road managers to establish if a route is a 'Life Line' and which routes have the greatest claim for project funding based on 'Life Line' needs. The spreadsheet based tool considers factors relevant to determining priority for road upgrade investment including the:

- size and needs of the communities serviced
- availability of alternative routes
- length and convenience of any alternative routes
- historic incidence of events that have closed the route
- assessment of responses to previous events, including cost and impacts in the regions serviced.



Unsealed road, Diamantina Shire

⁶⁴ Queensland Government. (2017). www.statements.qld.gov.au/Statement/2017/4/16/rare-mineral-discovery-offers-fresh-frontier-for-qld.

⁶⁵ Austroads. (2017). www.austroads.com.au/news-events/item/358-supporting-life-line-freight-routes.

⁶⁶ Austroads. (2017). www.austroads.com.au/news-events/item/358-supporting-life-line-freight-routes.

Economic contribution of road projects

In rural and remote communities, local government provides employment opportunities to their local communities. In most instances, employees of local government live in the community, contribute to the economy by buying essential goods and services, and may have children that attend local schools. This contributes to the vitality of the local community and economy. Where viable, a steady, long-term program of transport network maintenance and construction is key to the sustainability of local government workforces.

Advancements in technology

Advancements in telecommunications and other technologies combined with expanding the coverage of mobile reception are an opportunity to improve connectivity for rural and remote communities in the region.

Communications technology can reduce some of the need to travel on the transport network through the use of email, internet and video conferencing, allowing individuals to work, access distance education, seek healthcare and socialise with others, regardless of location. It also offers an opportunity for improved user experience through the provision of real-time information. Real-time information could provide road condition, road work and incident information to road users in advance of travel allowing users, including the freight industry, tourists and the local community, to retime their journey or select an alternative route. This would reduce delays and improve the efficiency of travel. Currently, signage and publications of road conditions can be slow to respond to changed conditions, inconveniencing road users.

Technological advancements, such as low and zero emission vehicles and cooperative and automated vehicles, have the potential to change the way freight and people move, and the type of vehicles travelling on

the network. They also have significant potential when applied to farm vehicles that operate on private property potentially providing productivity and safety benefits.⁶⁷ For regional areas, a significant challenge to the deployment of these vehicles is the provision of supporting infrastructure which could include requirements for physical infrastructure such as sealed roads, signage, road markings and digital infrastructure such as mapping data and communications infrastructure.⁶⁸

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.

Increasing the coverage and quality of telecommunications will assist the region in realising the potential benefits offered through these technological advancements.

The Australian Government supported by co-contributions from state and local governments, mobile network operators, businesses and local communities through the roll-out of the Mobile Black Spot Program is continuing to improve mobile phone coverage and competition in regional and remote Australia.⁶⁹ Under rounds one and two of the Mobile Black Spot Program, deployment or planning of mobile base stations to improve mobile coverage in parts of Boulia Shire, Winton Shire, Barcaldine Regional Council, Longreach Regional Council and Blackall-Tambo Regional Council has been completed or is underway.

In addition to this, local governments in the region are investigating further opportunities to improve telecommunications, including utilisation of microwave towers to transmit wireless signals to increase coverage, reliability and speed of Wi-Fi internet services for residents, businesses and government departments and provide 'hotspots' at roadside amenity stops for travellers.⁷⁰

67 National Farmers Federation. (2017). *Submission to the Standing Committee on Industry, Innovation, Science and Resources Inquiry into the social issues related to land*

68 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*

69 Department of Communications and the Arts. (2017). www.communications.gov.au/what-we-do/phone/mobile-services-and-coverage/mobile-black-spot-program

70 Queensland Country Life. (2017). www.queenslandcountrylife.com.au/story/4813179/wifi-deal-to-be-the-envy-of-australia/

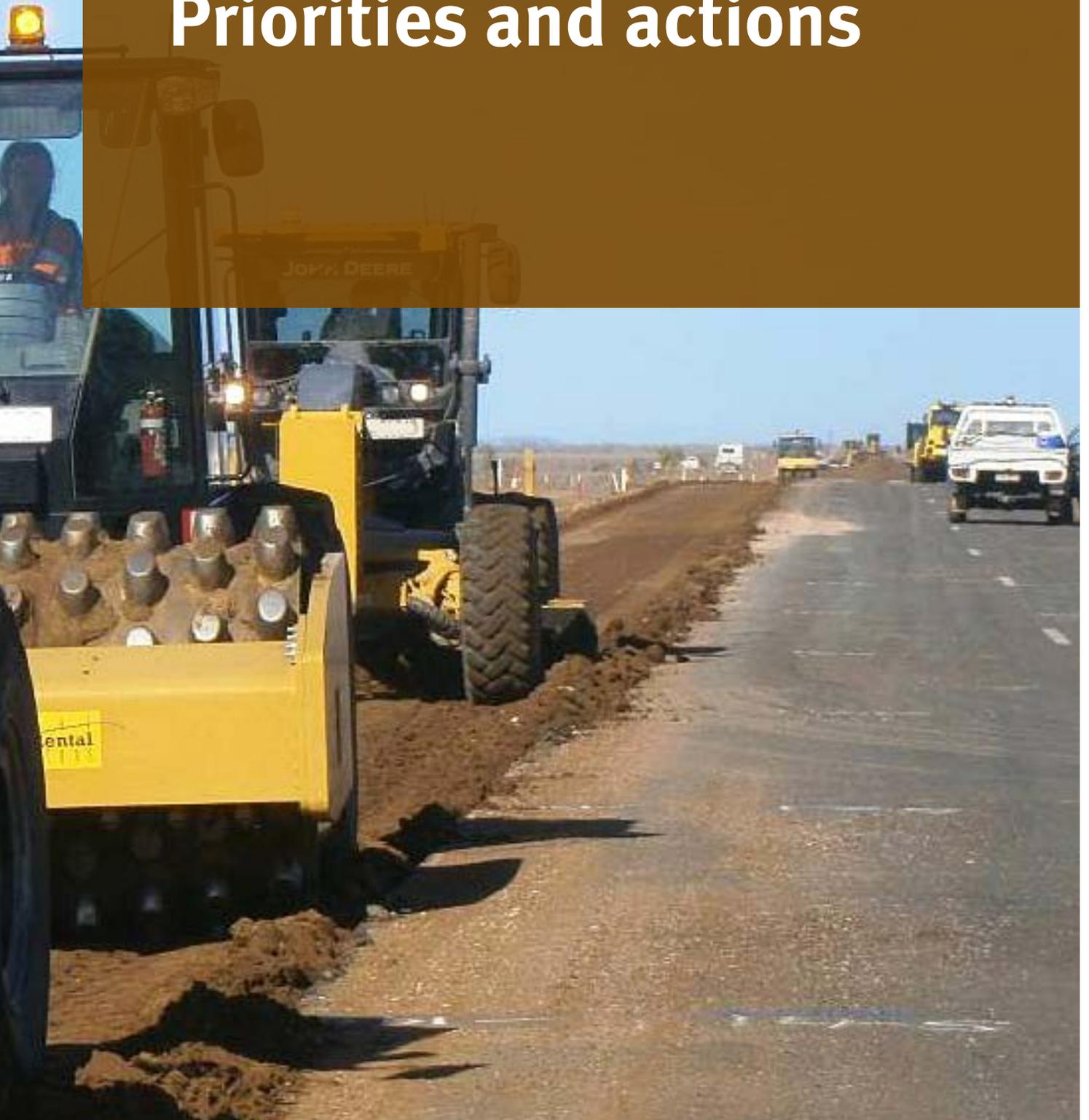


Tree of Knowledge, Barcaldine



Roller and grader on site, Thomson Developmental Road (Jundah-Longreach)

4. Priorities and actions



The plan's priorities set the direction for the region's transport network over the next 15 years. The four regional priorities established through the plan's development process are:

- **Priority 1:** Economic development—A transport system that enables economic growth and diversification by providing efficient and effective access to markets and destinations within and external to the region.
- **Priority 2:** Community—An accessible, affordable and integrated transport network that supports liveable and connected communities in the Central West Queensland region.
- **Priority 3:** Safety—A transport network that meets the needs of all users by addressing infrastructure and safety deficiencies, providing user information and improving interactions between business, residents and visitors.
- **Priority 4:** Environment and sustainability—A sustainable and resilient transport network that provides access to and between the region's communities.

A range of 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 services 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. Baseline 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.



Sunset at Big Red (sand dune) near Birdsville

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 Economic development	PRIORITY 2 Community	PRIORITY 3 Safety	PRIORITY 4 Environment & sustainability
	A transport system that enables economic growth and diversification by providing efficient and effective access to markets and destinations within and external to the region.	An accessible, affordable and integrated transport network that supports liveable and connected communities in the Central West Queensland region.	A transport network that meets the needs of all users by addressing infrastructure and safety deficiencies, providing user information and improving interactions between business, residents and visitors.	A sustainable and resilient transport network that provides access to and between the region's communities.
ROLE OF TRANSPORT	<p>Responding to the challenges of:</p> <ul style="list-style-type: none"> ■ variability in network condition and environmental impacts on freight efficiency ■ demand for road freight ■ underutilisation of rail ■ geographically dispersed population. <p>And opportunities for:</p> <ul style="list-style-type: none"> ■ growth in tourism, agriculture and mining ■ better use of existing infrastructure ■ attracting funding through new approaches to project assessment ■ maintaining the local road maintenance workforce ■ advances in technology. <p>By taking action to:</p> <ul style="list-style-type: none"> ■ maintain and operate transport networks to support and grow the region's economy. 	<p>Responding to the challenges of:</p> <ul style="list-style-type: none"> ■ accessibility and community connectivity ■ geographically dispersed and aging population. <p>And opportunities for:</p> <ul style="list-style-type: none"> ■ better use of existing infrastructure ■ advances in technology. <p>By taking action to:</p> <ul style="list-style-type: none"> ■ improve access to and within the region including access for local trips within towns ■ provide infrastructure and services that are equitable and meet diverse community needs ■ plan and prioritise capacity upgrades and new infrastructure where it supports industry and productivity most. 	<p>Responding to the challenges of:</p> <ul style="list-style-type: none"> ■ geographically dispersed population ■ variability in network condition impacts on safety. <p>And opportunities for:</p> <ul style="list-style-type: none"> ■ growth in tourism, agriculture and mining ■ advances in technology. <p>By taking action to:</p> <ul style="list-style-type: none"> ■ encourage safe travel behaviour. 	<p>Responding to the challenges of:</p> <ul style="list-style-type: none"> ■ geographically dispersed population ■ variability in network condition and environmental impacts on the transport network. <p>And opportunities for:</p> <ul style="list-style-type: none"> ■ advances in technology. <p>By taking action to:</p> <ul style="list-style-type: none"> ■ build, maintain and operate safe and resilient transport infrastructure and facilities ■ review and improve emergency and disaster management and recovery efforts.
TRANSPORT OBJECTIVES	<p>1.1 A transport network that optimises supply chain productivity by supporting the efficient movement of goods to, from and within the region.</p> <p>1.2 A transport network that provides access to the region's tourism destinations.</p> <p>1.3 The integration of land use and transport planning to support the long-term economic growth of the region.</p>	<p>2.1 A transport system that improves social connectivity and provides reliable access to employment, education, services and recreational opportunities.</p> <p>2.2 A transport system that caters for the diverse needs of the community.</p>	<p>3.1 A transport network that allows users to travel safely and feel secure.</p> <p>3.2 Safer driving behaviours through improved education and information.</p>	<p>4.1 A safe, reliable and resilient transport network during weather events.</p>
MEASURES OF SUCCESS	<ul style="list-style-type: none"> ■ Freight productivity improves. ■ Transport supports the region's tourism economy. 	<ul style="list-style-type: none"> ■ Greater access and connectivity to places, services and information. ■ Reduced frequency and duration of unplanned closures due to incidents. 	<ul style="list-style-type: none"> ■ Reduction in transport-related incidents, crashes, injuries and fatalities. ■ Increase accessibility to telecommunications and digital information. 	<ul style="list-style-type: none"> ■ Reduced frequency and duration of unplanned closures due to flooding.

4.1 Priority 1: Economic development

A transport system that enables economic growth and diversification by providing efficient and effective access to markets and destinations within and external to the region.

Priority 1 supports:

- the Transport Coordination Plan's objective 'efficiency and productivity' where transport 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 regional plan's focus on creating a more sustainable future and integrating land use, transport and economic activity.

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

The geographic distance to export facilities and capital cities adds considerable transport costs to the region's agriculture products. Efficient and reliable supply chains can assist in reducing the total cost of production and are essential to industry sustainability.

The transport network supports the arrival of the region's visitors by rail, road and air and their movement within the region, contributing to their overall experience of Central West Queensland. Tourism transport options within the region include self-drive, fly-drive, coach tours and scenic rail travel which are popular with the retiree or family markets. The retiree market in particular is expected to experience growth due to Australia's aging population and a corresponding increase in retirees who travel around Australia. Tourism benefits the Central West Queensland region's rural and regional businesses through expenditure on leisure activities and attractions, overnight stopovers and travel necessities (such as fuel and food). The region also benefits through expenditure from commercial visitors on accommodation, food, and vehicle and venue hire generated from conferences, meetings and other work activities.



The organically certified Blackall Saleyards

Transport objectives

Objective 1.1: A transport network that optimises supply chain productivity by supporting the efficient movement of goods to, from and within the region.

The development of efficient transport links between producers, manufacturers and customers is important to the future growth of the region's economy. Improvements to transport infrastructure increases the productivity and reliability of the network, which fosters a more efficient freight network. The freight network needs to be planned holistically to optimise the supply chain across and between all freight modes.

Objective 1.2: A transport network that provides access to the region's tourism destinations.

A well-integrated and safe transport network is required to support the tourism industry and attract more tourists to the region. Improvements to the ease of access and connectivity on the transport network will increase the appeal of the region, particularly to the self-drive tourism market. Further, well maintained and managed transport infrastructure will increase the overall experience for not only road users, but also visitors travelling by bus, coach, rail and air, and recreational cyclists.

Objective 1.3: The integration of land use and transport planning to support the long-term economic growth of the Central West Queensland region.

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 development and supply chain objectives to optimise the region's long-term economic viability.



Four wheel drive towing caravan on the Landsborough Highway near Blackall

Actions

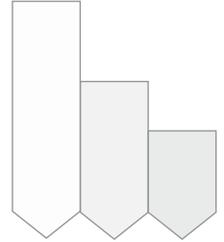
PRIORITY 1: ECONOMIC DEVELOPMENT

OBJECTIVES

Objective 1.1: A transport network that optimises supply chain productivity by supporting the efficient movement of goods to, from and within the region.

Objective 1.2: A transport network that provides access to the region's tourism destinations.

Objective 1.3: The integration of land use and transport planning to support the long-term economic growth of the Central West Queensland region.



Actions – short-term	1.1	1.2	1.3
<p>A1.01 Regional Freight Plan Develop an integrated multi-modal freight plan to identify and prioritise freight network improvements to support supply chain efficiency across the region. The plan will consider current and emerging freight demands including freight links for the agriculture industry and future freight requirements for the Galilee Basin and Diamantina Minerals Province; access and movement requirements for oversize over-mass and high productivity vehicles; first and last mile links; and the role of the of the region's airports, rail terminals, and key freight routes.</p>	✓		
<p>A1.02 Tourism transport needs and opportunities In partnership with statewide and local organisations, undertake multi-modal planning required to implement the <i>Queensland Tourism and Transport Strategy</i>. This may include identifying priorities to enhance the total visitor experience in the region by undertaking a multi-modal transport analysis to identify the transport needs and opportunities for tourists traveling around the region as well as to and within key tourism destinations such as Birdsville, Longreach, Barcardine, Winton, Blackall and Boulia.</p>		✓	
<p>A1.03 Supporting active transport tourism Provide advice to local government, other state government agencies and tourism bodies to support planning, design and construction of rail trails and tourism routes in the region to support active transport tourism. Suitable locations for developing walking, off-road cycling or horse riding trails could include sections along the disbanded Winton to Hughenden and Blackall to Yaraka branch rail lines.</p>		✓	✓

CASE STUDY: Smart Central West Digital Strategy

The Remote Area Planning and Development Board (RAPAD) have developed a strategy for the coordinated implementation of digital technologies to benefit the Central West Queensland region by ‘shrinking vast distances and enabling better services.’The strategy includes a range of initiatives targeted at aiding growth in tourism, agriculture and entrepreneurship in the region.⁷¹

The tourism industry is expected to benefit from the implementation of the strategy through the collection of data depicting tourist itineraries and behaviours through wireless devices, data sharing and opening up better connectivity for the region's visitors. An improved understanding of tourism visitation and the routes taken can provide valuable information in the management of the transport network. Better access to online content will also provide access to up-to-date information to travel conditions.

For the region's residents and businesses, the strategy offers opportunity to overcome the challenge of distance through ecommerce platforms and collaboration initiatives to link likeminded residents in the development of tourism products such as tourist trails across the region as well as link to ideas and collaborate and share ideas with regions with similar characteristics.

⁷¹ Remote Area Planning and Development Board. (2016). *Smart Central West Digital Strategy*.

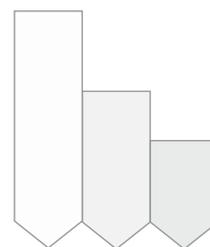
PRIORITY 1: ECONOMIC DEVELOPMENT (cont.)

OBJECTIVES

Objective 1.1: A transport network that optimises supply chain productivity by supporting the efficient movement of goods to, from and within the region.

Objective 1.2: A transport network that provides access to the region's tourism destinations.

Objective 1.3: The integration of land use and transport planning to support the long-term economic growth of the Central West Queensland region.



Actions – medium/long-term	1.1	1.2	1.3
<p>A1.04 Corridor, route and link planning Review and update link planning for the state strategic, regional and district road network in the region. Identify the key corridors and routes which require inter-regional planning and coordination to enhance the transport network connectivity to the region, including enhanced north-south connections.</p>	✓	✓	✓
<p>A1.05 Accessing mineral resource areas Work with industry and local governments to maintain transport connection routes for key resource areas and plan for the impact of current and potential future mining ventures, including future transport requirements, to manage network impacts and maximise economic development opportunities. Studies could include supporting future exploration of rare earth minerals (Diamantina Minerals Province), potential coal mining in the southern Galilee Basin, and ongoing access to oil and gas extraction in the Cooper Basin.</p>	✓		
<p>A1.06 Freight modelling Progressively develop, update and enhance a strategic freight model that can be used to identify, forecast and analyse multi-modal freight flows across the state.</p>	✓		
<p>A1.07 Freight data Develop strategies to improve the capture, storage and usability 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.</p>	✓		
<p>A1.08 Planning and investment frameworks Progress planning and investment frameworks to ensure that business cases for transport projects in the region demonstrate economic, environmental and social equity and feasibility, reflecting the benefits of investing in remote and regional transport projects.</p>	✓		✓

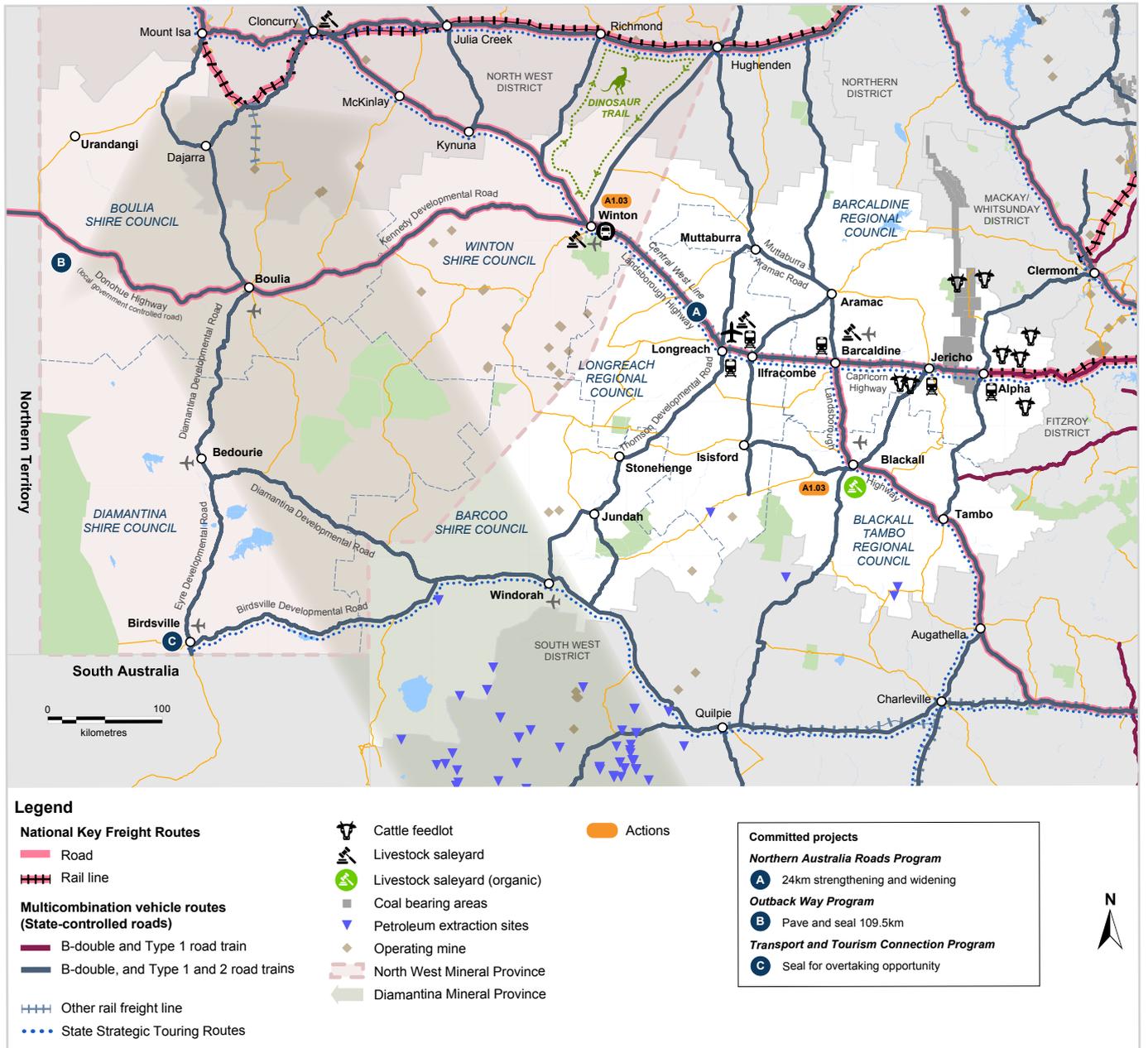


Figure 7: Priority 1 region map

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

4.2 Priority 2: Community

An accessible, affordable and integrated transport network that supports liveable and connected communities in the Central West Queensland region.

Priority 2 supports:

- the Transport Coordination Plan's objectives for 'community connectivity and environment' and 'customer experience and affordability'
- 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 regional plan's objectives to provide integrated transport services and facilities to meet the economic, social, health and environmental needs of the region and to improve the services, safety, efficiency and patronage of public transport systems.

Liveability is shaped by a combination of factors such as the amenity of the natural and built environments, economic prosperity, social stability and equity, accessibility, educational opportunity as well as cultural, entertainment and recreational possibilities. The affordability of essential goods and services and employment are basic factors influencing liveability, as is affordable transport to other centres to access higher order goods and services.

The Central West Queensland region's population is geographically dispersed with many living in small towns where only basic goods and services are available. Access to higher order goods and services requires travel to larger centres, often across considerable distances. The cost of freight is a contributor to the cost of living due to the significant distances goods travel to reach the Central West Queensland region. Continued and improved access to employment, goods and services are crucial in sustaining these communities and providing opportunities to attract new residents.

Transport objectives

Objective 2.1: A transport system that improves social connectivity and provides reliable access to employment, education, services and recreational opportunities.

Liveability and lifestyle significantly impact on where individuals choose to live. Promoting liveability and the sustainable growth of the Central West through connectivity and accessibility within and to the region is vital. This could include providing at least one durable and robust link to all towns, and providing all members of the community with reliable access to essential goods and services, education and employment opportunities, and recreational facilities. Initiatives, such as investment in infrastructure and improved transport systems, which improve accessibility, could support the retention of residents that would otherwise seek employment and education outside of the region.

Objective 2.2: A transport system that caters for the diverse needs of the community.

The Central West is home to a diverse range of people with various transport needs. Maintaining and enhancing the existing transport infrastructure assists all users, regardless of age, mobility restrictions or socio-economic status, to travel safely and efficiently. The mobility decisions of residents and visitors are heavily dependent on the availability, affordability and reliability of transport networks and services, especially when travelling for long distances.

Actions

PRIORITY 2: COMMUNITY

OBJECTIVES

Objective 2.1: A transport system that improves social connectivity and provides reliable access to employment, education, services and recreational opportunities.

Objective 2.2: A transport system that caters for the diverse needs of the community.

Actions – short-term	2.1	2.2
<p>A2.01 Principal cycle network planning In collaboration with local governments, review and update the <i>Central Queensland Principal Cycle Network Plan</i> every five years and accompanying <i>Priority Route Maps</i> for the main population centres in the Central West region of Barcaldine, Aramac, Alpha, Blackall, Tambo, Boulia, Longreach and Winton every two years.</p>	✓	✓
<p>A2.02 Principal cycle network plan implementation Undertake planning to deliver the principal cycle network to support more cycling, more often on safe, direct and connected routes via:</p> <ul style="list-style-type: none"> ■ standalone options analysis and business case development for cycling infrastructure on highest priority routes. ■ explicit provision for cycling infrastructure as part of planning for other TMR funded projects on all principal routes, pursuant to the department's Cycle Infrastructure Policy. 	✓	✓
<p>A2.03 Long distance passenger transport services In collaboration with community and industry, explore the feasibility of improving long distance passenger services, including additional routes, scheduling and service integration to improve accessibility and connectivity (particularly east – west air transport links to Emerald and Rockhampton) from the Central West to key regional service centres. Where possible, opportunities to improve fare affordability should also be identified.</p>	✓	✓
<p>A2.04 Road improvement project planning Implement the region's road improvement prioritisation strategies through undertaking planning for the region's key road projects, in particular planning to have at least one sealed road access to every town in the Central West Queensland region to support the efficient, safe and reliable movements of people and freight. This includes undertaking business case development to complete paving and sealing on the Eyre Developmental Road (Bedourie to Birdsville) and Blackall-Jericho Road.</p>	✓	✓
<p>A2.05 Improved walkability and amenity Work with local governments to investigate opportunities to improve the pedestrian environment in town centres throughout the region to strengthen walkability and local amenity.</p>	✓	✓
<p>A2.06 Access for people with disabilities Improve the end-to-end journey for people with a disability by working in collaboration with key stakeholders to achieve the objectives of the <i>Disability Action Plan 2018–2022</i>.</p>	✓	✓
Actions – medium/long-term	2.1	2.2
<p>A2.07 Community based transport Support local government in identifying opportunities to improve access to transport services suited to their communities. This may include investigating new and existing shared transport services and community-based transport options, and how these may be supported through technology and tools that allow coordination between transport providers as well as the integration of end-to-end journey planning, booking and payment options.</p>	✓	✓
<p>A2.08 Technology Partner with local government through the Outback Regional Roads and Transport Group to identify facilitation requirements and responsibilities, network impacts, and potential benefits of cooperative and automated vehicles as well as low and zero emission vehicles in the region and inform strategic policy and planning. This work should align with <i>The Future is Electric – Queensland's Electric Vehicle Strategy</i>, and other relevant statewide strategies and plans, to ensure integration and connectivity.</p>	✓	✓

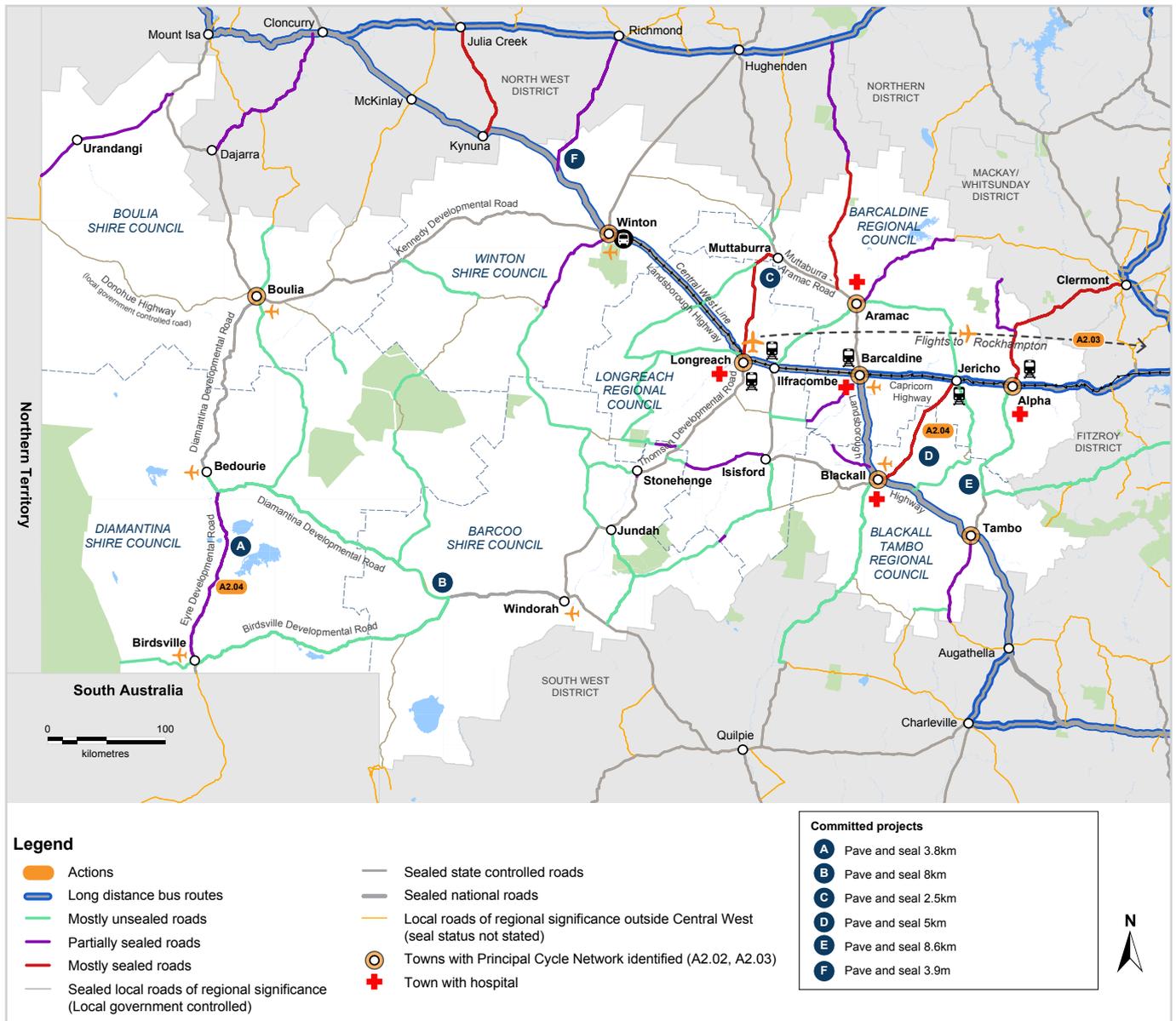


Figure 8: Priority 2 region map

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

4.3 Priority 3: Safety

A transport network that meets the needs of all users by addressing infrastructure and safety deficiencies, providing user information and improving interactions between business, residents and visitors.

Priority 3 supports:

- the Transport Coordination Plan's objective 'safety and security' where transport 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 regional planning objective to improve the services, safety, efficiency and patronage of public transport systems.

A safe transport network is needed to assist the region's residents, visitors and freight to reach intended destinations without harm. The Central West Queensland region's geographically disparate communities require travel across long distances, often with variable road conditions, exposing travellers to a range of safety risks. 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. Customers should feel safe using the transport system, and understand their role in ensuring the safety of themselves and other travellers.

Improving transport network safety can be achieved through a combination of improved infrastructure, information, communication technology and education. Examples of initiatives that support and encourage safety include rest areas to mitigate driver fatigue and improved education on the unique characteristics of driving on remote roads such as interaction with road trains and driving on unsealed roads.



Queensland Police Service's 'Stay on Track Outback' road safety initiative, Birdsville

Transport objectives

Objective 3.1: A transport network that allows users to travel safely and feel secure.

The identification, management and communication of transport safety risks and incidents is essential in developing a safe transport system. Upgrading and managing existing communications and transport infrastructure, particularly road infrastructure, can help reduce the number of crashes, injuries and fatalities in the region.

Objective 3.2: Safer driving behaviours through improved education and information.

The ability to send and receive up-to-date road condition information to users and promotion of safe driving behaviours through awareness programs creates a sense of accountability for everyone. Educational programs can empower residents, visitors and travellers to make informed, smart decisions and adhere to road and transport rules and conditions.

CASE STUDY: Cooperative Intelligent Transport Systems

Cooperative Intelligent Transport Systems (CITS) is technology that facilitates communication between vehicles with vehicle-to-vehicle systems and with roadside infrastructure via vehicle-to-infrastructure systems. CITS provides information to drivers regarding their immediate environment in real time.

Transport for NSW are currently trialling the technology with heavy vehicles in the Illawarra area through the Cooperative Intelligent Transport Initiative (CITI) providing heavy vehicles fitted with the technology to receive safety messages about upcoming hazards and potential crashes.⁷²

Messages include:

- intersection collision warning
- forward collision warning
- heavy braking ahead warning
- traffic signal phase information
- speed limit information.

Transport for NSW has also been trialling the technology to inform heavy vehicle drivers to receive instant information about distance and travel time to rest areas, the current availability of space and the facilities provided.



Oak Street, Barcaldine

⁷² Transport for NSW. (2016). www.roadsafety.transport.nsw.gov.au/research/roadsafetytechnology/cits/index.html.

Actions

PRIORITY 3: SAFETY

OBJECTIVES

Objective 3.1: A transport network that allows users to travel safely and feel secure.

Objective 3.2: Safer driving behaviours through improved education and information.



Actions – short-term	3.1	3.2
<p>A3.01 Tourism and road user education Identify and capitalise on opportunities to enhance and link tourism information with road user education through programs and campaigns that promote outback road safety.</p>	✓	✓
<p>A3.02 Real-time messaging Identify opportunities to increase the use of technology for signage, road condition monitoring, and the provision of real-time information on network closures, inclement weather and safety incidents.</p>	✓	✓
<p>A3.03 Road safety project planning Continue to identify, prioritise and nominate locations, links and networks for road safety treatments, as part of Safer Roads Sooner and Black Spot programs. Identify other opportunities such as investigations of the Landsborough Highway for sections which require intervention, safety assessments of the narrow sealed road network to identify priority sections, and undertake overtaking lane planning including on the Birdsville and Diamantina developmental roads.</p>	✓	
<p>A3.04 Improving mobile coverage Investigate potential solutions to improve mobile communication coverage across the region's transport network, for example, at recognised rest stops.</p>	✓	✓
<p>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 self-drive tourism routes. Ensure planning and provision of rest areas addresses potential safety risks associated with incompatibility or conflicts between trucks and recreational vehicles.</p>	✓	
Actions – medium/long-term		
<p>A3.06 Stock routes Continue to update and develop management plans for primary stock routes throughout the Central West Queensland region to improve road safety and the efficiency of agricultural practices.</p>	✓	
<p>A3.07 Cattle grids Continue to identify opportunities to remove cattle grids from the Central West Queensland region's road network through the fencing of roadside properties as opportunities arise. Where cattle grids cannot be removed, identify opportunities to replace or maintain existing cattle grids across the region.</p>	✓	

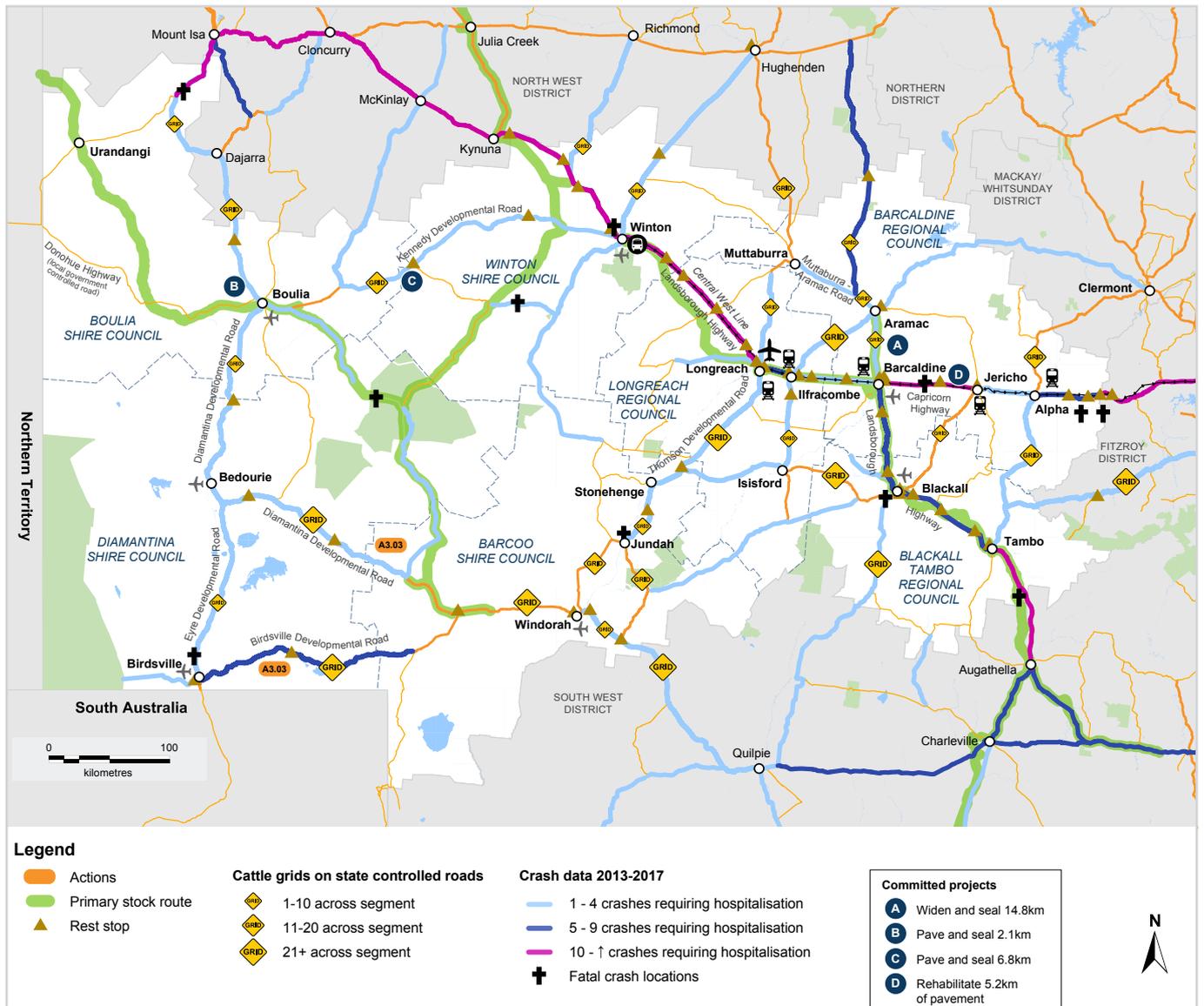


Figure 9: Priority 3 region map

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: Environment and sustainability

A sustainable and resilient transport network that provides access to and between the region's communities.

Priority 4 supports:

- the Transport Coordination Plan's objective 'environment and sustainability' where transport contributes to a cleaner, healthier and more liveable environment 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 regional planning objectives to provide integrated transport services and facilities to meet the economic, social, health and environmental needs of the region.

Sustainability is an important consideration when meeting the region's transport needs, to ensure future generations or the region's historical and natural values are not compromised. Protecting natural values is important to the community and the ongoing success of the region's tourism industry. Sustainable development and operation of the transport system supports both liveability and the economy. The effective multi-modal prioritisation, coordination and management of transport infrastructure and operations contribute to achieving a sustainable, efficient and connected transport network.

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. 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.

Extreme weather can lead to road closures, infrastructure damage and delays across the region. The impacts cover not only the period which the road is closed due to inundation or damage, but the time it takes for road or bridge inspection prior to reopening, restrictions until damage is addressed and then 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.



Diamantina Shire Council environmental signage near Birdsville

Transport objectives

Objective 4.1: A safe, reliable and resilient transport network during weather events.

The closure of roads, rail tracks and airports resulting from weather events has significant impacts on transport network users.

Network closures are not only inconvenient, but can also be unsafe. Reliable access is required to support emergency connections and enable safe network use. Innovative technology can be utilised to advise customers of road closures which can empower them to make safe and intelligent mobility decisions.



Burke River, Boulia

Actions

PRIORITY 4: ENVIRONMENT AND SUSTAINABILITY

OBJECTIVES

Objective 4.1: A safe, reliable and resilient transport network during weather events.

Actions – short-term	4.1
<p>A4.01 Accessibility and safety during weather events</p> <p>Continue to undertake critical transport network response planning and support local and district disaster management groups to improve accessibility and safety during and following major inclement weather events, including the reliability of communication systems along key links.</p>	✓
<p>A4.02 Flooding resilience</p> <p>Continue to undertake road network flooding investigations across the region to identify key flooding locations and understand requirements and improvements needed to reduce the impact of flooding and improve the resilience of the network. Areas for investigation include:</p> <ul style="list-style-type: none"> ■ Bullock Creek on Muttaborra–Aramac Road ■ Belyando River on Capricorn Highway (Emerald–Alpha) ■ Cuttaburra Crossing on Eyre Developmental Road (Bedourie–Birdsville). 	✓
Actions – medium/long-term	
<p>A4.03 Climate change</p> <p>Consider the effect of climate change in the planning of the transport network in the Central West Queensland region, through long-term scenario modelling and analysis.</p>	✓

CASE STUDY: Flinders Highway Flood Study⁷³ — a route approach to addressing flood immunity

Northern Queensland's Flinders Highway runs east west across 770 kilometres connecting Cloncurry, and towns along its route, to Townsville. The Flinders Highway has a history of poor flood performance with long and frequent road closures during the wet season. Although previous studies and infrastructure projects had addressed a handful of individual crossings, there was no means of assessing overall flood immunity or impacts for the overall route.

The *Flinders Highway Flood Study* assessed the entire route in terms of flood immunity and impacts on the efficient movement of goods and services and providing more reliable access for tourists and the community. A tool was developed to inform decision making through a holistic assessment of highway flooding and its impacts by combining hydrologic, hydraulic and economic assessments and accounting for simultaneous closures at multiple crossings during storm events. The tool allows Transport and Main Roads to prioritise investment in structures that provide the greatest economic benefit by improving the overall flood immunity with a consistent comparison of upgrade options.

⁷³ Department of Transport and Main Roads. (2016). *Flinders Highway Flood Study*

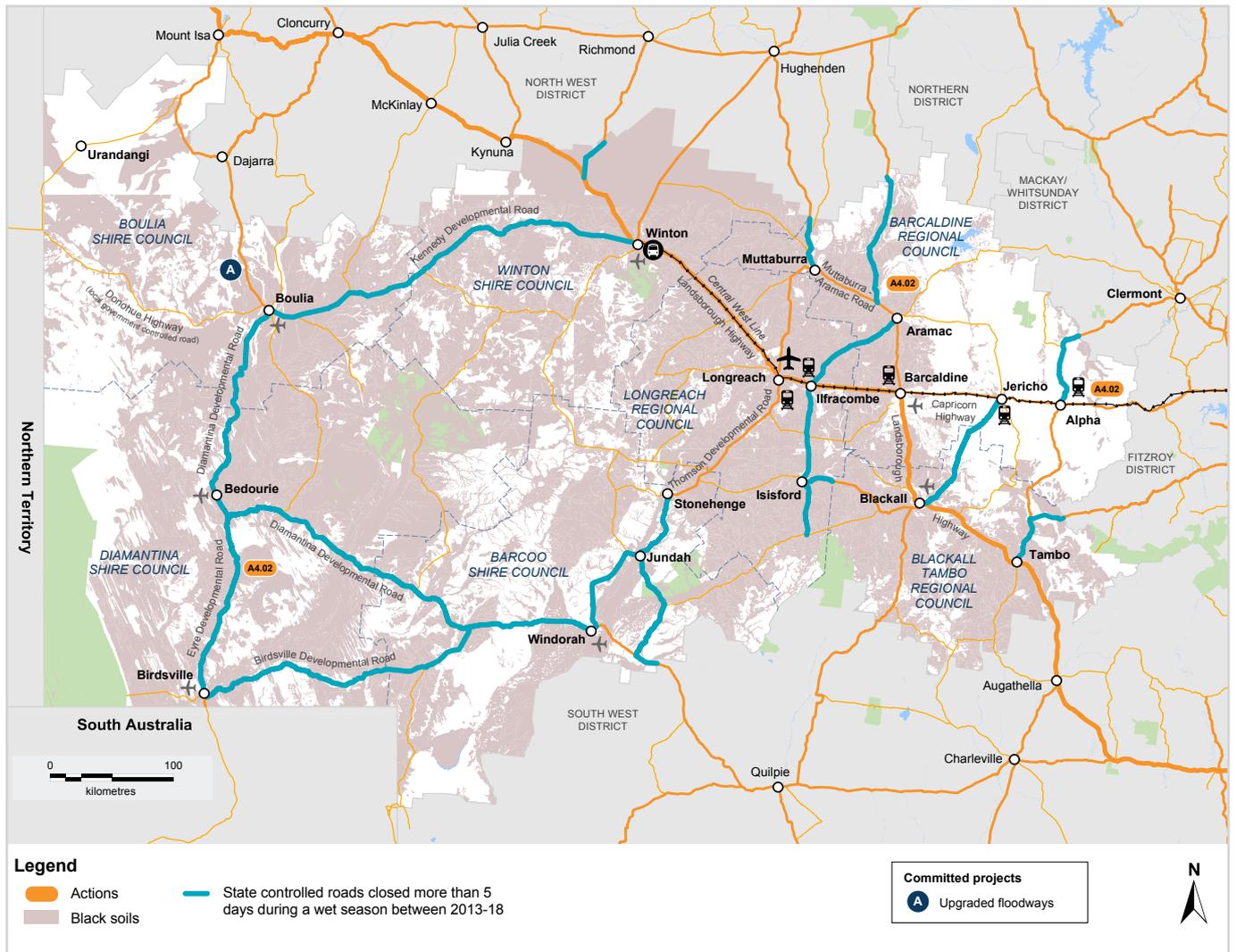


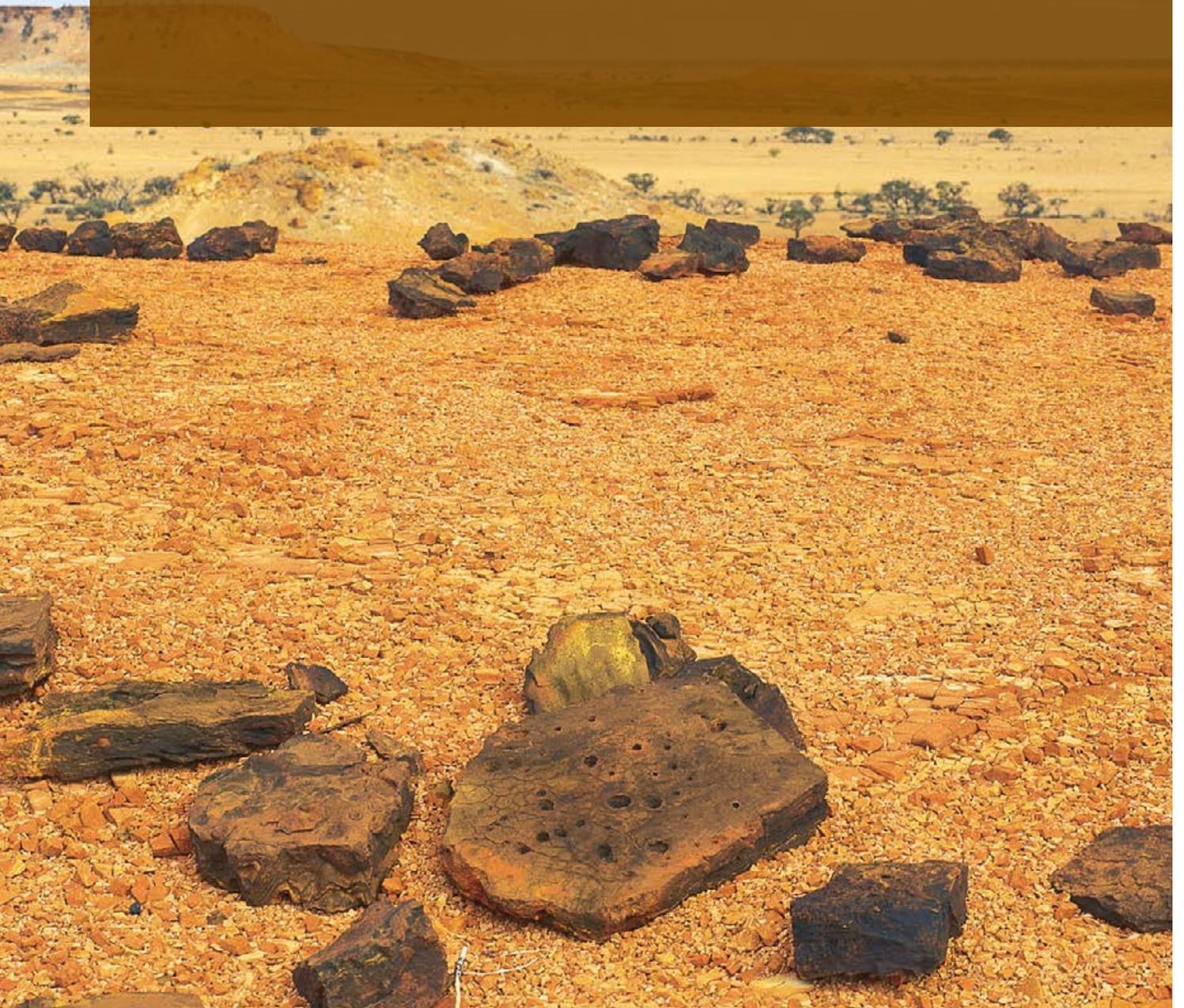
Figure 10: Priority 4 region map

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



Traditional Aboriginal cultural stone arrangements (Bora Rings), Winton Shire

5. Implementation



5.1 Taking action

Delivering the *Central West Queensland 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 11 shows the importance of the 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 this 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 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.

■ Delivering the *Transport System Planning Program (TSPP)*

The TSPP is a rolling program of planning projects across all modes and all regions with projects ranging from network to link level and investment proposal activities. Demonstrated alignment with Regional Transport Plans is essential for planning projects to be eligible for funding under the TSPP.

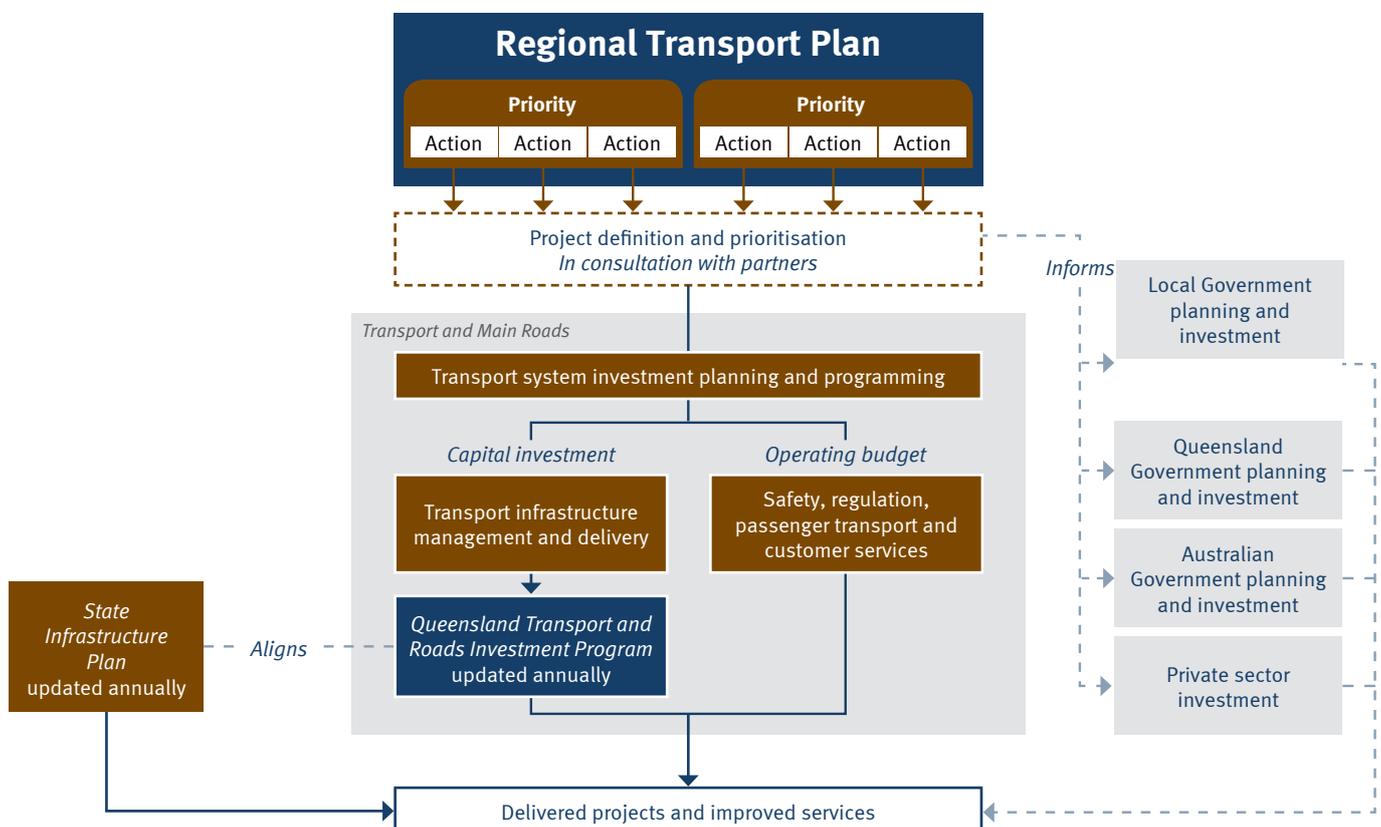


Figure 11: Regional Transport Plans are a critical step in Transport and Main Roads investment lifecycle

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 *Central West Queensland 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 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 the implementing of an initiative or action
- supporting and encouraging private sector investment through project facilitation to accelerate action delivery and realise economic or commercial benefits, for example, through investment facilitation 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). Moving forward RRTGs will 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. This includes reviewing and identifying specific economic drivers, opportunities and challenges as they change over time to inform project identification and prioritisation.

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



Barcaldine Shire Hall, Barcaldine

5.3 Measuring success

Overall, the effectiveness of this Plan within the region will be measured against the measures of success outlined for each priority (Figure 12). These align to the Transport and Main Roads' *Transport Coordination Plan 2017–2027* 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.

PRIORITY 1: ECONOMIC DEVELOPMENT

MEASURE OF SUCCESS	PROPOSED INDICATOR	SOURCE
Freight productivity improves.	Heavy vehicle operating costs.	Transport and Main Roads
Transport supports the region's tourism economy.	Percentage variation from posted speed limit on state-controlled roads. [^]	Transport and Main Roads

PRIORITY 2: COMMUNITY

MEASURE OF SUCCESS	PROPOSED INDICATOR	SOURCE
Greater access and connectivity to places, services and information.	Kilometres of unsealed road upgrade to sealed road standard.	Transport and Main Roads
	Proportion of people choosing to walk, cycle and take public transport to work. ^{^^}	Australian Bureau of Statistics
Reduced frequency and duration of unplanned closures due to incidents.	Frequency and duration of unplanned closures on the state-controlled transport network (other than flooding).	Transport and Main Roads

PRIORITY 3: SAFETY

MEASURE OF SUCCESS	PROPOSED INDICATOR	SOURCE
Reduction in transport-related incidents, crashes, injuries and fatalities.	Number of road crashes resulting in fatalities or hospitalisation.	Transport and Main Roads
	Road crashes (resulting in fatalities and hospitalisation casualties) per 100 million vehicles kilometres travelled on state-controlled roads.	Transport and Main Roads
	Road crashes (resulting in fatalities and hospitalisation casualties) per kilometre on state-controlled roads.	Transport and Main Roads
Increase accessibility to telecommunication and digital information.	Proportion of the state-controlled transport network (rail and road) with mobile reception coverage.	Transport and Main Roads

PRIORITY 4: ENVIRONMENT AND SUSTAINABILITY

MEASURE OF SUCCESS	PROPOSED INDICATOR	SOURCE
Reduced frequency and duration of unplanned closures due to flooding.	Frequency and duration of unplanned closures on the state-controlled transport network due to flooding.	Transport and Main Roads

Figure 12: Measures of success and proposed indicators

[^] Proxy measure for improving reliability to access the region's tourism destinations via road.

^{^^} Proxy measure for a more accessible transport system through an increased use of a greater range of transport options.

5.4 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 this 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.

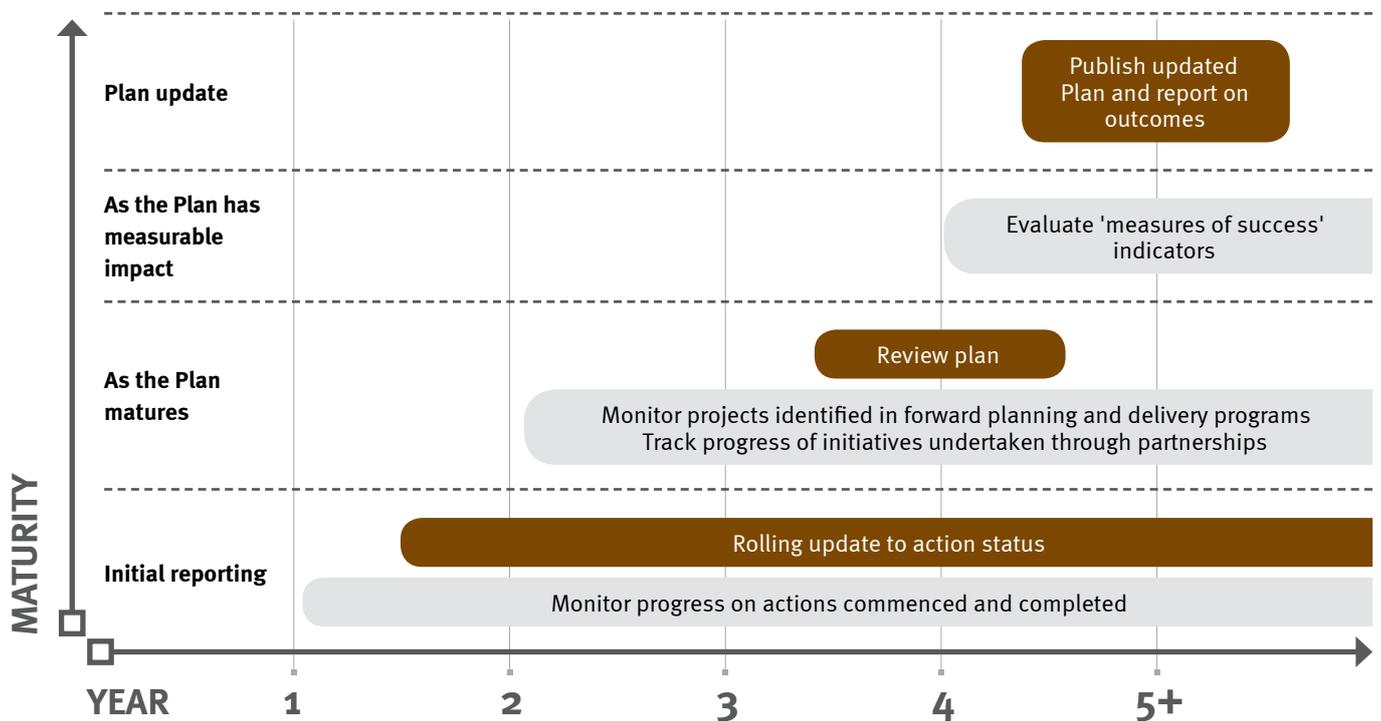


Figure 13: Monitoring, reporting and review as the Plan matures

Further information

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



Paving and sealing Diamantina Developmental Road (Bedourie - Boulia), May 2017



PHOTO CREDITS

Front cover, The Big Red Bash (music festival), Birdsville (background), Tourism and Events Queensland; Memorial Park, Blackall (inset, middle), Mal Greig; Thomson River Cruises, Longreach (inset, right), Mal Greig.

Inside cover image: Water tower at sunset, Windorah, Tourism and Events Queensland.

Page 4, Simpson Desert near Birdsville, Tourism and Events Queensland.

Page 10, Australian Stockman's Hall of Fame, Longreach, Mal Greig.

Page 12, Public art, Windorah, Mal Greig.

Page 16, Birdsville Races, Birdsville, Barry Shipway.

Page 19, Australian Workers Heritage Centre, Barcaldine, Mal Greig; Windorah Outback Shop, Windorah, Mal Greig.

Page 20, Blackall Woolscour, Mal Greig; Boulia Shire Council town information signage, Boulia, Mal Greig.

Page 21, Carcory Homestead Ruins near Birdsville, Mal Greig; Australian Stockman's Hall of Fame, Longreach, Mal Greig.

Page 22, Elderslie Street, Winton, Tourism and Events Queensland.

Page 23, Traditional Aboriginal dance at the Outback Festival, Winton, Tourism and Events Queensland.

Page 25, The view from Dinosaur Drive near Winton, Tourism and Events Queensland.

Page 27, Tourist coaches near Birdsville, Barry Shipway.

Page 36, Sunset near Winton, Tourism and Events Queensland.

Page 38, The Australian Age of Dinosaurs Museum of Natural History near Winton, Tourism and Events Queensland.

Page 39, The Big Red Bash (music festival) near Birdsville, Tourism and Events Queensland.

Page 41, Unsealed road, Diamantina Shire, Mal Greig.

Page 43, Tree of Knowledge, Barcaldine, Mal Greig.

Page 46, Sunset at Big Red (sand dune) near Birdsville, Mal Greig.

Page 58, Queensland Police Service's 'Stay on Track Outback' road safety initiative, Birdsville, Mal Greig.

Page 62, Diamantina Shire Council environmental signage near Birdsville, Barry Shipway.

Page 63, Burke River, Boulia, Mal Greig.

Page 66, Traditional Aboriginal cultural stone arrangements (Bora Rings), Winton Shire, Tourism and Events Queensland.

Page 69, Barcaldine Shire Hall, Barcaldine, Mal Greig.

