

DARLING DOWNS

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 contribution from our local government partners to develop this plan.

- Goondiwindi Regional Council
- Lockyer Valley Regional Council
- Southern Downs Regional Council
- Toowoomba Regional Council
- Western Downs Regional Council.

Cover images: Toowoomba Second Range Crossing (background); Warwick Town Hall (inset, left); Gatton-Helidon Road, Lockyer Valley (inset, centre); Toowoomba Interchange, Toowoomba (inset, right).

Inside cover image: Clock tower, Toowoomba.



CONTENTS

1. Introduction	4
1.1 A shared direction for transport	6
1.2 What is a Regional Transport Plan	6
1.3 Strategic alignment	7
1.4 Alignment with the <i>State Infrastructure Plan</i>	9
1.5 Alignment with the <i>Transport Coordination Plan</i>	9
1.6 Alignment with the <i>State Planning Policy</i>	9
1.7 Alignment with regional planning	10
1.8 Achievements to date	12
1.9 Developing Regional Transport Plans	14
2. The Darling Downs region	18
2.1 Region overview	20
2.2 Transport network	24
3. Goals, challenges and opportunities	34
3.1 Goals	36
3.2 Challenges	37
3.3 Opportunities	40
4. Priorities and actions	44
4.1 Priority 1: Supporting economic growth	48
4.2 Priority 2: Enhancing liveability	55
4.3 Priority 3: A safer transport system	61
4.4 Priority 4: Network resilience	66
5. Implementation	70
5.1 Taking action	72
5.2 Delivering in partnership	73
5.3 Measuring success	74
5.4 Monitoring and review	76



Logging truck travelling in Chinchilla

1. Introduction



1.1 A shared direction for transport

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

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

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

The Darling Downs region is home to more than 289,400 people and includes the local government areas of Goondiwindi, Lockyer Valley, Southern Downs, Toowoomba and Western Downs.¹

1.2 What is a Regional Transport Plan

The purpose of the *Darling Downs 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 the 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).

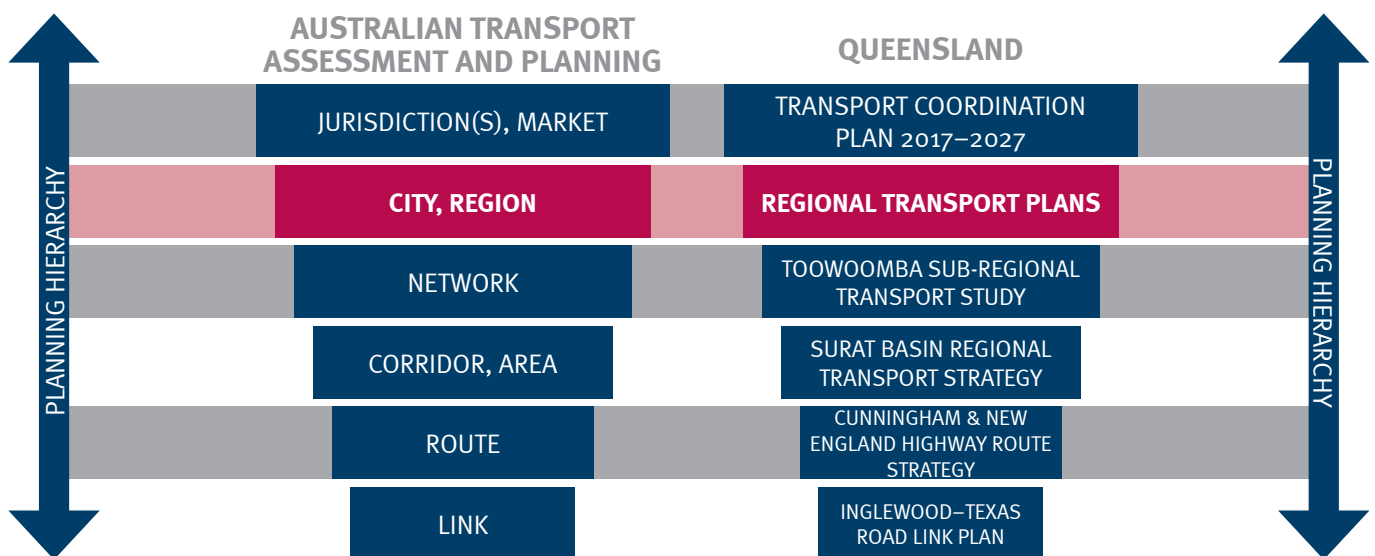


Figure 1: Examples of how Queensland responds to the Australian Transport Assessment and Planning hierarchy

¹ Australian Bureau of Statistics. (2019). *Regional Population Growth, Australia*. (Catalogue 3218.0, 2018 edition).

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

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

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 aligns with:

- *State Infrastructure Plan*
- *State Planning Policy*
- *Darling Downs Regional Plan 2013*
- *South East Queensland Regional Plan 2017 (ShapingSEQ)*
- local government land use, transport plans and strategies
- economic development strategies
- the Australian Government's *Australian Infrastructure Plan* (prepared by Infrastructure Australia).

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

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

Key planning documents include:

- *Transport Coordination Plan 2017–2027*
- *Queensland Transport Strategy (draft)*
- *Transport and Main Roads Strategic Plan 2019–2023*
- *Safer Roads, Safer Queensland: Queensland's Road Safety Strategy 2015–2021*
- *Queensland Freight Strategy*
- *Queensland Cycling Strategy 2017–2027*
- *Queensland Walking Strategy 2019–2029*
- *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 provides 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 Darling Downs 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 means for customers, the community, the economy and the environment.

1.6 Alignment with the *State Planning Policy*

The *State Planning Policy 2017* 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 Toowoomba (formerly Brisbane West) Wellcamp Airport and Army Aviation Centre Oakey as strategic airports.

1.7 Alignment with regional planning

The Department of State Development, Manufacturing, Infrastructure and Planning has authority over two relevant statutory regional plans which apply to local governments across the region. These are:

- *South East Queensland Regional Plan 2017 (ShapingSEQ)*
- *Darling Downs Regional Plan 2013.*

ShapingSEQ includes the local government areas of Lockyer Valley and Toowoomba's urban area (Figure 2). Darling Downs Regional Plan covers the local government areas of Goondiwindi, Southern Downs, Toowoomba and Western Downs.

Collectively, this Plan and the regional plans will work together towards achieving shared goals and objectives for transport through complementary land use and transport initiatives that:

- sustainably accommodate a growing population
- contribute to developing a globally competitive economic powerhouse, including the protection of agricultural land while supporting the co-existence of other economic opportunities
- help move people, products and information efficiently
- promote ecological and social sustainability, including certainty for the future of towns
- support living in better designed communities.

Relationship with *ShapingSEQ*

The *Darling Downs Regional Transport Plan* aligns with, and advances, the strategic intent of *ShapingSEQ* for the urban area of Toowoomba and the Lockyer Valley local government area.

One of *ShapingSEQ*'s goals for South East Queensland is to have more complete and interconnected communities supported by a multi-modal and integrated regional transport system. This goal is advanced by the *Darling Downs Regional Transport Plan* which establishes the strategic transport planning framework for the development of a single integrated network accessible to everyone.

To achieve this, this plan sets priorities and objectives which align with the regional plan's strategies for planning and coordination of regional infrastructure networks and services that enable efficient and sustainable development, economic growth and social benefits throughout the region and beyond. This plan also recognises the importance of planning for and maintaining strong inter-regional connectivity to major centres, economic hubs, and strategic infrastructure including intermodal facilities and ports.

In addition to strategic policy alignment, the *Darling Downs Regional Transport Plan* also supports *ShapingSEQ*'s sub-regional outcomes for 'prosper', 'grow' and 'connect' in the western sub-region. Specifically, the plan seeks to support the growth of the Western Gateway Regional Economic Cluster within the urban area of Toowoomba, through a variety of actions including the preparation of transport area and network studies to be delivered in the short term. These and other investigations will also consider the network implications from the proposed residential growth areas identified in the regional plan.

The key to maintaining alignment of planning objectives and actions in this plan and the regional plans will be a commitment to ongoing stakeholder collaboration during implementation of all plans.

Darling Downs RTP area

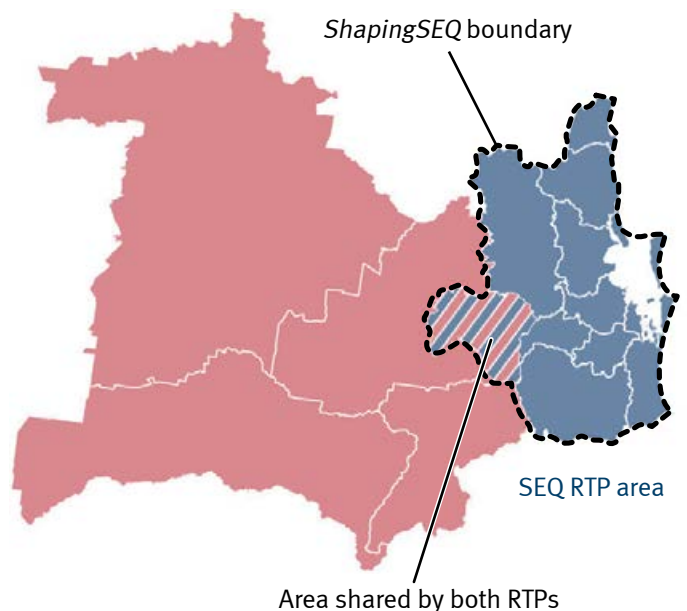


Figure 2: Regional planning boundaries

Other regionally significant plans and initiatives

Statutory regional plans are part of a suite of policies and legislative instruments that guide land use planning and development. Other regionally specific plans that have informed this Regional Transport Plan include:

- Department of State Development, Manufacturing, Infrastructure and Planning's Regional priorities and economic development initiatives (as at 10 August 2017)

- Regional Development Australia's *Darling Downs Regional Roadmap 2016–2020* and *Darling Downs and South West Economic and Social Development Strategy* (April 2012)
- Australian Government Department of Education, Employment and Workforce Relations' *Regional Education, Skills and Jobs Plan: Queensland – Darling Downs 2012–2014* (July 2013).

SEQ City Deals

The Queensland Government is working with the Australian Government and the SEQ Council of Mayors to develop an SEQ City Deals strategy. This strategy will provide an agreed prioritisation, governance and funding framework for delivering an SEQ City Deal.

An SEQ City Deal will advance the objectives and key policies in a range of strategic land use and infrastructure plans including *ShapingSEQ*, the *State Infrastructure Plan* and TMR's Regional Transport Plans.

While the strategic direction and objectives of the *South East Queensland Regional Transport Plans* will be

instrumental in shaping an SEQ City Deal, the *Darling Downs Regional Transport Plan* will also play a key role due to its coverage of the urban area of Toowoomba and the Lockyer Valley.

This plan's goals and priorities reinforce the importance of this area's role in facilitating economic trade and movement of goods and produce between both regions; common social aspirations highlight the growing importance of inter-regional collaboration and coordinated planning and decision-making.



Clifton Train Station

1.8 Achievements to date

Transport and Main Roads has reflected on the transport principles outlined in the regional plans that apply to the Darling Downs region, along with other strategic direction setting documents, and delivered the following transport network improvements in the region:

Toowoomba Second Range Crossing

- Toowoomba Second Range Crossing providing a 41 km bypass route to the north of Toowoomba, running from the Warrego Highway at Helidon to the Gore Highway at Athol via Charlton, jointly funded by the Australian Government and Queensland Government.

Roads

- Construction of a roundabout at the New England Highway and Stanthorpe Connection Road southern intersection.
- Safety improvements on the Warrego Highway at various intersections and accesses on the western and eastern outskirts of Dalby, as part of the Warrego Highway Upgrade Program, jointly funded by the Australian Government and Queensland Government.
- Construction of various overtaking lanes on the Warrego Highway between Dalby and Miles, as part of the Warrego Highway Upgrade Program, jointly funded by the Australian Government and Queensland Government.
- Packages 2, 3 and 5 of the Warrego Highway (Oakey – Miles) safety upgrades, which included six intersection upgrades, road widening in some sections, and safety works such as removal of roadside hazards and culvert drops, as part of the Warrego Highway Upgrade Program, jointly funded by the Australian Government and Queensland Government.
- Carroll Creek culvert replacement - a \$4.9 million project to replace the culverts at the site west of Yuleba to improve productivity for road freight operators. Construction began in November 2018 and was completed in May 2019. The project was funded through savings realised from completed WHUP projects.
- Drillham - Palardo upgrade to rehabilitate and strengthen the road surface as well as widen sections.
- A \$13 million project to widen narrow sections of the highway to a safe standard for heavy vehicles. Construction started in May 2018 and was completed in March 2019.
- Miles western access upgrade a \$11.9 million project to widen and rehabilitate the highway through the town and on the western outskirts. Construction started in May 2018 and was completed in October 2018.

- Duplication of the Warrego Highway, from two to four lanes, between Charlton and Kingsthorpe, Toowoomba, as part of the Warrego Highway Upgrade Program, jointly funded by the Australian Government and Queensland Government.
- Safety works on the New England Highway between Warwick and Wallangarra, as part of the National Highway Upgrade Program, jointly funded by the Australian Government and Queensland Government.
- Construction of two overtaking lanes on the New England Highway, between Yarraman and Toowoomba, jointly funded by the Australian Government and Queensland Government.
- Construction of eight overtaking lanes on the Warrego Highway, between Oakey and Dalby, jointly funded by the Australian Government and Queensland Government.

Public transport

- Implementation of the new Toowoomba urban bus network increasing route frequencies, span of hours, service coverage and introduction of Sunday services.
- Rerouting of three urban bus services in Warwick to improve operational efficiency and safety.

Active transport

In collaboration with local governments:

- *Downs South West Principal Cycle Network Plan.*
- Priority Route Maps for Miles, Chinchilla, Dalby, Goondiwindi, Oakey, Pittsworth, Toowoomba, Gatton, Laidley, Warwick and Stanthorpe.
- Grant projects for Toowoomba including the City Golf Club Shared Path, McLean Street Shared Path Stage 2 and the Glen Aplin Shared Path Upgrade
- Grant projects for Warwick including Park Road Shared Use Bridge and Pratten Street Cycle Lanes.

Bridges

- Jingi Jingi Creek bridge upgrade a \$10.6 million project to replace the deteriorated culverts and build a new concrete bridge at Jingi Jingi Creek.
- Replacement of bridges over Braemar Creek on Dalby–Kogan Road and Bum Bum Creek on the New England Highway.
- Replacement of the Kogan Creek Bridge in Kogan on the Dalby-Kogan Road, as part of the Bridge Renewal Program, jointly funded by the Australian Government and Queensland Government.



Toowoomba Second Range Crossing

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 funds are prioritised to meet regional needs and customer expectations
- by promoting consideration of non-infrastructure solutions for regional priorities which are often more cost effective than building new infrastructure
- by helping to identify and align cross-agency priorities and actions to promote efficient and coordinated planning and investment.

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

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 3.

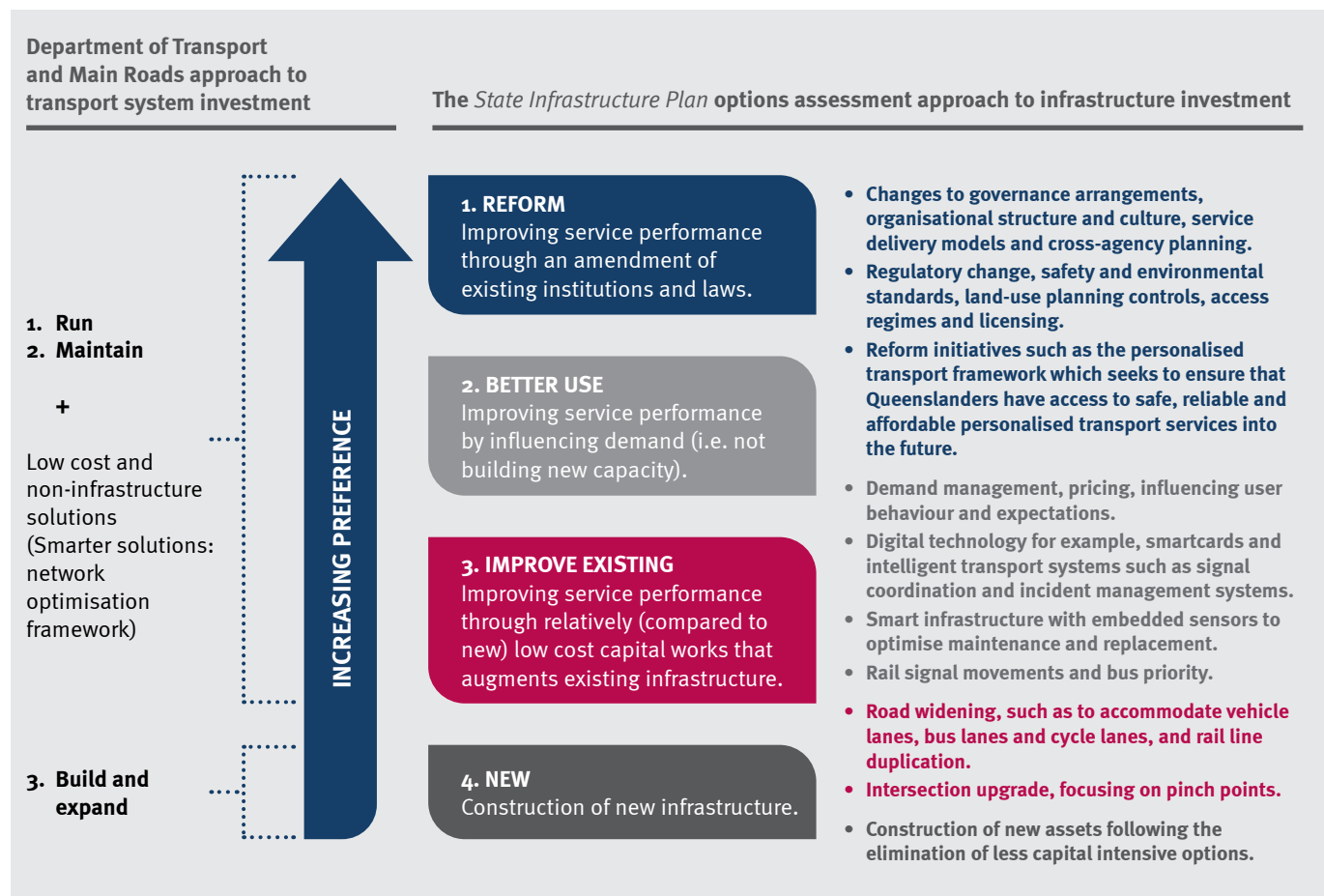
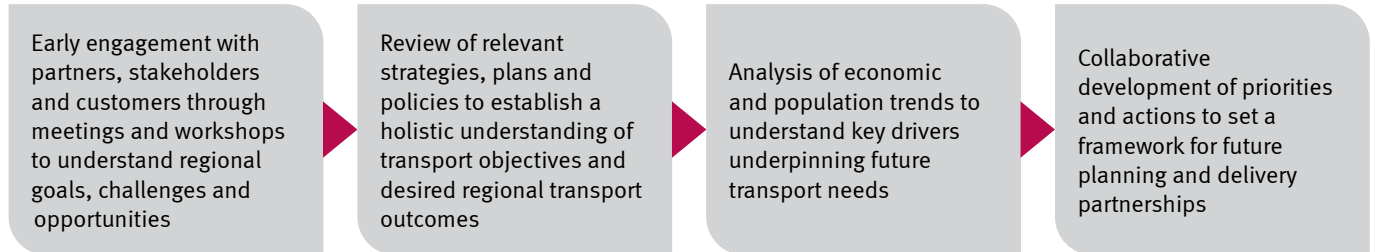


Figure 3: Alignment between the departmental and government approaches to infrastructure investment

Process

The *Darling Downs 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.



Condamine River, Warwick

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.

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, mining, 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:

- opportunities to improve efficiencies across the freight rail and road networks
- last-mile accessibility to freight generators, particularly agriculture and animal husbandry
- opportunities to streamline freight regulations
- ensuring integration between economic, land use and transport planning
- improving town safety and amenity by managing heavy vehicle movement through towns
- scope to improve passenger transport options, other than private vehicles
- transport system resilience and responsiveness to weather events, including floods and drought
- leveraging technology and innovation for real-time data and transport information
- limiting emissions from land transport
- the safety of people travelling across a vast region.

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

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.

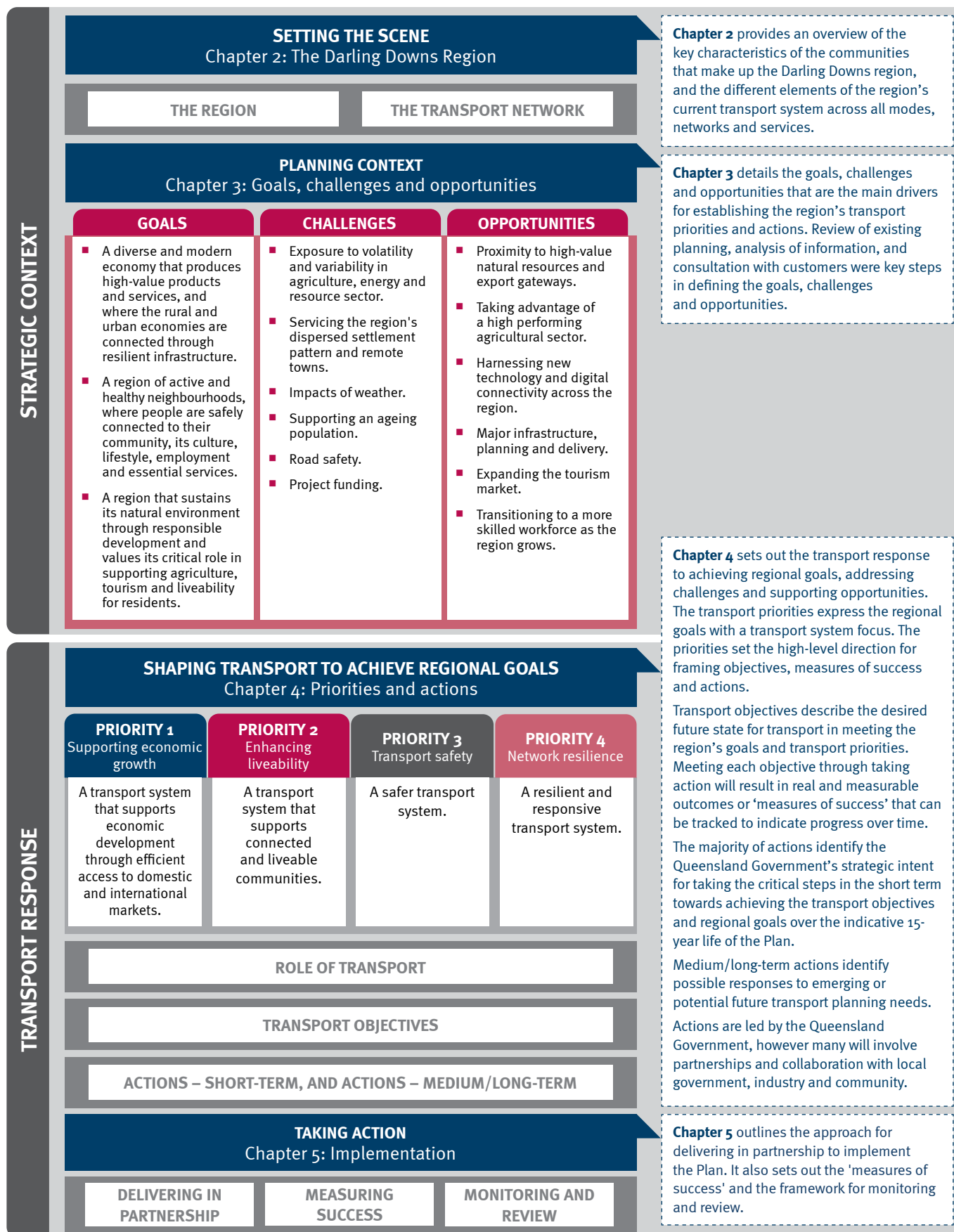
- **Chapter 1** introduces the purpose, scope and strategic alignment of the Regional Transport Plan.
- **Chapter 2** provides an overview of the region's community, economy and transport system.
- **Chapter 3** describes the region's goals, challenges and opportunities and their relationship to transport.
- **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.



College View, Warrego Highway, Lockyer Valley

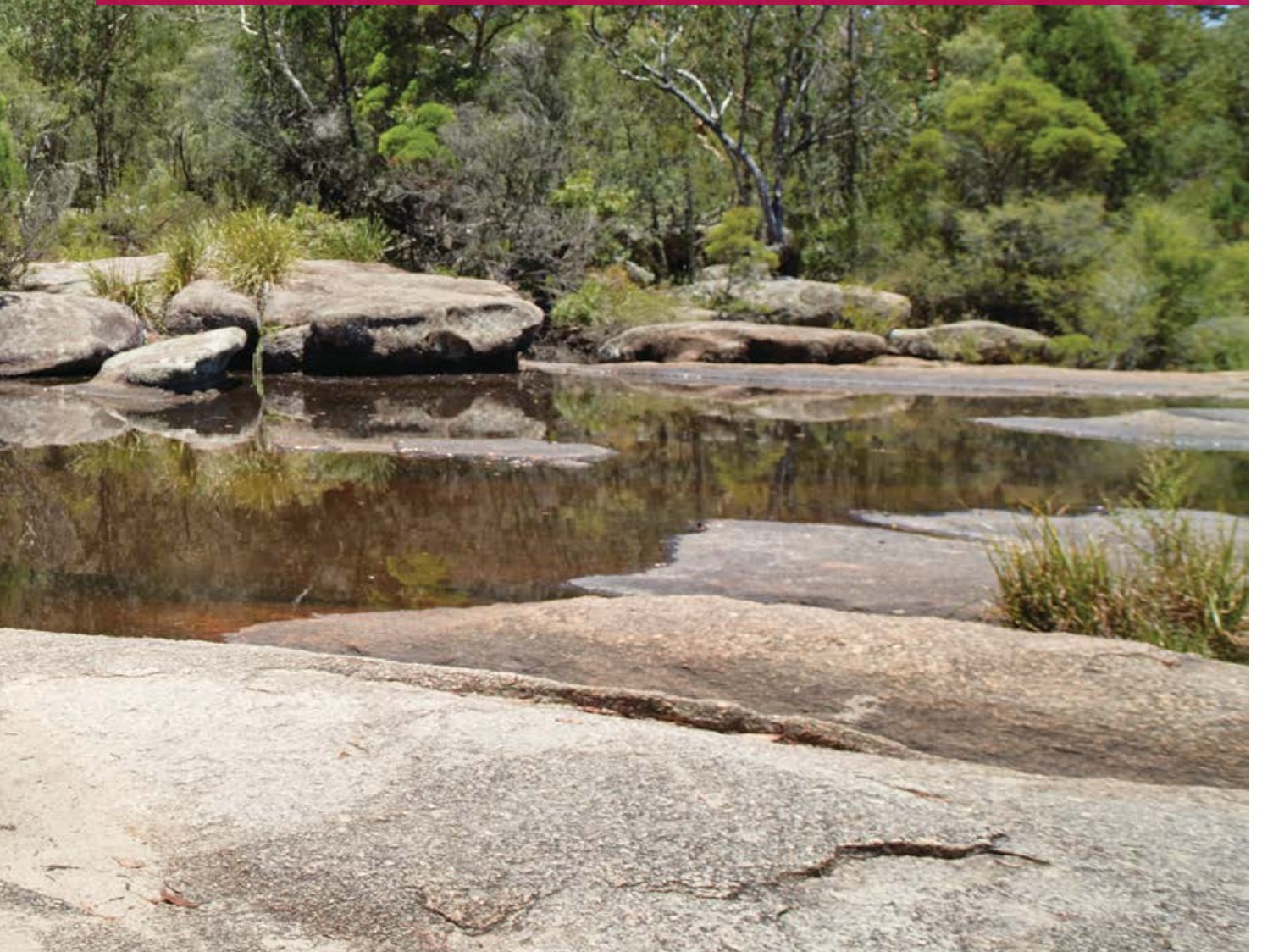
Table 2: Structure of the Darling Downs Regional Transport Plan





Girraween National Park

2. The Darling Downs Region



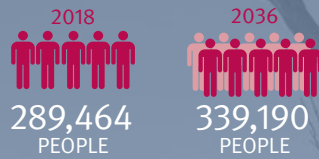
2.1 Region overview

THE DARLING DOWNS REGION COVERS AN AREA OF **79,530 KM²**



WHICH IS JUST OVER **4.6%** OF QUEENSLAND'S LAND MASS²

POPULATION GROWTH 2018–2036*



57% of people live in Toowoomba. The region's population has an average annual growth rate of 0.88% from 2018 to 2036

IN 2017–2018, GROSS REGIONAL PRODUCT WAS \$19.1 BILLION AND GREW

7%

FROM 2015–2016³



9,819 KM² OF PROTECTED LAND INCLUDING NATIONAL PARKS THAT OFFER OPPORTUNITIES FOR TOURISM AND REFLECT IMPORTANT COMMUNITY PLACES AND PRISTINE NATURAL ENVIRONMENTS²



11,974 INDIVIDUALS IN THE DARLING DOWNS WITH ABORIGINAL OR TORRES STRAIT ISLANDER HERITAGE, COMPRISING **4.3%** OF THE POPULATION²



REGION'S MEDIAN TOTAL FAMILY INCOME PER ANNUM

\$75,603

QUEENSLAND'S MEDIAN TOTAL FAMILY INCOME OF

\$86,372 PER YEAR²

AVERAGE DAILY TEMPERATURE RANGE OF **12.0C – 26.1C**



AVERAGE RAINFALL OF **658MM** PER ANNUM²



17.7% OF THE REGION'S POPULATION AGED **65+**, **22.9%** IN SOUTHERN DOWNS, **15%** IN QLD*²



Darling Downs and the South West provides:

- 1/3 of the State's agricultural output
- 22% of Queensland's cattle
- 75% of the State wheat crop
- 85% of Queensland's cotton⁵

KEY FEATURES OF THE REGIONAL ECONOMY:*



The greatest employer across the region is **health care and social assistance** with **12.9%** of the total employed persons. Agriculture, forestry and fishing accounts for **30%** of registered businesses and **11%** of employment.*

Projections to 2036 indicate employment growth in the following industries:

- healthcare and social assistance
- manufacturing
- mining
- accommodation and food services
- professional, scientific and technical services



Tourism generated **\$1,312.6 million** in sales and contributed **\$686 million** to the economy of the Darling Downs region in 2017–2018. Mining contributed **\$2.3 billion**.⁶

² Queensland Government's Statisticians Office. (April 2019). *Queensland Regional Profiles: Resident Profile for Custom region*. Retrieved from www.statistics.qgso.qld.gov.au/qld-regional-profiles.

³ National Institute of Economic and Industry Research. (2018). *National Economic Indicators for Local Government Areas, 2017/18*. Retrieved from <https://economic-indicators.id.com.au>.

⁴ Queensland Government Statistician's Office. (2018). *Projected population (medium series), by five-year age group and sex, by local government area, Queensland, 2016 to 2041*.

⁵ Trade and Investment Queensland (June 2019). *Regional Investment opportunities*. Retrieved from <https://www.tiq.qld.gov.au/invest/regional-investment-opportunities/darling-downs-south-west/>

⁶ National Institute of Economic and Industry Research. (2019). *Tourism Value*. Retrieved from www.economy.id.com.au/.

* Note: Population statistics for 2018 are based on Australian Bureau of Statistics. (2019). *Regional Population Growth, Australia. (Catalogue 3218.0, 2018 edition)*. Population statistics for 2036 are based on Queensland Government Statistician's Office. (2018). *Projected population (medium series), by local government area, Queensland, 2016 to 2041, 2018 edition*. Employment statistics are based on Australian Bureau of Statistics. (2017). *Census of Population and Housing, Australia, 2016 – Working Population Profile – Wo9 (place of work)*. 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)*.

Local government areas

Local government areas and population centres*

2018
estimated resident
population

2036
projected
population

GOONDIWINDI REGIONAL COUNCIL

Goondiwindi, Inglewood

2018 Pop'n
10,728

2036 Pop'n
10,737



Goondiwindi is located in the south-west of the region, bordered by New South Wales to the south. The local government area has 5518 jobs and 1921 businesses and contributes \$727 million to Gross Regional Product.⁷

The primary industry is agriculture, forestry and fishing which accounts for 27 per cent of employment, followed by retail (10.8 per cent) and health care and social assistance (9.8 per cent).^{*} Rural production in Goondiwindi includes cotton, wheat and livestock.

The area features the Macintyre River, heritage buildings and country landscapes, as well as a number of state

forests such as the Yelarbon State Forest and Bringalily State Forest.⁸

Major roads which run through the local government area include the Gore Highway, which runs south-west to north-east between Goondiwindi and Toowoomba, and the Cunningham Highway connecting Goondiwindi to Warwick and on to Brisbane. The Leichhardt Highway runs north of Goondiwindi connecting to Miles and Rockhampton to form the Leichhardt Way which intersects with the Adventure Way at Moonie. The South Western rail system runs through Goondiwindi and links to Millmerran, Warwick, Stanthorpe and Toowoomba.

LOCKYER VALLEY REGIONAL COUNCIL

Gatton, Laidley

2018 Pop'n
41,011

2036 Pop'n
55,145



Lockyer Valley is located in the far east of the region. The local government area has 13,662 jobs and 3085 businesses and contributes \$1.64 billion to Gross Regional Product.⁷

The major industries are agriculture, forestry and fishing which employs 21.1 per cent of people, followed by education and training (13.9 per cent) and retail trade (9.2 per cent).^{*} Lockyer Valley has fertile farmland and produces the most diverse range of commercial fruit and vegetables in Australia⁹ and accounts for 28 per cent of Queensland's horticulture production.¹⁰

The area offers a range of rural and outback experiences for visitors as well as those centred around food production. It also features many tourist drives and annual events and festivals.¹¹

The major road connection through the Lockyer Valley is the Warrego Highway running east-west and connecting Miles to Brisbane. The Gatton Clifton Road is a key north-south connection linking the New England Highway and the Warrego Highway. The West Moreton rail system runs through the area connecting Rosewood to Miles with passenger stops in Helidon, Gatton and Laidley.^{12,13}

7 National Institute of Economic and Industry Research. (2018). *National Economic Indicators for Local Government Areas, 2017/18*. Retrieved from <https://economic-indicators.id.com.au>

8 Tourism and Events Queensland. (2017). *Destination information: Goondiwindi*. www.queensland.com/en-ca/destination%20information/goondiwindi.


9 Department of Infrastructure, Local Government and Planning. (2017). *South East Queensland Regional Plan (ShapingSEQ)*.

10 Trade and Investment Queensland. (2017). *Lockyer Valley Regional Profile*. <https://www.tiq.qld.gov.au/download/business-interest/about-queensland/qld-regional-market-profiles/Market-Profile-Lockyer-Valley.pdf>.

11 Lockyer Valley Regional Council. (2016). *Lockyer Valley Tourism Guide*. www.lockyervalley.qld.gov.au/our-region/tourism-and-events/destinations/Pages/default.aspx.

12 Queensland Rail. (2017). *West Moreton system*. www.queenslandrail.com.au/forbusiness/the-regional-network/west-moreton-system.

13 Queensland Rail. (2017). *Westlander*. www.queenslandrailtravel.com.au/Planyourtrip/timetable.

Local government areas and population centres*	2018 estimated resident population	2036 projected population
<p>SOUTHERN DOWNS REGIONAL COUNCIL Stanthorpe, Warwick</p> 	<p>2018 Pop'n 35,601</p>	<p>2036 Pop'n 38,321</p>

Southern Downs is located in the south of the region, bordering New South Wales to the south and South East Queensland to the east. The local government area has 15,800 jobs and 4066 businesses and contributes \$1.95 billion to Gross Regional Product.¹⁴

The major industries with the highest employment rates are agriculture, forestry and fishing (14.3 per cent), health care and social assistance (11.7 per cent) and retail (11.6 per cent).*

The area is renowned for its boutique Granite Belt wineries, the Warwick Rodeo and Morgan Park precinct as well as natural attractions such as Girraween National Park¹⁵ having received 822,294 visitors and a total of 1.28 million domestic visitor nights in 2016-17.¹⁶

The New England Highway runs north-south from Allora to the New South Wales border. The Cunningham Highway runs from the South Coast region, through Warwick and west to Goondiwindi. The Stanthorpe-Texas Road, in the south of the area, provides a link between Stanthorpe and Texas.

<p>TOOWOOMBA REGIONAL COUNCIL Highfields, Oakey, Toowoomba</p> 	<p>2018 Pop'n 167,657</p>	<p>2036 Pop'n 196,218</p>
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Toowoomba is located in the east of the region. It is a regional city and the primary activity centre in the region. The local government area has 85,368 jobs and 15,650 businesses and contributes \$10.8 billion to Gross Regional Product.¹⁷

The primary employment industries in the region are health care and social assistance (15.6 per cent), education and training (11.2 per cent) and retail (10 per cent).* Toowoomba is known as Queensland's Garden City and hosts the annual Carnival of Flowers each spring as well as a range of other events and festivals. It is also home to historical attractions including the Cobb+Co Museum.¹⁸

The Toowoomba Wellcamp Airport and the Army Aviation Centre Oakey are strategic airports in the region.

Major roads and highways intersect in Toowoomba city including the Warrego Highway, Gore Highway and New England Highway.

The Toowoomba Second Range Crossing will improve freight and cross-region transit, particularly by diverting heavy vehicles and through-traffic out of the Toowoomba city centre. The West Moreton rail system passes from east to west through Toowoomba.

14 National Institute of Economic and Industry Research. (2018). *National Economic Indicators for Local Government Areas, 2017/18*. Retrieved from <https://economic-indicators.id.com.au>.

15 Tourism and Events Queensland. (TEQ). (2017). *Southern Queensland Country*. www.teq.queensland.com/destinations/southern-queensland-country.

16 EarthCheck. (2018). *Southern Downs: Tourism Market Research Program February 2018*. Retrieved from https://www.sdrc.qld.gov.au/ArticleDocuments/586/Southern%20Downs%20Market%20Research%20report_final.pdf.aspx.

17 National Institute of Economic and Industry Research. (2018). *National Economic Indicators for Local Government Areas, 2017/18*. Retrieved from <https://economic-indicators.id.com.au>.

18 Tourism and Events Queensland. (2018). *Destination information: Toowoomba*. www.southernqueenslandcountry.com.au/destinations/toowoomba.

Local government areas and population centres*	2018 estimated resident population	2036 projected population
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WESTERN DOWNS REGIONAL COUNCIL
Chinchilla, Dalby, Miles, Wandoan

2018 Pop'n
34,467

2036 Pop'n
38,771

The Western Downs is the northern-most part of the Darling Downs region. The local government area has 19,745 jobs and 4812 businesses and contributes \$3.997 billion to Gross Regional Product.¹⁹

The largest industry is agriculture, forestry and fishing employing 17 per cent of people, followed by construction with 11.2 per cent and retail with 8.8 per cent.* The area offers a range of natural and cultural experiences. It features many rivers and lakes that are popular for water sports and fishing including the Condamine River.²⁰

Western Downs geography and environmental conditions, along with existing transmission infrastructure, has enabled the establishment of a strong energy sector. Western Downs is leading the way in renewable energy,

approving 15 solar farms with over \$6 billion in investment and a proposed 2.41 gigawatts of installed electricity generation.^{21,22}

The Warrego Highway runs north-west from Dalby to Miles and on to the South West region as part of the Warrego Way. The Leichhardt Highway runs north-south across the area through Miles, Condamine and Moonie. The Moonie Highway connects from the south-west corner of the local government area, through Moonie to Dalby. Other major roads in the local government area include Bunya Highway, Dalby-Cooyar Road, Condamine-Meandarra and Dalby-Cecil Plains Road. The Western and West Moreton rail systems connect the region west to Quilpie and east to Brisbane supporting both passenger and freight movements.^{23,24}

Local government areas and population centres*	2018 estimated resident population	2036 projected population
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**DARLING DOWNS
REGION TOTAL**

289,464

339,190

¹⁹ National Institute of Economic and Industry Research. (2018). *National Economic Indicators for Local Government Areas, 2017/18*. Retrieved from <https://economic-indicators.id.com.au>.

²⁰ Western Downs Regional Council. (2018). *Exploring Western Downs*. www.wdrc.qld.gov.au/visiting-western-downs/exploring-western-downs/.

²¹ Western Downs Regional Council. (2019). *Energy Investment Prospectus*. Retrieved from https://issuu.com/wdrc5/docs/web_wdrc_energy_prospectus_final_we.

²² Western Downs Regional Council. (2018). *Council approves construction of 15th solar farm*. Retrieved from <https://www.wdrc.qld.gov.au/council-approves-construction-of-15th-solar-farm/>.

²³ Queensland Rail. (2017). *The regional network*. www.queenslandrail.com.au/forbusiness/the-regional-network.

²⁴ Queensland Rail. (2017). *Network Map*. www.queenslandrailtravel.com.au/Playyourtrip/networkmap.

* Note: Population statistics for 2018 are based on Australian Bureau of Statistics. (2019). *Regional Population Growth, Australia. (Catalogue 3218.0, 2018 edition)*. Population statistics for 2036 are based on Queensland Government Statisticians' Office. (2018). *Projected population (medium series), by local government area, Queensland, 2016 to 2041, 2018 edition*. Employment statistics are based on Australian Bureau of Statistics. (2017). *Census of Population and Housing, Australia, 2016 – Working Population Profile – Wo9 (place of work)*. 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)*.

2.2 Transport network

An overview of the region’s transport network and location of key services is shown in Figure 4.

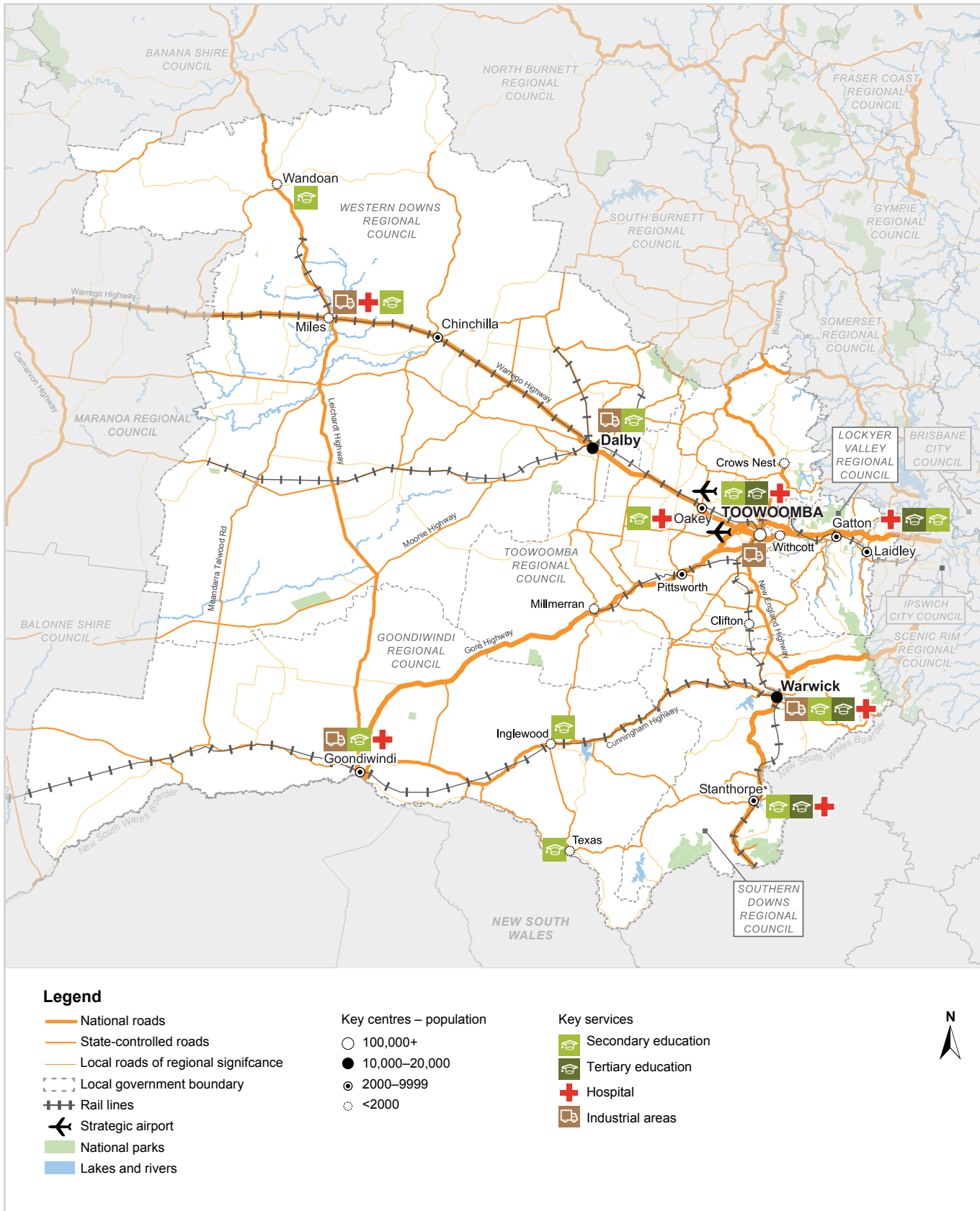


Figure 4: Overview of the Darling Downs region’s transport network and key services in the region



THE REGION'S FREIGHT NETWORK IS PREDOMINANTLY BASED AROUND MAJOR ROADS



THE NEW ENGLAND HIGHWAY CARRIED AN ANNUAL AVERAGE DAILY TRAFFIC OF 1344 HEAVY VEHICLES THROUGH TOOWOOMBA AND 1314 THROUGH WARWICK IN 2018, WHILE THE WARREGO HIGHWAY CARRIED ANNUAL AVERAGE DAILY TRAFFIC OF 2922 HEAVY VEHICLES THROUGH TOOWOOMBA AND 1906 THROUGH DALBY IN 2018²⁵



TOOWOOMBA WELLCAMP AIRPORT HANDLED 127,642 PASSENGERS IN 2018²⁶



PUBLIC BUS SERVICES ARE PROVIDED IN TOOWOOMBA, LOCKYER VALLEY AND WARWICK



THE WESTERN, WEST MORETON AND SOUTH WESTERN RAIL SYSTEMS SERVICE THE REGION, CONVERGING IN TOOWOOMBA BEFORE HEADING EAST



HEAVY RAINFALL IS A KEY DISRUPTOR OF TRANSPORT IN THE REGION. FLOODING IN 2011 RESULTED IN MORE THAN SIX SECTIONS OF STATE-CONTROLLED ROADS BEING CLOSED FOR MORE THAN 15 DAYS²⁷

RESIDENT METHOD OF TRAVEL TO WORK IN 2016 IN THE REGION:²⁸



73%
TRAVEL BY CAR



17%
WORK AT HOME OR DO NOT WORK



0.5%
CATCH PUBLIC TRANSPORT



0.7%
CYCLE



4.1%
WALK

²⁵ Queensland Government. (2019). *Traffic census for the Queensland state-declared road network*. Retrieved from <https://data.qld.gov.au/dataset/traffic-census-for-the-queensland-state-declared-road-network>.

²⁶ Bureau of Infrastructure, Transport and Regional Economics. (2019). *Airport Traffic Data*. Retrieved from https://www.bitre.gov.au/publications/ongoing/airport_traffic_data.aspx.

²⁷ Department of Transport and Main Roads. (2017). *Interactive Maps – Hydraulic and Flooding Interactive Map*.

²⁸ Queensland Government Statistician's Office. (April 2019). *Queensland Regional Profiles: Workforce Profile for Custom Area*. Retrieved from <https://statistics.qgso.qld.gov.au/qld-regional-profiles>.

Roads

There are more than 3800 kilometres of state-controlled roads, including 687 kilometres of the National Land Transport Network in the region.²⁹ The road network is supported by assets such as bridges, rest areas, roadside amenities and service centres.

Five highways in the region are designated as part of the National Land Transport Network. Four are given high maintenance priority by the Queensland Government – the Warrego, Gore, New England and Cunningham Highways. The Toowoomba Second Range Crossing (TSRC) is a toll road, all tolls collected will fund the operations and maintenance costs of running the TSRC.³⁰

There are also a number of identified State Strategic Touring Routes in the region as outlined in the *Queensland Tourism and Transport Strategy*.

Distance and existing road standards influence the type of freight vehicle that is used in the region. As shown in Figure 6 (on page 31), the region has a mix of roads suitable for heavy vehicles. The *Heavy Vehicle National Law 2012* governs the operations of all vehicles over 4.5 tonnes in gross vehicle mass.

The movement of people and goods across the region is highly dependent on the road network. Private vehicle transport is the primary mode of travel for all trip purposes across the region, including urban centres such as Toowoomba. Private vehicle dependence is largely due to the long distances between centres, the dispersed low-density settlement pattern across the region and lack of viable alternative transport options.

Toowoomba Second Range Crossing

The Toowoomba Second Range Crossing (TSRC) is an alternative crossing of the Toowoomba Range for all classes of heavy vehicles to improve freight efficiency and driver safety, relieve pressure on Toowoomba's roads, and enhance liveability for residents of the city and Withcott in the Lockyer Valley.

The 41km long route is from the Warrego Highway at Helidon Spa in the east to the Gore Highway at Athol in the west, via Charlton. At \$1.6 billion, it was funded on an 80:20 basis by the Australian and Queensland governments.³⁴ TSRC opened to traffic in September 2019 and has numerous benefits including:

- Improved road and driver safety
- Reduced travel times and greater travel time reliability

Stock Routes

Transport and Main Roads provides guidance on dealing with the management of travelling stock, agistment and stock crossings on state-controlled roads to promote a balance between safety, efficiency, environment and community access through the Darling Downs Region.

The Queensland Stock Route Network, prepared by the Department of Natural Resources, Mines and Energy, provides a classification of stock routes across the state and is supported by local management plans prepared by councils. While all councils in the region include stock routes, the network is denser in the west with primary and secondary stock routes in the local government areas of Goondiwindi and Western Downs.

Rail

The Darling Downs region is served by Queensland Rail's narrow gauge West Moreton (national key freight route), South Western and Western rail systems. The main function of the region's rail network is freight, with only limited long-distance passenger services. Queensland Rail owns the rail lines and freight services on these lines are operated by Aurizon and Watco.

Major commodities transported by rail include coal from the Clarence–Moreton and Surat Basin to the Port of Brisbane, as well as grain and cotton.³¹ Livestock is transported from the west to major abattoirs in Oakey, Grantham and on to Brisbane.

- Avoiding up to 18 sets of traffic lights
- Increased freight efficiencies
- Removal of over-dimensional and all classes of dangerous goods vehicles from Toowoomba's urban area.



TSRC viaduct to New England Highway

29 Department of Transport and Main Roads. (2019). *Queensland Transport and Roads Investment Program 2019-20 to 2022-23*. Retrieved from <https://www.tmr.qld.gov.au/About-us/Corporate-information/Publications/Queensland-Transport-and-Roads-Investment-Program.aspx>.

30 Department of Transport and Main Roads. (2016). *Annual Report 2015–2016*. Retrieved from <https://www.tmr.qld.gov.au>.

31 Queensland Rail. (2016). *West Moreton and South-Western System Information Packs: Issue 3.1*. Retrieved from <https://www.queenslandrail.com.au>.

The Surat Basin Infrastructure Corridor State Development Area (SDA) is a 214-kilometre rail corridor protected by the SDA development scheme. It is proposed between the towns of Wandoan and Banana to connect the existing Western and Moura railway systems.³²

The characteristics of the rail system make it well suited to high volume, point-to-point pick up and delivery over long distances. Commodity movements by rail are influenced by access, flexibility, the seasonal nature of agricultural demand, existing axle load restriction across the network and differing rail gauge when crossing the state border.

Passenger transport

The 'Westlander' scheduled passenger rail service runs from Brisbane to Charleville via Toowoomba twice a week. As depicted in Figure 5, the passenger rail service is supplemented by long-distance coaches which connect the Darling Downs to the South West and South East Queensland via the Warrego, Gore and Moonie Highways.

Public bus services are provided in Toowoomba, Lockyer Valley and Warwick. Public transport in other areas is limited to school buses, and inter- and intra-state coach services. School transport services receive full or partial funding from the Queensland Government. School transport services are monitored and reviewed regularly, as part of a state-wide program, to ensure that school transport services meet the needs of school students in the Darling Downs region.

In Toowoomba, there are nine bus routes covering outer residential areas such as Westbrook and Glenvale, as well as key destinations including Toowoomba Bus Station, Toowoomba Hospital, the University of Southern Queensland, the city centre and major suburban shopping centres.

The urban bus network in the Southern Downs consists of four daytime off-peak bus routes in Warwick, with no Sunday timetable. TransLink bus services provide connections between Helidon, Gatton, Laidley and Rosewood enabling interchange to the South East Queensland passenger rail network.

Public transport currently accounts for 0.3 per cent of commuter trips in Toowoomba and 0.5 per cent of commuter trips across the region.³³ These mode shares are consistent with regional areas and highlight the high levels of private vehicle use in the Darling Downs region.

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 (RRTG) where Transport and Main Roads and local government representatives within the region work collaboratively to plan and prioritise investment on road and transport infrastructure.

In the Darling Downs region, the RRTG is a strong and active leadership group providing strategic insight, allocating funding to the highest priority projects and identifying opportunities for financial efficiencies.

32 Department of State Development, Manufacturing, Infrastructure and Planning. (2019). *Surat Basin Infrastructure Corridor State Development Area*. <http://www.statedevelopment.qld.gov.au/coordinator-general/state-development-areas/current/surat-basin-infrastructure-corridor-state-development-area.html>.

33 Queensland Government's Statisticians Office. (April 2019). *Queensland Regional Profiles: Workforce Profile for Custom region*. Retrieved from www.statistics.qgso.qld.gov.au/qld-regional-profiles.

34 Department of the Premier and Cabinet. (2019, Sep 08). *Toowoomba Second Range Crossing officially opens*. [Media Release]. <http://statements.qld.gov.au/Statement/2019/9/8/toowoomba-second-range-crossing-officially-opens>.

Active transport

Within the region there are a variety of busy urban centres, such as Toowoomba, with dedicated walking and cycling infrastructure. Facilities include on-road cycle lanes, shared footpaths and recreational trails (walking and cycling) which are progressively being implemented. While smaller centres generally have more limited active transport facilities, they are often characterised by low-trafficked streets with wide road reserves providing pleasant environments conducive to walking and cycling.

Outside of towns, cars are the favoured mode of transport due to the considerable distances between households and services. The combination of a lack of dedicated infrastructure, high speed environments, minimal amenities at destinations, and the region's climate, can make it challenging to provide connected cycling routes. Even in larger urban centres, where average trip lengths are comparatively short, cars remain the preferred travel option. Across the region, cycling only achieves a mode share of 0.7 per cent for journeys made to work while walking achieves 4.1 per cent.³⁵

To help guide further investment in the active transport network, Transport and Main Road's *Downs South West Principle Cycle Network Plan* has been prepared in collaboration with local governments identifying core routes needed to get more people cycling more often.

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 the areas for further investment over the next two years.



Cyclists in rural area

³⁵ Queensland Government's Statisticians Office. (April 2019). *Queensland Regional Profiles: Workforce Profile for Custom region*. Retrieved from www.statistics.qgso.qld.gov.au/qld-regional-profiles.

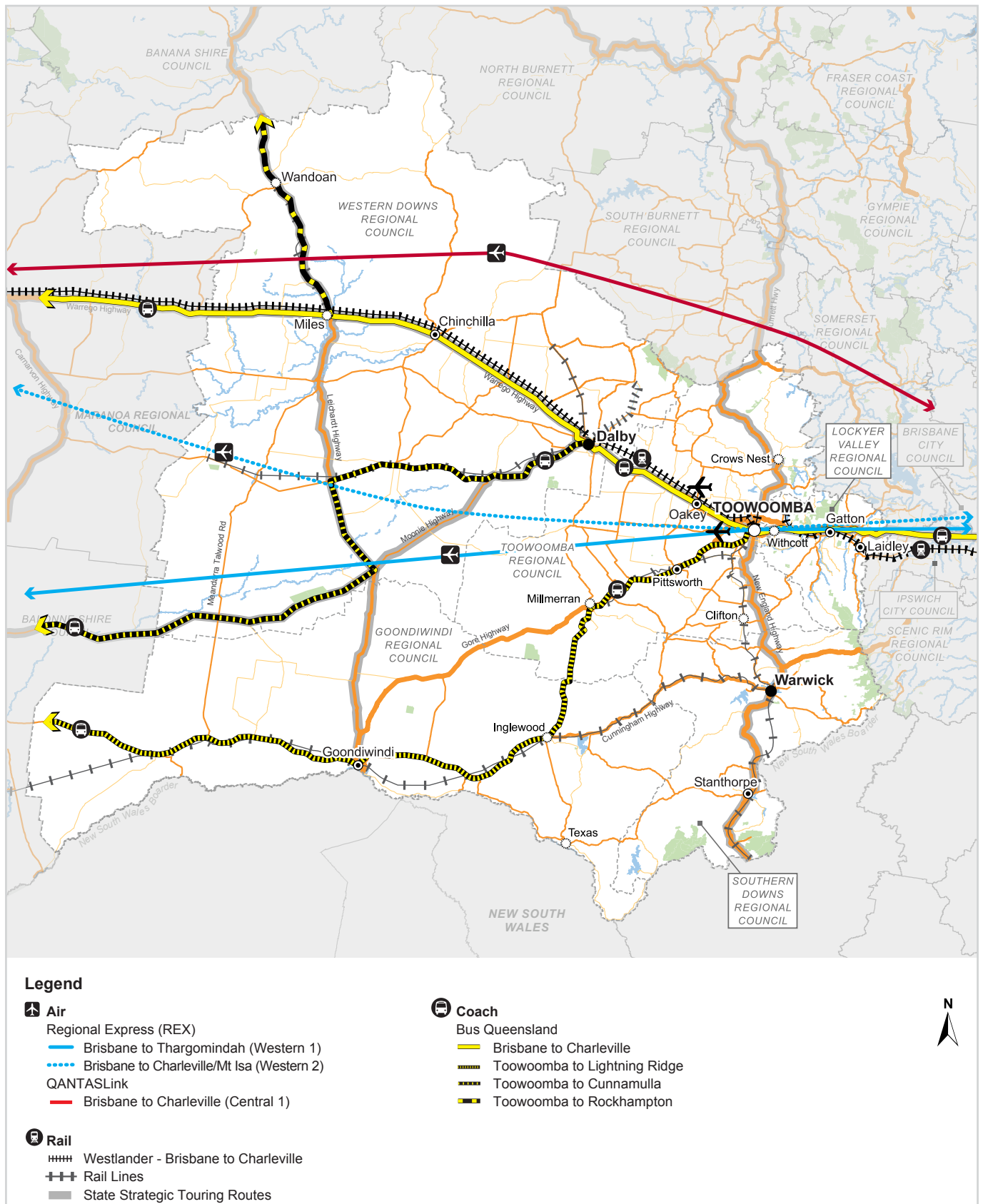


Figure 5: Long-distance passenger transport and State strategic touring routes

Air transport

The region is served by state regulated and subsidised air services. These passenger and freight services, depicted in Figure 5, provide remote communities with important access to economic, medical, educational and social opportunities. Regional flights from Brisbane and Toowoomba connect Darling Downs to South West Queensland including St George, Roma, Charleville, Thargomindah and north to Mt Isa.

The key regional airports of Toowoomba City, Chinchilla and Miles are maintained by regional councils. Toowoomba Wellcamp Airport (previously Brisbane West Wellcamp Airport) is privately owned.

Toowoomba Wellcamp Airport is identified as a strategic airport in the *State Planning Policy 2017*. It is the only regional facility capable of providing access for large aircraft, such as the Boeing 747, and the only airport within the region providing regular inter- and intra-state services. While it provides passenger services, it primarily provides freight access to Asia for the region's exports.³⁶

Toowoomba Wellcamp Airport has an annual patronage of 127,642 and handled 1243 tonne of air freight in 2018.³⁷

A further 13 aerodromes are available for use by charter flights, the Royal Flying Doctor Service and local and

agricultural aircraft. Military aircraft use the Oakey Army Aviation Centre, the region's other designated strategic airport in the *State Planning Policy 2017*.

Boating

The Darling Downs region has numerous rivers, dams and weirs, which are used for recreational purposes. There are seven public boating facilities in the region owned by Transport and Main Roads.³⁸

Freight

The freight system is central to the economy of the region, transporting goods for key industries including agriculture, manufacturing and mining via road, rail and pipeline.

Timely and cost-effective access to export gateways are vital for the region's exports to remain internationally competitive (see Figure 6). These include the Port of Brisbane, processing and distribution facilities in South East Queensland (including the Toowoomba Trade Gateway) and international freight airports at Toowoomba and Brisbane.



Cattle property, Toowoomba

³⁶ Toowoomba Wellcamp Airport. (2019). *From Toowoomba to the World*. Retrieved from <https://www.wellcamp.com.au/>.

³⁷ Bureau of Infrastructure, Transport and Regional Economics. (2019). *Airport Traffic Data*. Retrieved from https://www.bitre.gov.au/publications/ongoing/airport_traffic_data.aspx.

³⁸ Department of Transport and Main Roads. (2018). *Boating facility locations in Queensland*. www.msq.qld.gov.au/Waterways/Recreational-boating-infrastructure/Boating-facilities.

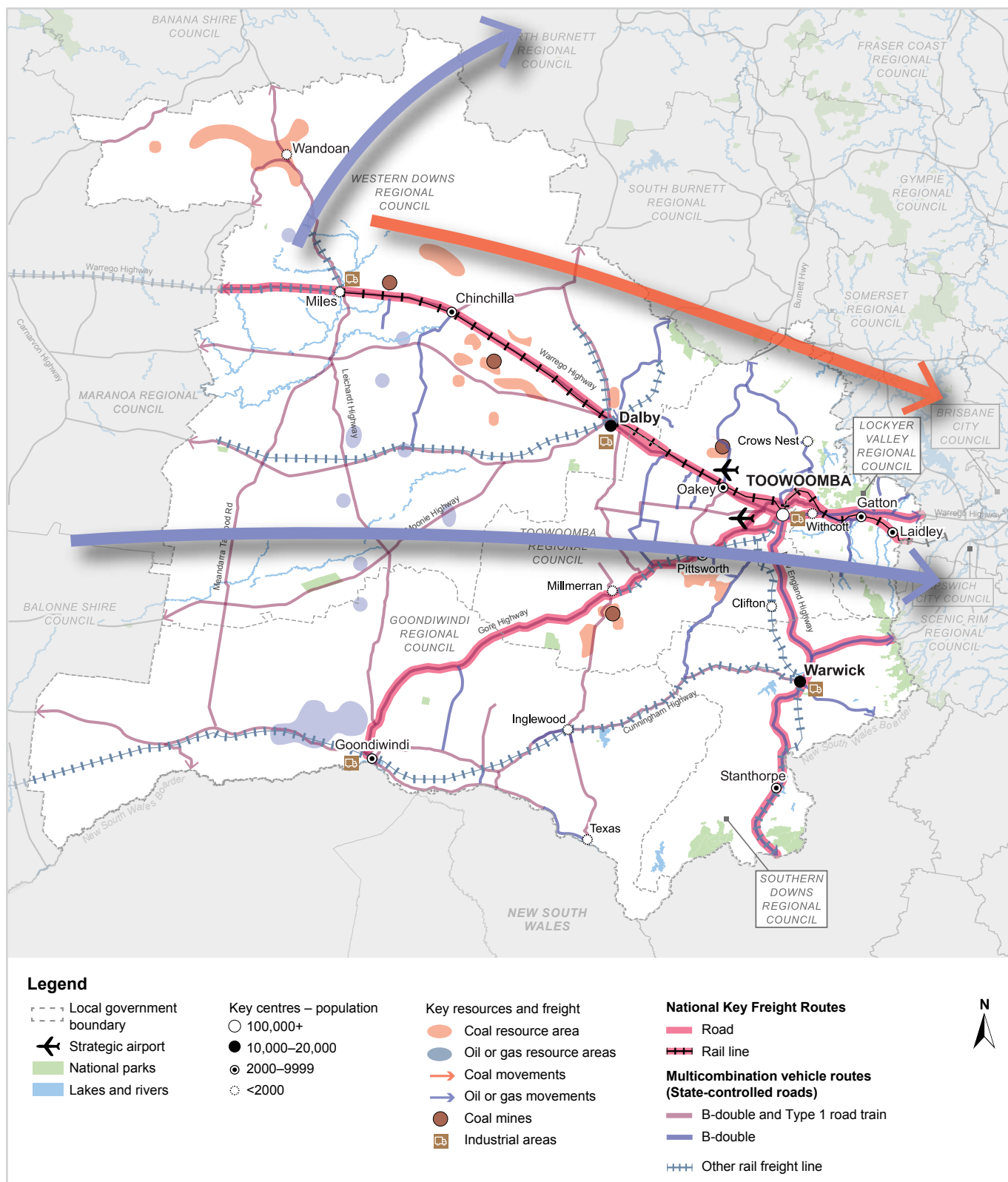


Figure 6: Heavy vehicle routes and freight movement for key mining exports

Sources:

Department of Transport and Main Roads. (2013). *Moving Freight*. <http://www.tmr.qld.gov.au/~media/busind/Transport%20sectors/Freight/Moving%20Freight%20final/FinalMovingFreightfull.pdf>.

Australian Government. (2019). *National Key Freight Routes Map*. Retrieved from <http://maps.infrastructure.gov.au/KeyFreightRoute/>.

Department of Transport and Main Roads. (2019). *Multi-combination routes in Queensland*. Retrieved from <https://publications.qld.gov.au/dataset/multi-combination-vehicle-routes-section-5>.

Department of Natural Resources, Mines and Energy. (2019). *Mines online maps*. <https://minesonlinemaps.business.qld.gov.au/SilverlightViewer/Viewer.html?Viewer=momapspublic>.

Regional freight movements

Key exports and freight movements in the region include:

- Beef cattle production from grazing systems which takes place throughout the region. A major sale yard complex at Dalby and abattoirs/processing plants at Oakey and south-west Toowoomba are significant elements of the beef industry.
- Approximately 1.5 to 2.5 million tonnes of grain is produced annually in the region (including Maranoa), with production varying depending on seasonal conditions. While much of the grain produced is consumed locally through feedlots, piggeries and poultry operations, significant volumes are transported to the Port of Brisbane for export.^{39,40}
- Horticulture is a rapidly growing industry in the region, with the traditional production area of the Granite Belt (Stanthorpe) extending to the Eastern Downs and the Border Rivers areas. Toowoomba also hosts the largest pecan and macadamia processing facility in the southern hemisphere.
- There are around 120 registered piggeries in the region with registered capacity of 694,642 standard pig units, representing around 60 per cent of the state's pig production.⁴¹ Currently most pigs produced in the region are transported to an abattoir and processing facility outside of the region at Kingaroy.
- Poultry and egg production, which is mostly consumed domestically with only a small percentage being exported. The region produces 80 per cent of Queensland's egg supply, as well as an increasing proportion of chicken meat production which requires transport routes to processing facilities in the south-east corner.⁴¹
- Due to an increasing international demand there is a resurgence in milk and milk products. A major export focused milk processing facility is planned for construction at Toowoomba Trade Gateway.
- Sheep meat, wool and goat industries are smaller, though important industries in the region, with the bulk of production occurring in the southern and western areas. The industry requires road and rail access to processing facilities and markets within the region, in the south-east corner and in southern states.
- The region holds over 10 per cent of Queensland's coal deposits and an estimated 65 per cent of Queensland's known coal seam gas reserves.⁴² In 2015, 6.9 million tonnes of coal was delivered to the Port of Brisbane via the West Moreton rail system, implying a capacity utilisation of 64 per cent. The system capacity is challenged due to the need for freight to share rail capacity with the Brisbane Metropolitan rail system.⁴³ A significant amount of coal seam gas and oil is also piped east to Brisbane.



Freight train, Toowoomba

39 Australian Bureau of Statistics. (2017). *Agricultural Commodities, Australia, 2015-16*. Retrieved from <https://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/7121.02015-16?OpenDocument>.

40 Australian Bureau of Statistics. (2019). *Agricultural Commodities, Australia, 2017-18*. Retrieved from <https://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/7121.02017-18?OpenDocument>.

41 Department of Agriculture and Fisheries. (2017). *Intensive animal industries licensing database*.

42 Department of State Development. (2013). *Darling Downs Economic and Infrastructure Framework*. <http://www.statedevelopment.qld.gov.au/resources/plan/dd-economic-infrastructure-framework.pdf>.

43 Department of Infrastructure and Regional Development. (2016). *Freightline 4 – Australian coal freight transport*. https://www.bitre.gov.au/publications/2016/Freightline_04.aspx.

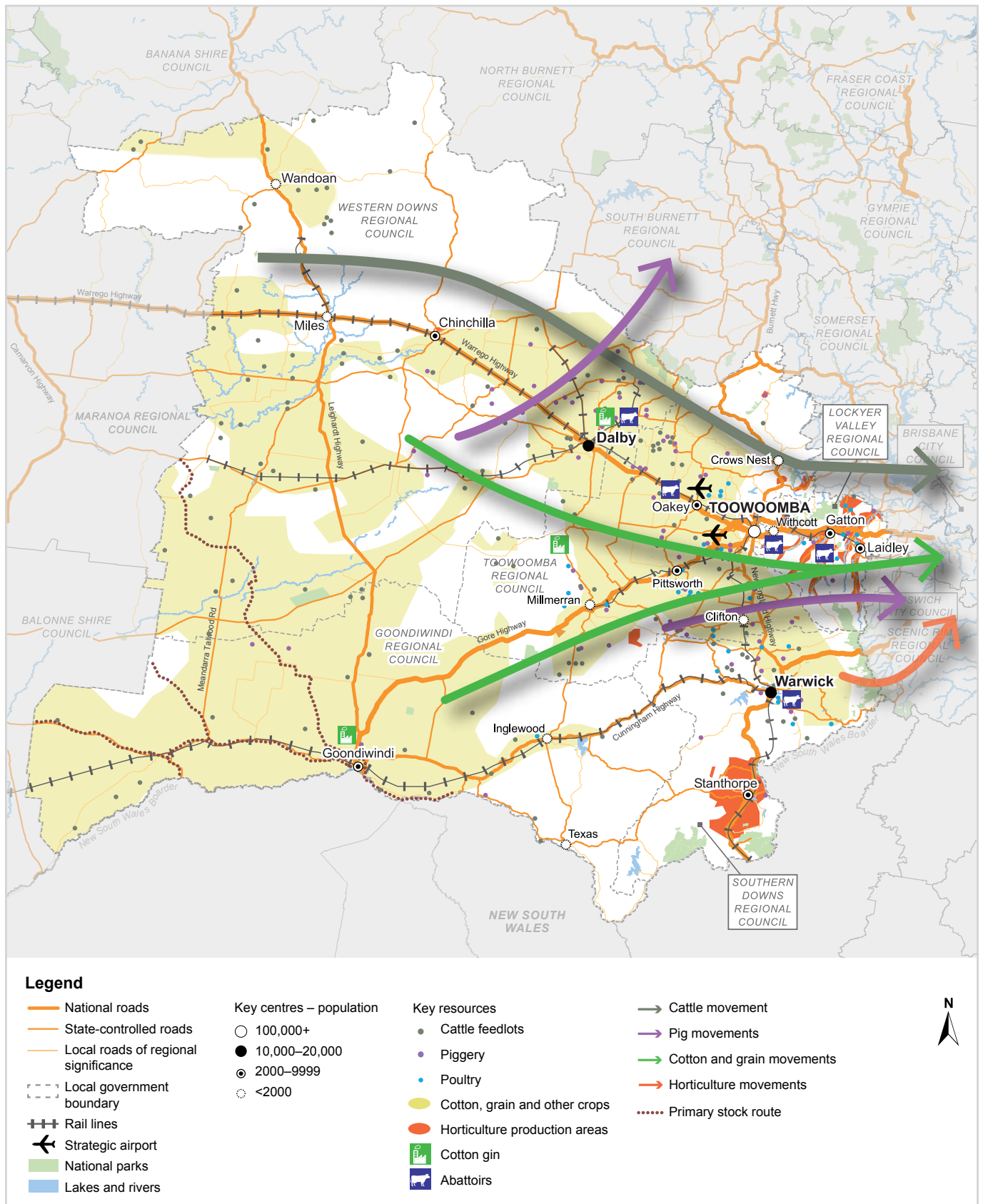


Figure 7: Freight movement for key agricultural exports

Sources:

Department of Transport and Main Roads. (2013). Moving Freight.
 Department of Natural Resources, Mines and Energy. (2016). Queensland Stock Route Network. www.dnrme.qld.gov.au/__data/assets/pdf_file/0003/99624/stock-routes-map.pdf.
 Queensland Government. (2013). Agricultural Land Audit. Retrieved from <http://qldspatial.information.qld.gov.au/WALI/>.



Transport and Main Roads employee

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 *Darling Downs 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 relationship between goals and priorities is presented in Figure 8. Priorities are the transport response to the region's goals in the context of addressing challenges and supporting the opportunities that present.



Mount Whitestone, Gatton-Clifton Road, Lockyer Valley

DARLING DOWNS REGIONAL TRANSPORT PLAN GOALS

A diverse and modern economy that produces high value products and services and where the rural and urban economies are connected through resilient infrastructure

A region of active and healthy neighbourhoods, where people are safely connected to their community, its culture, lifestyle, employment and essential services

A region that sustains its natural environment through responsible development and values its critical role in supporting agriculture, tourism and liveability for residents

PLANNING CONTEXT

Challenges and opportunities

TRANSPORT PRIORITIES

PRIORITY 1

Supporting economic growth

A transport system that supports economic development through efficient access to domestic and international markets.

PRIORITY 2

Enhancing liveability

A transport system that supports connected and liveable communities.

PRIORITY 3

Transport safety

A safer transport system.

PRIORITY 4

Network resilience

A resilient and reliable transport system.

Figure 8: Regional goals and relationship to transport priorities

3.2 Challenges

Exposure to volatility and variability in agriculture, energy and resource sector

The resource and agriculture sectors together contribute approximately 15.7 per cent of the Darling Downs Gross Regional Product and collectively employ 12.5 per cent of the region's workers.^{44,45} Changes in these sectors impact on business confidence, community sustainability and other industries such as manufacturing, health care and retail.⁴⁶

Coal's proportion of the overall domestic energy mix has fallen 21 per cent since the peak in 2008–09.⁴⁷

Agricultural commodities are subject to global price movements impacting on demand with local weather variability impacting on production.⁴⁸

The continued strength of these industries remains important to the region's economy. Overcoming uncertainty in the economic cycle and maintaining a cost competitive freight system remain key challenges.

Servicing the region's dispersed settlement pattern and remote towns

The Darling Downs region contains a major regional city, several towns and remote centres. Servicing the population growth, development and maintaining assets in these centres pose fiscal and operational challenges.

Outside of the city of Toowoomba, most towns and communities have low populations. Residents are dispersed across the region with many living large distances from their nearest regional centre and essential services.

Residents are dispersed across the region with many living large distances from their nearest regional centre and essential services. This poses service accessibility challenges, particularly for more remote communities. For example, the distance between the local primary school in Westmar and the nearest high school is more than 120 kilometres, posing a challenge for students, and their families, transitioning to secondary schooling.



Road safety signage

44 Queensland Government Statistician's Office. (2018). *Experimental Estimates of Gross Regional Product 2000–01, 2006–07 and 2010–11*. www.qgso.qld.gov.au/products/reports/experimental-estimates-grp.

45 Queensland Government Statistician's Office. (2017). *Queensland Regional Profiles*. www.statistics.qgso.qld.gov.au/qld-regional-profiles.

46 Regional Development Australia. (2016). *Darling Downs and South West Regional Roadmap 2016–2020*. www.rda-ddsw.org.au/rda-dd-sw.

47 Department of the Environment and Energy. (2019). *Australian Energy Update 2019*. https://www.energy.gov.au/sites/default/files/australian_energy_statistics_2019_energy_update_report_september.pdf.

48 Australian Government. (2011). *Economic Roundup Issue 1, 2011, Commodity Price Volatility*. www.treasury.gov.au/publication/economic-roundup-issue-1-2011/economic-roundup-issue-1-2011/commodity-price-volatility.

Impacts of weather

The Darling Downs region has experienced weather conditions ranging from periods of drought through to significant flooding.⁴⁹ Adverse weather events impact people, property and the ongoing viability of some sectors.

Flooding has a considerable effect on infrastructure, particularly in remote areas, and can make roads impassable and unsafe. This can result in lost time and poor travel time reliability, impacting freight productivity and customers generally. With the Darling Downs region being one of Australia's largest freight destinations by volume, and freight connectivity with remote communities relying on the road network, flooding and extreme heat events can lead to significant delays and added costs.⁵⁰

It is projected that in the long term the region will experience rising temperatures and reduced rainfall, due to the impacts of climate change. Prolonged hot weather can adversely impact transport infrastructure including flushing of bitumen and stone aggregate roads, buckling of rail tracks and malfunction of ITS (traffic lights and CCTV cameras).⁵¹ While rainfall is expected to decline, rainfall events are predicted to be more intense and likely to cause flooding which will continue to impact the transport network.⁵²

One of the most significant contributors to climate change is the rise in greenhouse gas emissions, including those produced by transport. Future planning for the region's transport network will play a key role in achieving the objectives of the Queensland Climate Transition Strategy.

Transport and climate change

The *Queensland Climate Transition Strategy* outlines how the state proposes to prepare for the transition to zero emission 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 low and zero emission 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.



Wyaga Creek, Gore Highway

49 Department of Environment and Heritage Protection. (2016). *Climate Change in the Eastern Downs Region (DRAFT)*.

50 Bureau of Infrastructure, Transport and Regional Economics. (2014). *Road Freight Movement Survey 2014*. https://www.bitre.gov.au/publications/2014/files/Freightline_01.pdf.

51 McEvoy, D., Ahmed, I., & Mullet, J. (2012). *The impact of the 2009 heat wave on Melbourne's critical infrastructure*. *Local Environment*, 17(8), 783-796.

52 Business Queensland. (2019). *Agricultural land climate risk*. <https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/agribusiness/agricultural-land-audit/climate-risk>.

Supporting an ageing population

An ageing population in already small communities could reduce the workforce and, in turn, the services available in these areas.⁵³ As the population ages there is a natural decline in the working population, resulting in fewer people who participate in the local economy and community. This can reduce productivity and innovation as there are fewer people with the skills, outlook and adaptive capacity to develop business opportunities and respond to future economic change.⁵³ The ageing population also places pressure on health care and social services as more support is typically required.⁵⁴

For transport, an ageing population requires consideration of fit-for-purpose transport options that can suitably serve people of all abilities.

Road safety

In 2018, there were 22 fatalities on the region's roads. This represents 7.6 fatalities for every 100,000 residents in the region. The comparative number of fatalities statewide is 4.5 fatalities for every 100,000 residents.⁵⁵

Driver safety is particularly an issue on the Warrego, Gore and New England Highways, which have a relatively high number of crashes compared to other roads.⁵⁵

The horticultural production season (April to December)⁵⁶ also coincides with part of the annual tourist season, resulting in increased mixing of freight, private vehicles and caravan traffic.⁵⁷

In addition, long distances and variable road standards increase the chance for human error and the likelihood of crashes occurring.

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.

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.



Percy Street, Warwick

53 Regional Development Australia. (2016). *Darling Downs and South West Regional Roadmap 2016–2020*. www.rda-ddsw.org.au/rda-dd-sw.

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

55 Queensland Government. (2019). *Crash data from Queensland roads*. Retrieved from <https://www.data.qld.gov.au/dataset/crash-data-from-queensland-roads>.

56 A. Stafford & Associates. (2018). *Lockyer Valley Horticulture Research Project*. <https://www.lockyervalley.qld.gov.au/our-region/economic-and-regional-development/current-economic-projects/Documents/Horticultural%20Research%20Project%20Report.pdf>.

3.3 Opportunities

Proximity to high-value natural resources and export gateways

The Darling Downs region benefits from proximity to Brisbane and, in particular, the Port of Brisbane. The manufacturing sector is also a significant employer for residents and is anticipated to grow in the future.⁵⁷

Access to export gateways will be enhanced by the delivery of Toowoomba Second Range Crossing and the proposed Inland Rail which is currently in the planning phase. The continued development of Toowoomba Trade Gateway precinct provides a substantial local base to facilitate international exports and support mining operations in the Surat Basin.

These investments enable improvements in supply chains and freight productivity, and are expected to enhance the movement of people and goods and further trade development in the region.

This affords the region the opportunity to be the gateway for southern Queensland and north-western New South Wales to local, national and international markets.

Taking advantage of a high-performing agricultural sector

Contributing \$3.6 billion to the economy (in 2017–18)⁵⁸ Darling Downs – Maranoa statistical area has a high-performing agricultural sector with opportunity for outputs to be increased through further productivity and supply chain improvements.⁵⁹ Improving market access channels and applying new technologies could increase both agricultural productivity and the value of its outputs.^{60,61} Food manufacturing at the source, by converting basic commodities into higher value product and accessing new export markets in Asia due to Toowoomba Wellcamp Airport, are becoming increasingly viable.⁶²

New technologies include opportunities such as using drones for crop monitoring and spraying or improving soil analysis techniques, which could promote better decision making and resource allocation.⁶³ The introduction of automated processes in agriculture and the rise in the resource recovery industry may also provide a shift in the region's employment base toward higher-skilled, knowledge-based jobs.⁶⁴

Western Gateway Regional Economic Cluster

ShapingSEQ's 'Western Gateway' Regional Economic Cluster (REC) includes the Toowoomba Trade Gateway to the west of Toowoomba urban area, encompassing InterLinkSQ, Charlton Logistics Park & Witmack Industry Park, Wellcamp Airport and Wellcamp Business Park.

This REC's strategic location at the gateway to the west and at the intersection of two national highways coupled with the long-term investments such as the Melbourne to Brisbane Inland Rail, will further strengthen this regional hub as a significant inland port.

- 57 Queensland Government's Statisticians Office. (April 2019). Regional Employment Projects Data Tables - 2010-11 to 2040-41. Retrieved from <https://www.qgso.qld.gov.au/statistics/theme/economy/labour-employment/economic-projections#current-release-regional-employment-projections>.
- 58 Australian Bureau of Statistics. (2019). *Value of Agricultural Commodities Produced, Australia, 2017-18*. Cat. No. 7503.0. Retrieved from <https://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/7503.02017-18?OpenDocument>.
- 59 Mike Boland. (2009). *How is value-added agriculture explained? Agricultural Marketing Resource Centre*. Retrieved from www.agmrc.org/business-development/getting-prepared/valueadded-agriculture/articles/.
- 60 Regional Development Australia. (2017). *Agricultural Opportunities in Southern Queensland*. www.rda-ddsw.org.au/reports-publications/.
- 61 Kim Bryceson. (2016). *Technology and Food Security*. www.gci.uq.edu.au/filething/get/12150/Bryceson-GCI%20Technology%20%20Food%20Security_Nov%202016.pdf.
- 62 Toowoomba Regional Council. (2018). *Transport and logistics Profile 2018*. <http://www.tr.qld.gov.au/edocman-document-detail-page/industry-profile-transport/download>
- 63 Landcare Australia. (2017). *Landcare in focus 2017 Annual Special Publication*. www.landcareaustralia.org.au/EDM/LiF/march2017/LiF-March2017.pdf.
- 64 Australian Government. (2015). *Agricultural Competitiveness White Paper*. www.agwhitepaper.agriculture.gov.au/SiteCollectionDocuments/ag-competitiveness-white-paper.pdf.

Harnessing new technology and digital connectivity across the region

Technology and digital connectivity creates significant opportunities for both supply chain optimisation and improving accessibility to essential services. Technology advances allow for real-time data accessibility and the ability to track the movement of goods. Providing digital access to essential services, such as health, education and retail, supports regional and remote communities by increasing residents' options while simultaneously reducing their need to travel long distances.

Digital connectivity between assets, service providers and customers can also enable real-time monitoring of fleet and physical infrastructure resulting in the optimisation of transit times, for example during flood events. It can be used to direct maintenance crews to check on asset conditions, in turn reducing asset degradation and enabling a more efficient response to maintenance requirements.

In the long term, technological advancements such as cooperative and automated vehicles are anticipated to support the region through further efficiency gains in the movement of goods and safer roads by reducing human error in driving.

Major infrastructure, planning and delivery

The Toowoomba Second Range Crossing is a major road infrastructure project diverting heavy vehicles and through traffic out of the Toowoomba city centre, improving safety and freight access.

The Inland Rail project, a national rail project, is proposed to cross through the region, improving safety and resilience of the rail network.

These infrastructure projects provide opportunities for more efficient freight movement as well as easing passenger traffic flows across the network.



Inland Rail route

Source: Australian Government.

Inland Rail

Inland Rail is an Australian Government led project that proposes to build a new 1700 kilometre freight railway from Melbourne to Brisbane via regional Victoria, New South Wales and Queensland. Upon completion, Inland Rail will deliver a fast, efficient and reliable freight line with a transit time of under 24 hours. It is the largest freight rail infrastructure project in Australia and is anticipated to be operational in 2024–2025.

Inland Rail is a nationally significant freight transport initiative which will serve as a major catalyst to achieve freight network efficiencies, supply chain investments and unlock new growth opportunities along the corridor.

While the specific alignment is still being developed, formal planning approval processes for four coordinated projects in Queensland have now commenced: Border to Gowrie, Gowrie to Helidon, Helidon to Calvert and Calvert to Kagaru.

Source:

Australian Rail Track Corporation. (2019). *Program*. <https://inlandrail.artc.com.au/program>.

Economic projects and initiatives

There are several economic projects which have either commenced or are proposed in the Darling Downs that may influence transport planning and provide opportunities within the region. These include:

- Coopers Gap Wind Farm—a \$500 million project which will connect 115 wind turbines with 460 megawatts of generating capacity to the national electricity network, to be operational in 2020.⁶⁵
- The Emu Swamp Dam is an \$84 million proposal to dam the Severn River and provide water to local farms via a 117-kilometre pipe network in the Southern Downs.⁶⁶
- Chinchilla’s \$21 million potable water treatment upgrade, replacing the existing outdated infrastructure to support future population growth.⁶⁷
- Enabling works for the Toowoomba Enterprise Hub, including new transport and utilities corridors and providing connectivity for the planned inter-modal inland port to the enterprise hub. Once completed, the Toowoomba Enterprise Hub is expected to be a significant employment generator for the region.
- Ongoing expansion of the aviation park and freight facilities at Toowoomba Wellcamp Airport.
- Progression of planning for Inland rail that will be dual gauge rail, capable of hauling larger tonnages across the system to the Port of Brisbane and south to Melbourne.
- The Toowoomba Railway Parklands Priority Development Area is a 50-hectare site north of the central business district. It includes a central parkland on an operational railyard site and Gowrie Creek, surrounded by a mixture of commercial, industrial, retail and residential land. The site is a key urban renewal and economic opportunity.⁶⁸
- The West Toowoomba Land Use Investigation is a 9000-hectare area within a series of local planning investigations being undertaken by Toowoomba Regional Council. The growth area will provide new homes, jobs, services and recreational opportunities.⁶⁹
- John Dee Abattoir Warwick redevelopment of \$16.7 million for warehousing and logistics.⁷⁰
- Upgrade of the Stanthorpe Industrial Estate.
- Upgrade of Defiance/Corson milling facility Warwick.
- New gas energy project Surat Gas Project between Dalby and Wandoan (Arrow) and LNG Project Walloons Gasfields, stretching from Wallumbilla to Millmerran (Australian Pacific).⁷¹
- Fucheng International Abattoirs project to build a \$100 million abattoir in Goondiwindi.⁷²
- Development of multiple solar farms across the region including, 148MW solar facility at Cameby, Ewerleigh 150MW Solar Park and Edenvale 280MW Solar Park south of Chinchilla plus University of Queensland construction of a Solar Farm in Warwick worth \$125 million.⁷³
- The proposed Hendon Intermodal facility in Southern Downs.

65 Department of State Development. (2017). Coopers Gap Wind Farm: Coordinator-General’s evaluation report on the environmental impact statement. <http://eisdocs.dsdip.qld.gov.au/Coopers%20Gap%20Wind%20Farm/CGER/Coopers%20Gap%20Wind%20Farm%20evaluation%20report%20-%20FINAL.pdf>.

66 Queensland Government. (2019, Aug 3). State kicks in to kick off Emu Swamp. [Media release]. <http://statements.qld.gov.au/Statement/2019/8/3/state-kicks-in-to-kick-off-emu-swamp>.

67 Department of State Development, Manufacturing, Infrastructure and Planning. (2019). Chinchilla Potable Water Treatment Plant Upgrade Stage 1. <https://www.statedevelopment.qld.gov.au/index.php/component/mtree/royalties-resource-producing-communities/1266-chinchilla-potable-water-treatment-plant-upgrade-stage-1>.

68 Department of State Development, Manufacturing, Infrastructure and Planning. (2019). Toowoomba Railway Parklands. <https://www.dsdmip.qld.gov.au/economic-development-qld/priority-development-areas/toowoomba-railway-parklands.html>.

69 Toowoomba Regional Council. (2017). Local plans and land use investigations. <http://www.tr.qld.gov.au/planning-building/planning-scheme-strategies-tools/strategies-and-guides/11399-local-land-use-plans>.

70 Queensland Government. (2019, Sep 20). Palaszczuk Government supporting Southern Downs beef jobs growth. <http://statements.qld.gov.au/Statement/2019/9/20/palaszczuk-government-supporting-southern-downs-beef-jobs-growth>.

71 Queensland Government. (2019, Feb 28). More gas and jobs to flow as \$10 billion Arrow project gets the green light. [Media release]. <http://statements.qld.gov.au/Statement/2019/2/28/more-gas-and-jobs-to-flow-as-10-billion-arrow-project-gets-the-green-light>.

72 Goondiwindi Regional Council. (2017, Dec 21). Council Approves New Abattoir Development. [Media release]. <https://www.grc.qld.gov.au/news/article/55/abattoir-approved>.

73 Western Downs Regional Council. (2018). *Solar Farms to create 550 Western Downs jobs*. <https://www.wdrc.qld.gov.au/solar-farms-to-create-550-western-downs-jobs/>

Expanding the tourism market

Tourism directly contributes 2.4 per cent of the Darling Downs Gross Regional Product, compared to an average of 5.2 per cent of Regional Queensland.⁷⁴ Domestic overnight visitation in the year ending March 2019 grew by up to 6.1 per cent on 3-year average with stronger growth in business and friends or relatives' visitation. International visitation also grew 9.6 per cent on average in the three years ending March 2019.⁷⁵ Employment in accommodation and food services industries is projected to grow by 48.17 per cent between 2016 and 2041.⁷⁶

Most domestic visitation is to see friends or relatives. There are opportunities to expand the tourism market from abroad by capitalising on the direct access provided by the Toowoomba Wellcamp Airport and by promoting the area's assets such as national parks, local history and cultural heritage sites, regional festivals and events, rural experiences and access to high quality local produce through Queensland's Regional Tourism Network.⁷⁷ Developing cycle tourism initiatives such as rail trails, cycling events and mountain bike destinations provides opportunities to further bolster local tourism. These features, combined with a unique rural experience, are an attractive proposition for tourists.

Given the strong growth in business visitation, there are opportunities to encourage longer stays by ensuring appropriate accommodation options and facilities are available.⁷⁸

Transitioning to a more skilled workforce as the region grows

Historically, health care, agriculture (including forestry and fishing), education and retail have been significant employment sectors. Health, education and retail employment have been primarily centred around Toowoomba.⁷⁹

While it is projected that agriculture, forestry and fishing will continue to employ the highest numbers of people in the region, as the region grows, the projected number of jobs in more skilled-based employment is also expected to grow.

There will be an increase in demand for health care services as the population ages. The health care industry is anticipated to be the second biggest employment sector.

Manufacturing jobs are expected to grow significantly in the Darling Downs – Maranoa statistic area, with projections indicating it could be the second highest employment industry in the region.

Overall, employment diversity across sectors is anticipated to intensify, which helps support the region's long-term sustainability.⁷⁶

74 Tourism and Events Queensland. (2019). *Regional Tourism Satellite Accounts 2016-17 Southern Queensland Country (Darling Downs) Key facts*. <https://teq.queensland.com/research-and-insights/domestic-research/regional-tourism-satellite-accounts>.

75 Tourism and Events Queensland. (2019). *Southern Queensland Country Regional Snapshot, year ending March 2019*. Retrieved from <https://teq.queensland.com/research-and-insights/domestic-research/regional-summaries/southern-queensland-country>.

76 Queensland Government Statistician's Office. (2017). *Regional Employment Projections Data Tables – 2010-11 to 2040-41*. www.qgso.qld.gov.au/products/tables/reg-employment-proj/index.php.

77 Tourism Events Queensland. (2017). *Southern Queensland Country*. www.teq.queensland.com/destinations/southern-queensland-country.

78 Regional Development Australia. (2016). *Darling Downs and South West Regional Roadmap 2016-2020*. www.rda-ddsw.org.au/rda-dd-sw.

79 Queensland Government's Statisticians Office. (April 2019). *Queensland Regional Profiles: Time Series Profile for Custom region*. Retrieved from www.statistics.qgso.qld.gov.au/qld-regional-profiles.



Township Entry Treatment at Brigalow on Warrego Highway

4. Priorities and actions



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

- **Priority 1:** Supporting economic growth—A transport system that supports economic development through efficient access to domestic and international markets.
- **Priority 2:** Enhancing liveability—A transport system that supports connected and liveable communities.
- **Priority 3:** Transport safety—A safer transport system.
- **Priority 4:** Network resilience—A resilient and responsive transport system.

Key customer inputs are summarised in Figure 9 and have been grouped into three overarching themes that reflect customer feedback.

These themes and the associated customer inputs have assisted to inform the corresponding priorities, objectives and actions. Collectively, they portray the desired future state for transport in the region

The Plan's actions are identified under each of the priorities. These are grouped into short-term and medium/long-term. Short-term actions identify the first steps needed to achieve the transport objectives and regional goals over the indicative 15-year life of the Plan. Medium/long-term actions identify possible responses to emerging or potential future transport planning needs. Actions will be reviewed and updated periodically as part of the implementation, monitoring and review process described in Chapter 5.

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

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

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

Table 3 shows the relationship linking priorities, objectives and measures of success.



Quart Pot Creek, Stanthorpe

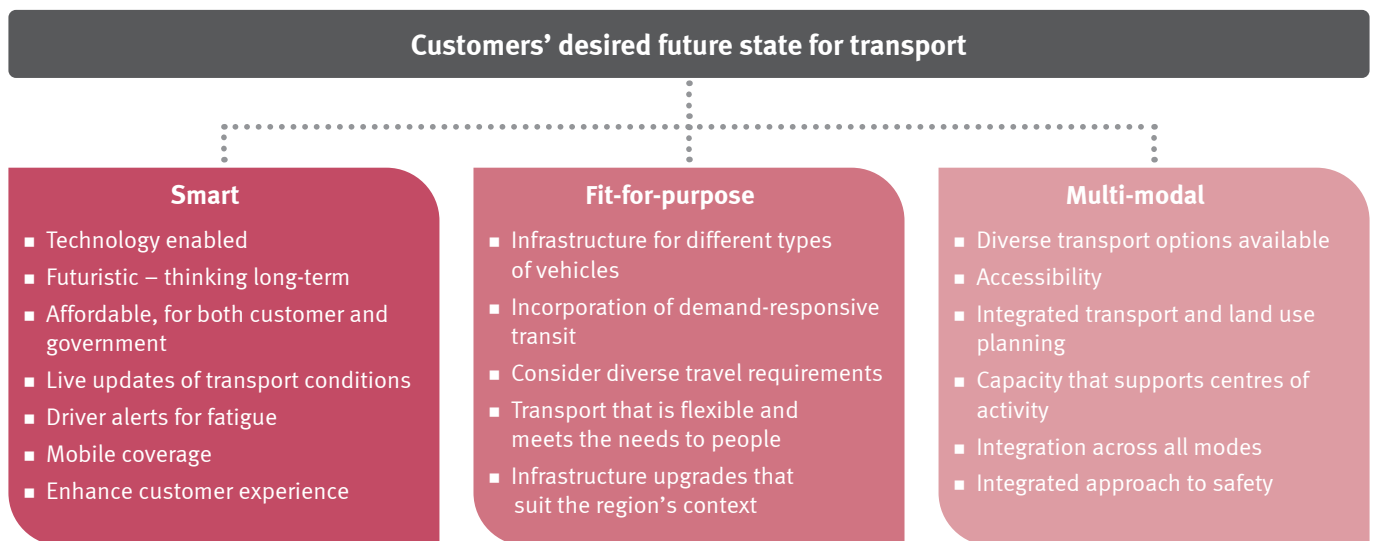


Figure 9: Customers' desired future state for transport

Table 3: 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 Supporting economic growth	PRIORITY 2 Enhancing liveability	PRIORITY 3 Transport safety	PRIORITY 4 Network resilience
	A transport system that supports economic development through efficient access to domestic and international markets.	A transport system that supports connected and liveable communities.	A safer transport system.	A resilient and responsive transport system.
ROLE OF TRANSPORT	<p>Responding to the challenge of:</p> <ul style="list-style-type: none"> exposure to economic volatility project funding. <p>Responding to opportunities for:</p> <ul style="list-style-type: none"> proximity to resources and export gateways a high-performing agricultural sector. <p>By taking action to:</p> <ul style="list-style-type: none"> prioritise infrastructure investment into key freight corridors that support the region's economy optimise supply chains, where possible, through a fit-for-purpose approach to first and last mile access capitalise on export gateways and new infrastructure. 	<p>Responding to the challenges of:</p> <ul style="list-style-type: none"> servicing dispersed settlements an ageing population. <p>Responding to opportunities for:</p> <ul style="list-style-type: none"> expanding tourism harness new technology and digital connectivity across the region. <p>By taking action to:</p> <ul style="list-style-type: none"> provide diverse transport options for customers that fit the context of the region's different localities enhance the customer experience enhance regional amenity through high-quality design and customer experience infrastructure. 	<p>Responding to the challenge of:</p> <ul style="list-style-type: none"> road safety project funding. <p>Responding to opportunity for:</p> <ul style="list-style-type: none"> major infrastructure, planning and delivery. <p>By taking action to:</p> <ul style="list-style-type: none"> encourage safe travel behaviour build, maintain and operate safe transport infrastructure and facilities. 	<p>Responding to the challenge of:</p> <ul style="list-style-type: none"> impacts of weather. <p>Responding to opportunities for:</p> <ul style="list-style-type: none"> harnessing new technology major infrastructure planning and delivery. <p>By taking action to:</p> <ul style="list-style-type: none"> leverage technology as a key enabler of positive customer experiences and transport outcomes that support economic, social and environmental sustainability collaborate across government and with industry to build, run and maintain an integrated transport network.
TRANSPORT OBJECTIVES	<p>1.1 Provide safe, efficient and reliable freight movements to industrial areas, intermodal facilities and export gateways.</p> <p>1.2 Provide a contestable freight system that is able to maximise efficiency gains.</p> <p>1.3 Support the tourism sector via a well-connected, multi-modal transport network.</p>	<p>2.1 Provide all customers with reliable and efficient passenger transport options that meet the diverse requirements of the region.</p> <p>2.2 Enable a seamless and legible transport system that provides a pleasant customer experience.</p> <p>2.3 Integrate land use and transport planning to improve liveability, amenity and network efficiency.</p>	<p>3.1 Minimise opportunities for crashes in the region through infrastructure that keeps customers safe and secure.</p> <p>3.2 Safe transport behaviour is enabled and supported through a coordinated approach to transport safety.</p> <p>3.3 Leverage technology to enhance the safety of customers using the transport system.</p>	<p>4.1 Design, construct, operate and maintain the transport system to be resilient to disruptions and support environmental sustainability.</p> <p>4.2 Adopt an integrated technology enabled response to minimise the impact of disruptions on customers.</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. Proportion of people choosing to walk, cycle and take public transport increases. 	<ul style="list-style-type: none"> Reduction in transport-related incidents, crashes, injuries and fatalities. 	<ul style="list-style-type: none"> Reduced frequency and duration of unplanned closures. Customers are able to access digital information on their journey.

4.1 Priority 1: Supporting economic growth

A transport system that supports economic development through efficient access to domestic and international markets.

Priority 1 aligns to:

- the Transport Coordination Plan's objective for efficiency and productivity
- the *State Infrastructure Plan*'s focus on transport infrastructure that unlocks the potential of critical supply chains by identifying and improving the freight network
- regional planning aims to contribute to developing a globally competitive economic powerhouse, including the protection of agricultural land while supporting the co-existence of other economic opportunities, moving products efficiently and providing certainty for the future of towns.

The transport system supports economic growth through:

- enabling goods and services to move as efficiently as possible, responding to the demands of existing and emerging industries
- connecting people to jobs and work
- facilitating access for visitors to the region's tourism destinations.

Improved connectivity between the region's freight generators and domestic and international markets will support enhanced productivity. This is particularly the case for the region's significant horticulture sector, which needs rapid access to the marketplace to remain globally competitive.⁸⁰

A holistic, strategic approach that seeks to connect the region with other regions and the broader freight system will be central for future planning. This requires consideration of key freight routes, but also how freight is distributed from key routes into the towns and centres.

The region is also an attractive tourist destination, with domestic and international visitors. The transport network needs to support easy access through an efficient and legible network.



Cotton bales, Dalby

⁸⁰ Regional Development Australia. (2016). *Darling Downs and South West Regional Roadmap 2016–2020*. www.rda-ddsw.org.au/rda-dd-sw/.

The priority seeks to support economic growth through:

- high-quality, fit-for-purpose corridors to transport freight
- first and last-mile access that is fit-for-purpose and supports the efficient distribution of goods (key to this will be the consideration of localised distribution that fits the scale of the area and supports high-quality public spaces)
- producers, business and freight operators understanding the multi-modal freight transport opportunities
- the freight network being contestable between modes to support overall supply chain optimisation
- ongoing planning to improve the Priority Road Network and the Warrego, Gore and Cunningham Highways as key inter-regional corridors to enable cross-border connectivity
- corridor planning for strategic transport and supply chain corridors that support regional productivity and access to markets
- growth in tourism supported by a legible, safe and accessible network connecting key centres and locations.

Future planning identified in QTRIP for Darling Downs includes:

- continued planning for the upgrade of the Gore Highway at Wyaga Creek to improve flood immunity and pavement width and condition
- continued planning of a heavy vehicle bypass for Warwick
- continued options analysis for safety upgrades on the Warrego Highway between Withcott and Minden.

Major projects committed in QTRIP for Darling Downs include:

- complete upgrading of the Chinchilla Rail Crossing on the Warrego Highway between Dalby and Miles, jointly funded by the Australian Government and Queensland Government
- identify the preferred solution for the Accommodation Creek Crossing project located on the New England Highway (Warwick – Wallangarra), south of Stanthorpe
- continue upgrading existing shoulders, and widening and applying wide-centre line treatments on the Warrego Highway between Dalby and Miles, jointly funded by the Australian Government and Queensland Government
- continue intersection improvements on the New England Highway (Yarraman – Toowoomba) at Ruthven Street and North Street
- complete upgrading the Emu Creek Bridge on New England Highway, jointly funded by the Australian Government and Queensland Government (Yarraman – Toowoomba)
- complete upgrading of package 4 of the Warrego Highway (Oakey – Miles) safety upgrades, which includes intersection upgrade and road widening in Chinchilla, as part of the Warrego Highway Upgrade Program, jointly funded by the Australian Government and Queensland Government
- complete realignment of Oakey-Pittsworth Road approaches at Toowoomba-Cecil Plains Road.



MacIntyre Bridge, Goondiwindi

Transport objectives

Objective 1.1: Provide safe, efficient and reliable freight movements to industrial areas, intermodal facilities and export gateways.

Connecting producers to markets requires efficient, high capacity transport corridors to export gateways, such as the Port of Brisbane and the Western Gateway Regional Economic Cluster. To inform network planning for these corridors, consideration of the freight supply chain and the role of different modes is required. There must also be consideration for the local context, how best to facilitate connections and opportunities for intermodal facilities.

Providing safe, efficient and reliable freight movement will:

- work to remove current impediments in the supply chain
- support consolidation centres in appropriate locations to help localise distribution and support greater economies of scale
- encourage and facilitate appropriate intermodal connections
- require planning for future infrastructure upgrades that support supply chain optimisation
- connect key inter-regional and interstate intermodal facilities and significant industrial precincts such as Toowoomba Trade Gateway and the Port of Brisbane
- enable access for high productivity vehicles and the oversize overmass network.

Objective 1.2: Provide a contestable freight system that is able to maximise efficiency gains.

The provision and operation of the freight system is complex. Regulations applicable to road freight and managed access to rail can impact the contestability of the overall freight system. Understanding the availability of freight capacity on the network via access to data relating to road and rail freight movements could enable efficiency gains to be realised.

Providing a contestable and optimised freight system will:

- need regulation that balances community expectations with practical freight requirements
- support better understanding of the available capacity within the freight network
- incentivise cooperation and information sharing to enhance network efficiency
- seek to remove impediments to access the various modes.

Objective 1.3: Support the tourism sector via a well-connected, multi-modal transport network.

The region contains, or connects to, iconic rural driving experiences. Such road trips, along with outback experiences, are an attractive proposition for road tourers, including the growing 'grey nomad' market. Additionally, the region hosts events such as the Toowoomba Carnival of Flowers and other places of interest such as the wineries of Stanthorpe, which attract visitors.

Supporting the visitor economy requires transport services and infrastructure that provide general connectivity between activity centres, services and attractions, but are also tailored to provide a holistic tourist experience. Key considerations in support of the tourism sector are:

- enhanced wayfinding and route legibility
- planning for tourist routes and travel experiences, including cycle tourism and rail trails
- network optimisation activities based on understanding how, when and where visitors use the existing transport network
- providing fit-for-purpose passenger transport options that support positive tourist experiences.

CASE STUDY: Truck sharing to improve supply chain efficiency

Backed by Telstra, Australian start-up Freight Exchange uses a digital platform to connect shippers with carriers in real time. Carriers can advertise spare capacity in their trucks from the centralised platform at no cost, creating efficiencies which enable them to offer cheaper shipping to regional centres. (The platform also services metropolitan centres).

'To date, this innovation has over 700 carriers and nearly 2000 business shippers. In the first 12 months of trading, Freight Exchange has helped to get many hundreds of trucks off the roads, as well as reduced expenditure for key customers by 25 per cent. Importantly, it has made a significant contribution to the development of regional Australia, while at the same time improving sustainability and reducing our carbon footprint.'

Source:

Freight Exchange. (2018). *Freight Innovation Is Improving The Sustainability and Efficiency of Regional Road Transportation*. www.blog.freightexchange.com.au/developing-regional-australia-through-innovation-while-reducing-our-carbon-footprint/



Toowoomba bus interchange

Actions

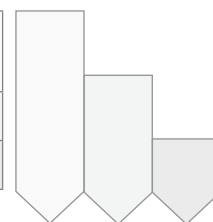
PRIORITY 1: SUPPORTING ECONOMIC GROWTH

OBJECTIVES

Objective 1.1: Provide safe, efficient and reliable freight movements to industrial areas, intermodal facilities and export gateways.

Objective 1.2: Provide a contestable freight system that is able to maximise efficiency gains.

Objective 1.3: Support the tourism sector via a well-connected, multi-modal transport network.



Actions – short-term	1.1	1.2	1.3
A1.01 Multi-modal freight connectivity Investigate appropriate inter-regional and multi-modal freight connectivity to Toowoomba Trade Gateway, Port of Brisbane and future transport infrastructure upgrades.	✓	✓	
A1.02 Corridor strategies Undertake planning for the state strategic and state regional road network for high priority interregional routes such as the Leichardt Highway, Drayton–Connection Road, Gore Highway, Moonie Highway, New England Highway, Cunningham Highway and Warrego Highway, to aid strategic investment decisions.	✓	✓	
A1.03 Multi-modal freight terminals Collaborate with industry and stakeholders to develop an agreed multi-modal freight terminal strategy for South East Queensland and Toowoomba.	✓	✓	
A1.04 Inland Rail Continue to support the implementation of the Inland Rail project within Queensland and protect the State’s interests including the future proofing for passenger services between Brisbane and Toowoomba.	✓	✓	✓
A1.05 Multi-modal freight access Investigate appropriate local multi-modal access to major freight generators such as: <ul style="list-style-type: none"> ■ Toowoomba Trade Gateway ■ Warwick industrial areas ■ Gatton West Industrial Zone ■ abattoirs, feedlots and agricultural facilities ■ renewable energy precincts for wind and solar industries ■ future transport infrastructure upgrades. 	✓	✓	
A1.06 Supporting major projects Undertake planning on the state and national road network to accommodate impacts raised by the Toowoomba Second Range Crossing and proposed Inland Rail.	✓	✓	✓
A1.07 Warrego Highway upgrades Continue to progress planning for the Warrego Highway Upgrade Strategy and the Warrego Highway East Masterplan.	✓	✓	✓
A1.08 Road corridor protection Undertake planning to establish a reliable, safe and flood immune state road network, including corridor planning and protection for key routes such as the following: <ul style="list-style-type: none"> ■ Toowoomba North South Transport Corridor (TNSTC) ■ Charlton Bypass ■ Warwick Heavy Vehicle Detour Route ■ Eastern Drive Duplication ■ Future Toowoomba-Athol Road (Gore Highway) ■ Withcott area considering functional changes post Toowoomba Second Range Crossing. 	✓		✓

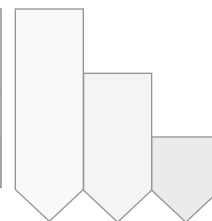
PRIORITY 1: SUPPORTING ECONOMIC GROWTH (cont.)

OBJECTIVES

Objective 1.1: Provide safe, efficient and reliable freight movements to industrial areas, intermodal facilities and export gateways.

Objective 1.2: Provide a contestable freight system that is able to maximise efficiency gains.

Objective 1.3: Support the tourism sector via a well-connected, multi-modal transport network.

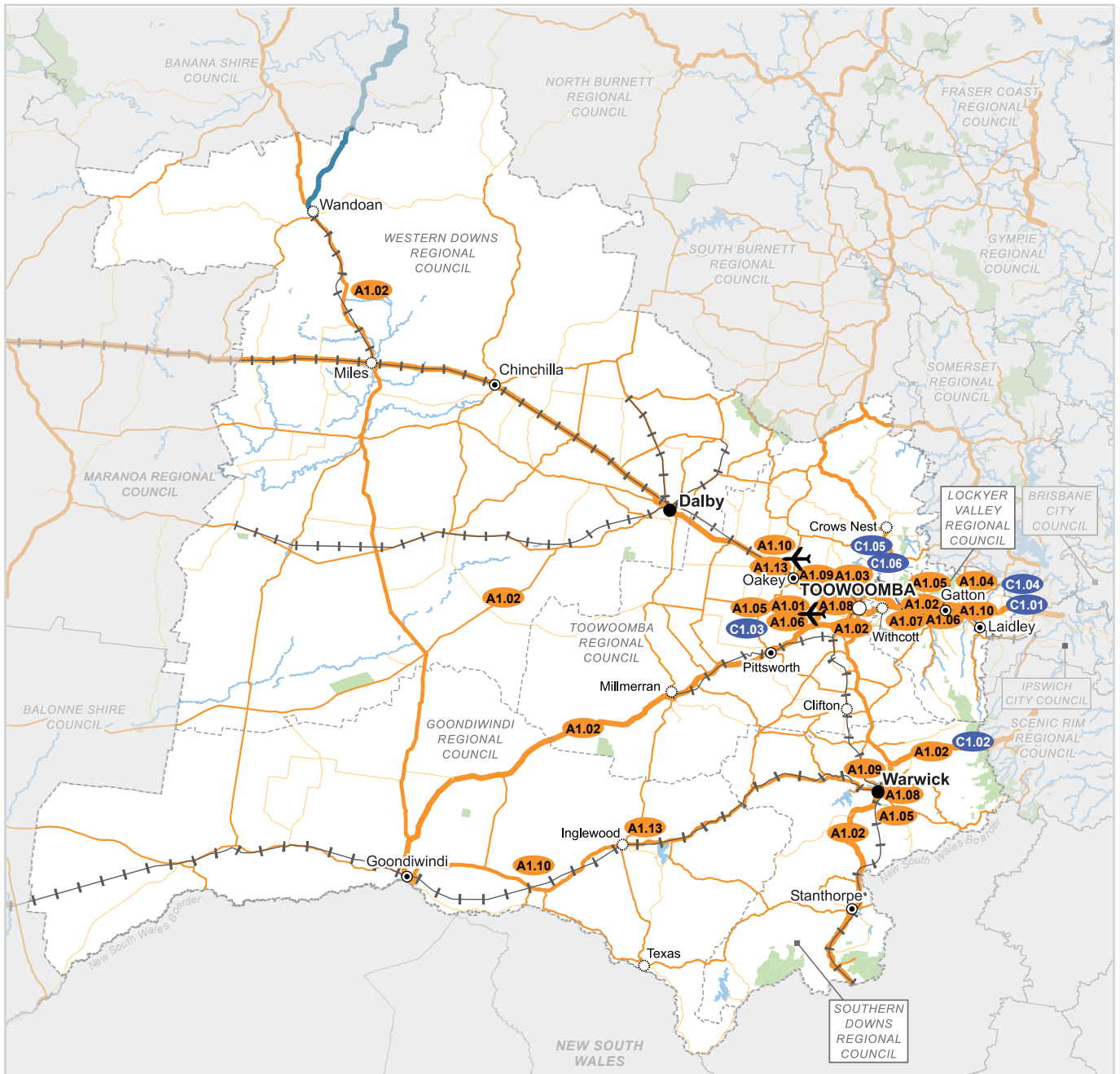


Actions – short-term (cont.)

	1.1	1.2	1.3
A1.09 Heavy vehicle freight access Investigate heavy vehicle freight access in Toowoomba city, Warwick and Oakey with surrounding intra-regional connections.	✓		
A1.10 Rail barriers Investigate opportunities for rail freight enhancement projects, including consideration of intermodal freight.	✓	✓	
A1.11 Real-time messaging Identify any gaps in the regional provision of information such as signage and information technology systems, to enable better real-time messaging to travellers throughout the region.			✓
A1.12 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.			✓
A1.13 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 potential transport network for emerging industries (for example, solar renewable energy); use and efficiency of rail freight; access and movement requirements for oversize over-mass and high productivity vehicles; first and last mile links; supply chain coordination models, and the role of the of the region's airports such as Toowoomba Wellcamp Airport, rail terminals, and key freight routes.	✓	✓	

Actions – medium/long-term

A1.14 Infrastructure design standards In partnership with local governments identify and update any existing transport infrastructure design standards for which greater value for money outcomes can be achieved in rural and remote areas.	✓	✓	✓
A1.15 Transport for Tourism Undertake planning required to implement the Queensland Tourism and Transport Strategy across the region. Undertake analysis and engagement to inform consideration of tourism in transport planning.			✓
A1.16 Real-time freight information Investigate the application of real-time freight transport information that shows where vehicles, including trains, are located across the network.	✓	✓	



Legend

- National roads
 - State-controlled roads
 - Local roads of regional significance
 - Local government boundary
 - Rail lines
 - Surat Basin Infrastructure Corridor
 - ✈ Strategic airport
 - National parks
 - Lakes and rivers
- Key centres – population
- 100,000+
 - 10,000–20,000
 - ⊙ 2000–9999
 - ⊙ <2000

Key committed projects

C1.01	Warrego Highway (Ipswich - Toowoomba)	Undertake miscellaneous works
C1.02	Cunningham Highway	Transport projects and planning (including Amberley Interchange)
C1.03	Inland rail planning	Network planning
C1.04	Warrego Highway East Masterplan	Transport project planning
C1.05	New England Highway (Yarraman - Toowoomba)	Widen pavement and improve intersections
C1.06	Toowoomba Range capacity and clearance upgrades	Construct new track and upgrade tunnels

- Action
- Committed project

Disclaimer: This map is indicative to illustrate proposed planning actions and is not intended to be accurate in terms of exact geographic extent.



Figure 10: Priority 1 region map

4.2 Priority 2: Enhancing liveability

A transport system that supports connected and liveable communities.

“Liveability is the sum of the factors that add up to a community’s quality of life including the built and natural environments, economic prosperity, social stability and equity, educational opportunity, and cultural, entertainment and recreation possibilities.”⁸¹

Priority 2 aligns to:

- the Transport Coordination Plan’s objectives for customer experience and affordability, community connectivity and environment and sustainability
- the *State Infrastructure Plan*’s focus on connecting regional communities with access to essential services and opportunities
- regional planning aims to sustainably accommodate a growing population, help move people and information efficiently and support living in better designed communities.

Transport has a key role to play in the liveability of the Darling Downs region, particularly in connecting residents and visitors to essential services, employment, education and recreational opportunities. Transport planning also supports high-quality living environments through integration with land use planning, where growth and development considers amenity, streetscape and mobility.

Catering for the region’s large size and diverse communities requires a tailored approach, which includes a variety of transport options. This can include cycling and active transport options, especially for Toowoomba which is well known for its parks, gardens and many creeks.

In urban areas, such as Toowoomba, density and passenger demand can support a range of public and private passenger transport options. Growth is forecast in larger centres of Toowoomba and Warwick as well as concentrated greenfield and brownfield growth areas such as Plainlands, Meringandan West, Highfields, Toowoomba Railway Parklands Priority Development Area and at Westbrook in the longer term. The strength of these centres and surrounding agricultural production has been a catalyst for growth and is expected to support future growth.



Palmerin Street, Warwick

⁸¹ Partners for Liveable Communities. (2017). *What is Liveability?* www.livable.org/about-us/what-is-livability.

In rural areas, many customers travel by car on roads of varying standards which can impact safety and travel times.

Technological development will have a fundamental impact on transport infrastructure, and regional connectivity. The transport network will be more data-enabled, allowing better wayfinding for travellers as well as advice on road hazards, network incidents and interruptions.

The digital environment will also enable residents to connect with essential services without necessarily having to leave their home. This changes the dynamic of transport accessibility as customers will be provided with more choice.

Given the region's population is ageing, equitable and appropriate transport options need to be provided. The transport system will support connectivity and liveability through:

- design, planning and operation of a road network that connects the region's customers to essential services, employment, education and recreation
- pragmatic and fit-for-purpose transport options including long-distance mobility options that provide for everyone including the region's non-resident workforce and skilled labour workforce
- prioritising sustainable transport options that support population growth and increased density in urban areas, such as Toowoomba.

Transport objectives

Objective 2.1: Provide all customers with reliable and efficient passenger transport options that meet the diverse requirements of the region.

Responding to the specific needs of the region's transport customers requires an integrated approach to transport delivery, with fit-for-purpose options. This means exploring mobility options that can be reliable, efficient, and where practicable, personalised to customer needs.

Private vehicles will continue to play a key role in personal mobility across the region, particularly in rural areas. Road upgrades will occur as appropriate to enable this. However, peer-to-peer, demand-responsive transit, community transport and active transport can provide alternate transport options, where suitable. School bus services can also play a role not only in allowing children to access education, but providing alternatives, where appropriate, to private vehicles for other transport customers.

In urban areas, and particularly Toowoomba, diverse transport options are provided. Public transport will be provided in some areas, including to connect to other regions, such as South East Queensland. In other areas, alternate transport options may be tested and encouraged to support an integrated, multi-modal transport system.

A frequent and reliable public transport network is proposed to connect the Toowoomba Wellcamp Airport, Toowoomba and Brisbane.

Providing reliable and efficient passenger transport options for everyone that supports liveable communities will:

- allow all customers in the region to be mobile, even if they cannot drive
- improve accessibility to employment, recreation, education and essential services
- reduce isolation and improve community welfare
- help to shift the reliance on private vehicles for mobility, particularly in the urban areas of Toowoomba.

Objective 2.2: Enable a seamless and legible transport system that provides a pleasant customer experience.

The transport system itself contributes to amenity and the customer experience of both residents and visitors. It provides the means for people to be mobile, but also provides opportunities for positive experiences. Improving the pedestrian and cycling environment contributes to better health outcomes and fosters creating a sense of community and connection. Appropriate road design, that suits its function, and good legibility are important to make it easy to navigate through the region, particularly for visitors. Integrating multi-modal transport options allows for seamless movement and transitions where required.

Part of providing a pleasant customer experience is understanding the mobility needs of customers. Engaging with customers and harnessing data informs system planning to ensure it is easy to use and meets the needs of the region's customers.

A transport system that provides a pleasant customer experience will:

- engage with and respond to the needs and preferences of the region's customers
- cater to diverse travel needs, including visitors
- consider wayfinding and the overall legibility of the network
- facilitate seamless transitions between different modes.

Objective 2.3: Integrate land use and transport planning to improve liveability, amenity and network efficiency.

The transport system can positively influence the amenity of the region, particularly in towns. Effective transport network planning responds to the specific requirements of customers, while being appropriate to the surrounding environment. For example, freight vehicles travelling through towns can impact on pedestrian safety and amenity. Integrating transport and land use planning requires the consideration of the purpose of a transport route or corridor and how best it will serve the region.

Safe, sustainable and healthy communities have balanced transport systems, with a mix of cleaner and more energy efficient vehicle use, public transport, walking and cycling. Increasing the mode share of active and public transport services, particularly in centres, will not only reduce the negative impacts of congestion but may also cut carbon emissions contributing to a cleaner environment.

Liveability is enhanced with places that are designed for people, with mixed-use neighbourhoods and walkable streets where people of all ages and levels of fitness can move around easily. Places for people foster a sense of belonging. Liveable neighbourhoods are pedestrian friendly and include most daily activities and destinations including public transport links within comfortable walking and cycling distances

New infrastructure and upgrades should consider movement, microclimate, accessibility, amenity and interaction with existing land uses.

In centres, this will encourage people to stop and access local businesses and create an attractive environment. In areas where efficient movement is most important, these approaches will enable network efficiency, while also considering factors such as pedestrian accessibility, cyclist safety and landscape design.

Integrating land use and transport planning will:

- support Toowoomba's plans for both consolidated growth and expansion in urban areas
- encourage high-quality design principles as part of all transport corridors, routes and links
- enhance amenity and accessibility, particularly in the region's towns
- support the provision of diverse transport options for the region's customers and reduce locational disadvantage
- balance the efficient movement of freight through the region's towns and city with the provision of high-quality streetscapes
- integrate the digital environment, including reducing the need for some customers to travel
- consider emerging technologies, such as cooperative and automated vehicles, and the key role they will play in the region's transport system.



Lake Apex, Gatton

Actions

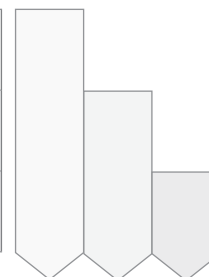
PRIORITY 2: ENHANCING LIVEABILITY

OBJECTIVES

Objective 2.1: Provide all customers with reliable and efficient passenger transport options that meet the diverse requirements of the region.

Objective 2.2: Enable a seamless and legible transport system that provides a pleasant customer experience.

Objective 2.3: Integrate land use and transport planning to improve liveability, amenity and network efficiency.



Actions – short-term	2.1	2.2	2.3
<p>A2.01 Multi-modal area transport strategies Plan the long-term, functional strategic network to facilitate the integration of land use and transport, efficient multi-modal movements and improve access and amenity in key areas such as Toowoomba, Lockyer Valley, Warwick, Dalby and Oakey.</p>	✓	✓	✓
<p>A2.02 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>	✓	✓	
<p>A2.03 Long-distance passenger services Continue to review long-distance bus, rail and air services to establish fit-for-purpose long-distance mobility options.</p>	✓	✓	
<p>A2.04 Household travel survey Undertake household travel surveys and investigate mechanisms to engage with customers to collect transport data.</p>	✓	✓	✓
<p>A2.05 Principal cycle network planning In collaboration with local governments, review and update the Downs South West Principal Cycle Network Plan every five years and accompanying Priority Route Maps every two years for the townships in the Darling Downs region such as Goondiwindi, Gatton, Laidley, Stanthorpe, Warwick, Oakey, Pittsworth, Toowoomba, Chinchilla, Dalby and Miles. Consider as part of the review of the principal cycle network an expanded geographic scope to include additional townships across the region.</p>	✓	✓	✓
<p>A2.06 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 of cycling infrastructure as part of planning for TMR funded projects on all principal routes, pursuant to the department's Cycle Infrastructure Policy. 	✓		✓
<p>A2.07 Improved walkability and amenity Work with local governments to investigate and prioritise opportunities to improve the pedestrian environment in town centres throughout the region to strengthen walkability and local amenity.</p>	✓	✓	✓
<p>A2.08 Boating infrastructure Investment in boating infrastructure across the region will undergo prioritisation based on an assessment of demand and input from the community and stakeholders.</p>		✓	

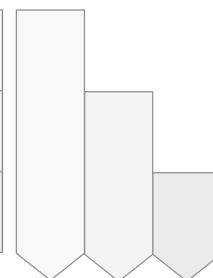
PRIORITY 2: ENHANCING LIVEABILITY (cont.)

OBJECTIVES

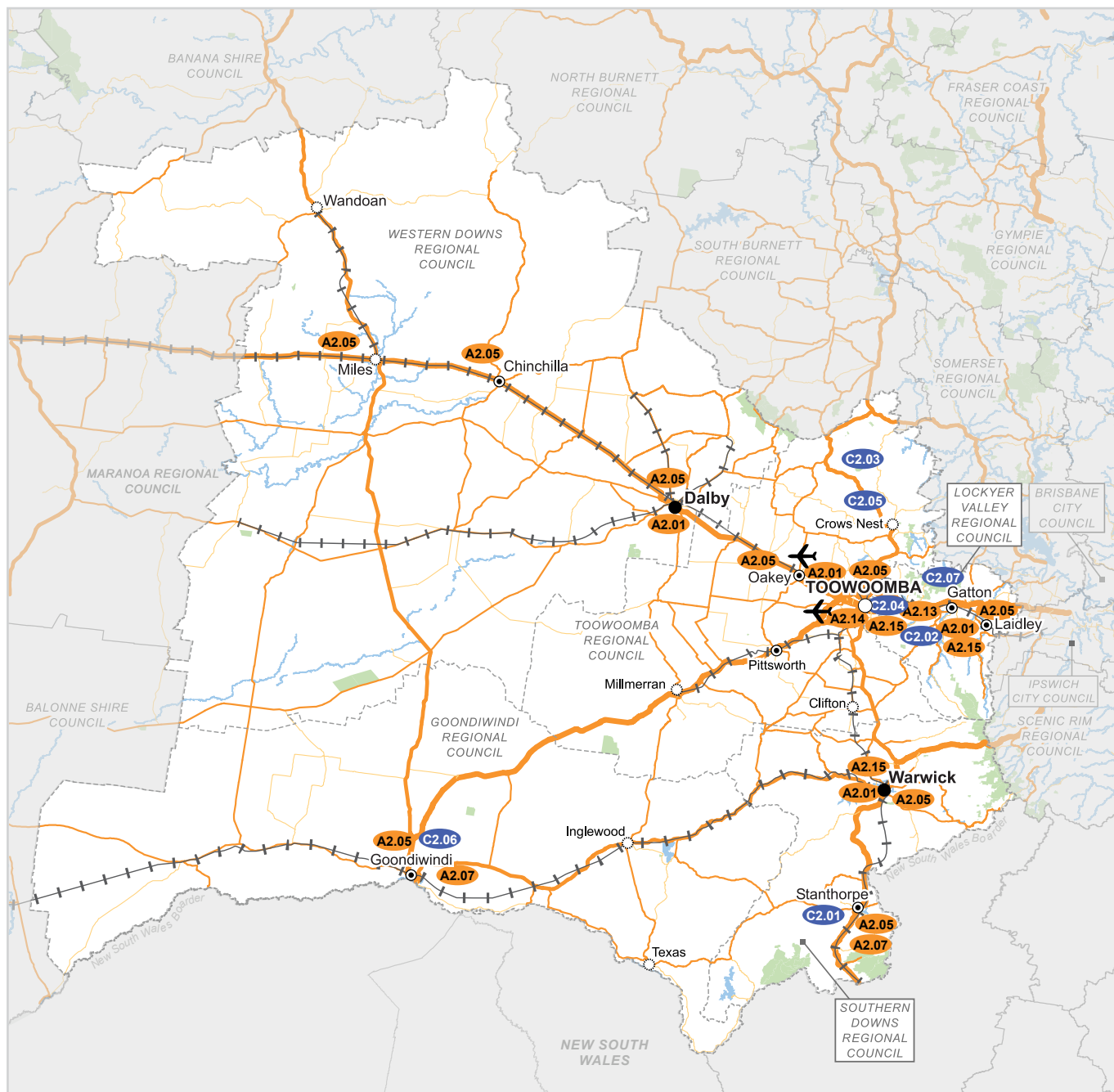
Objective 2.1: Provide all customers with reliable and efficient passenger transport options that meet the diverse requirements of the region.

Objective 2.2: Enable a seamless and legible transport system that provides a pleasant customer experience.

Objective 2.3: Integrate land use and transport planning to improve liveability, amenity and network efficiency.



Actions – short-term (cont.)	2.1	2.2	2.3
A2.09 Infrastructure vision standards Work in collaboration with the Regional Roads and Transport Group to review network vision standards, road hierarchy and road ownership in the region, to ensure road maintenance and management sits with the appropriate jurisdiction.			✓
A2.10 Cross-border connections Continue to work with Transport for NSW to prioritise planning for cross-border connections.	✓		✓
Actions – medium/long-term	2.1	2.2	2.3
A2.11 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.	✓	✓	✓
A2.12 Toowoomba to Brisbane public transport Investigate passenger rail service needs between Brisbane and Toowoomba.	✓	✓	✓
A2.13 High-frequency public transport Investigate provision of high-frequency public transport connections within and between the key areas of the Western Gateway Regional Economic Cluster, including the Toowoomba CBD, the Toowoomba knowledge and technology precinct and Toowoomba Trade Gateway.	✓	✓	✓
A2.14 Public transport system improvements Work with key stakeholders to investigate and determine appropriate public transport system improvements in Toowoomba, Warwick and Lockyer Valley that suits the needs of customers. The investigation should consider public and/or private service delivery models such as demand-responsive transit, ride sharing and mini-buses.	✓	✓	✓
A2.15 Cooperative and automated vehicles Understand and prepare for the role cooperative and automated vehicles will play in passenger and freight movement across the region in the future considering the low density population and geographic extents.	✓	✓	✓



Legend

- National roads
- State-controlled roads
- Local roads of regional significance
- Local government boundary
- Rail lines
- ✈ Strategic airport
- National parks
- Lakes and rivers

Key centres – population

- 100,000+
- 10,000–20,000
- 2000–9999
- <2000

Key committed projects

C2.01	Quart Pot Creek parklands and McGlew St - Stanthorpe cycle network	Construct cycleway/s
C2.02	Toowoomba - Brisbane passenger rail business case	Transport project planning
C2.03	Blackbutt Crows Nest Road	Construct to new sealed two-lane standard
C2.04	Central Toowoomba cycle network	Undertake transport project planning
C2.05	New England Highway (Yarraman - Toowoomba)	Construct cycleway/s
C2.06	Goondiwindi cycle network (stage 3 & 4)	Construct cycleway/s
C2.07	Gatton North South Connection (stage 1)	Construct cycleway/s

- Action
- Committed project

Disclaimer: This map is indicative to illustrate proposed planning actions and is not intended to be accurate in terms of exact geographic extent.



Figure 11: Priority 2 region map

4.3 Priority 3: Transport safety

A safer transport system.

A safe transport system is a fundamental priority for the region. The region has a number of road sections with the highest per capita crash record in Queensland.⁸² Long distances between destinations contribute to this through fatigue and increased risk of driver error. Rural and remote regions also have specific hazards, such as wildlife, and roads of varying quality. It is not always feasible to achieve a common standard of infrastructure across the whole region due to its large geographic area.

In towns and urban areas, safety for pedestrians, cyclists, vehicles and other modes is important. Well-designed streets, paths and public spaces that provide physical separation from motorised traffic, way finding, adequate shade and amenities play an important role in encouraging people to walk and ride as an everyday activity. An important tool in delivering active transport networks are Principal Cycle Network Plans and accompanying Priority Route Maps to facilitate infrastructure where it's needed and to improve safety.

A pragmatic approach to safety is needed which will include:

- provision of a safe transport environment, where the propensity for human error is minimised as much as possible
- education and awareness of high-risk crash locations and the need to rest frequently
- prioritisation of pedestrian and cyclist safety, particularly in towns and urban areas
- ongoing planning for safety improvements along key routes such as the Warrego, Cunningham, New England and Gore Highways as the key inter-regional corridors.

Priority 3 aligns to:

- the Transport Coordination Plan's objective for safety and security
- the *State Infrastructure Plan's* intent that the safety and reliability of Queensland's transport system is progressively improved so there are fewer fatal and serious injury crashes
- regional planning aims to support living in better designed communities through a safe transport system.



Safe cycling signage, Toowoomba

⁸² Australian Automobile Association. (2016). *Australian Road Assessment Program 2016*. Retrieved from www.ausrap.aaa.asn.au.

Transport objectives

Objective 3.1: Minimise opportunities for crashes in the region through infrastructure that keeps customers safe and secure.

Reducing transport network incidents requires a safe physical network and, in particular, a safe approach to the use of roads. New infrastructure will seek to minimise the propensity for accidents.

Minimising conflicts between different transport modes will assist in keeping customers safe when travelling.

In urban communities, the safety of customers using different modes, including walking and cycling, will need to inform network design and appropriate speed environments.

Infrastructure that keeps customers safe and secure will be achieved through:

- road safety packages that investigate provision of engineering solutions for the road network
- notification and safety improvements at level crossings to reduce danger for both pedestrians and vehicles while allowing efficient rail and traffic movements
- provision of safe pedestrian crossings and accessibility to activity centres
- provision of safe cycling options such as separated cycling lanes where appropriate
- ensuring the safety, efficiency and operational integrity of strategic airports is protected and that development and associated activities avoid increasing risk to public safety.

Objective 3.2: Safe transport behaviour is enabled and supported through a coordinated approach to transport safety.

Programs to encourage safe travel behaviour on roads and waterways, combined with disaster management planning, contribute to a safer transport system.

In addition to existing initiatives, opportunities exist for more targeted measures specific to the Darling Downs region. This may include community engagement and education for tourists and young people in schools to inform them of the risks inherent on regional roads.

Closer engagement with local councils, communities and developers during planning and design phases, for all modes of transport will also improve safety outcomes. This includes consideration of how new and existing land uses will interact with the existing or planned transport network.

Objective 3.3: Leverage technology to enhance the safety of customers using the transport system.

Effective use of technology will play a key role in improving safety. Safety mechanisms such as phone apps and collision avoidance technology that detects driver inactivity can provide driver alerts. Using live monitoring systems to detect faults on transport vehicles, road condition and infrastructure can also be used to improve transport safety. In the longer term, cooperative and automated vehicles may contribute to safety, by removing the propensity for human error when travelling.

A safe transport environment enhanced through technology will:

- provide a more forgiving transport system that minimises the human cost of crashes
- reduce the risk of human error when travelling
- reduce the number of crashes on the network
- reduce fatalities and hospitalisations.

Backpackers and Seasonal Workers Road Safety Campaign

Southern Downs Regional Council deployed an award-winning road safety campaign tailored towards backpackers and seasonal workers. The program involved collaboration with farmers and accommodation providers to raise awareness of road signage and disseminate information pamphlets developed in multiple languages for seasonal workers.

Source: Southern Downs Regional Council. (2015). *SDRC's Backpackers & seasonal Workers Road Safety Campaign*. Retrieved from <https://www.sdrc.qld.gov.au/our-region/backpackers-guide/sdrcs-backpackersseasonal-workers-road-safety-campaign>.

Actions

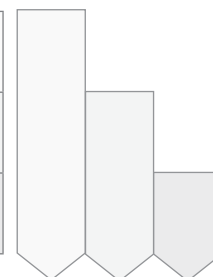
PRIORITY 3: TRANSPORT SAFETY

OBJECTIVES

Objective 3.1: Minimise opportunities for crashes in the region through infrastructure that keeps customers safe and secure.

Objective 3.2: Safe transport behaviour is enabled and supported through a coordinated approach to transport safety.

Objective 3.3: Leverage technology to enhance the safety of customers using the transport system.



Actions – short-term	3.1	3.2	3.3
<p>A3.01 Road safety treatments Continue to identify, prioritise and nominate candidate sites for road safety treatments as part of Safer Roads Sooner and Black Spot programs and through other opportunities such as planned upgrades. As part of the High Risk Roads process, undertake planning to inform options for safety related improvements across the Darling Downs region.</p>		✓	✓
<p>A3.02 Rail crossings Continue to improve safety at rail level crossings through initiatives such as reducing the number of level crossings, improving infrastructure and exploring new technology to align with the <i>Queensland Level Crossing Safety Strategy 2012–2021</i>.</p>	✓		
<p>A3.03 Rest areas in Darling Downs region Explore measures to minimise crashes by determining investment priorities for new or upgraded rest areas to address driver fatigue risks, encourage safe travel, and provision of sufficient capacity and amenities.</p>	✓	✓	✓
<p>A3.04 Safety, capacity and amenity impacts for rural townships and Toowoomba Work with local governments to mitigate safety, capacity and amenity issues caused by traffic volumes and heavy vehicles where relevant for rural townships and Toowoomba, subject to statewide priorities. Priorities include major towns in the Darling Downs region and Toowoomba intersections such as James Street and Hume Street as well as the Neil Street intersection.</p>	✓		
<p>A3.05 Aviation–public safety areas Reflect and address land use and transport planning constraints that result from a future review of public safety areas for Toowoomba Wellcamp Airport. The airport is protected as a strategic airport under the <i>State Planning Policy</i>.</p>	✓		
<p>A3.06 Boating safety Undertake boating safety initiatives for inland waterways and waterbodies.</p>		✓	✓
<p>A3.07 Safety promotion Continue to develop region specific education, promotion and communication campaigns in partnership with community, industry and other authorities to encourage safe travel behaviour on roads, pathways, public transport and waterways in the region.</p>		✓	✓
<p>A3.08 Road safety packages Develop safety packages to address corridor deficiencies for the Warrego (Toowoomba to Roma), Gore, Cunningham and New England Highways considering engineering solutions.</p>			✓
<p>A3.09 Improving mobile coverage Investigate potential solutions to improve mobile communication coverage across the region’s transport network, for example at recognised rest stops.</p>			✓

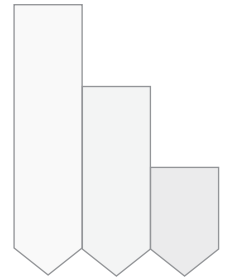
PRIORITY 3: TRANSPORT SAFETY (cont.)

OBJECTIVES

Objective 3.1: Minimise opportunities for crashes in the region through infrastructure that keeps customers safe and secure.

Objective 3.2: Safe transport behaviour is enabled and supported through a coordinated approach to transport safety.

Objective 3.3: Leverage technology to enhance the safety of customers using the transport system.



Actions – medium/long-term

A3.10 Warrego Highway Corridor Planning

Undertake planning to inform corridor protection and investment decisions regarding the development of the Warrego Highway (Toowoomba - Miles) corridor to suit the transport system in locations such as:

- Dalby Heavy Vehicle Detour Route
- Chinchilla Heavy Vehicle Detour Route
- Miles Heavy Vehicle Detour Route
- Oakey to Dalby Masterplanning.

A3.11 New England Highway

Undertake planning for the New England Highway considering:

- widening/strengthening of Back Creek on the New England Highway (Yarraman–Toowoomba)
- upgrade options between Nelson Street and Drayton Connection Road.

A3.12 Wildlife crashes

Identify wildlife-to-vehicle crash hotspots to prioritise mitigation and intervention strategies.

A3.13 Stock routes

Continue to review and make recommendations to the Department of Natural Resources, Mines and Energy for primary stock routes throughout the South West region to improve road safety and the efficiency of agricultural practices.

A3.14 Gore Highway (Toowoomba-Athol Road)

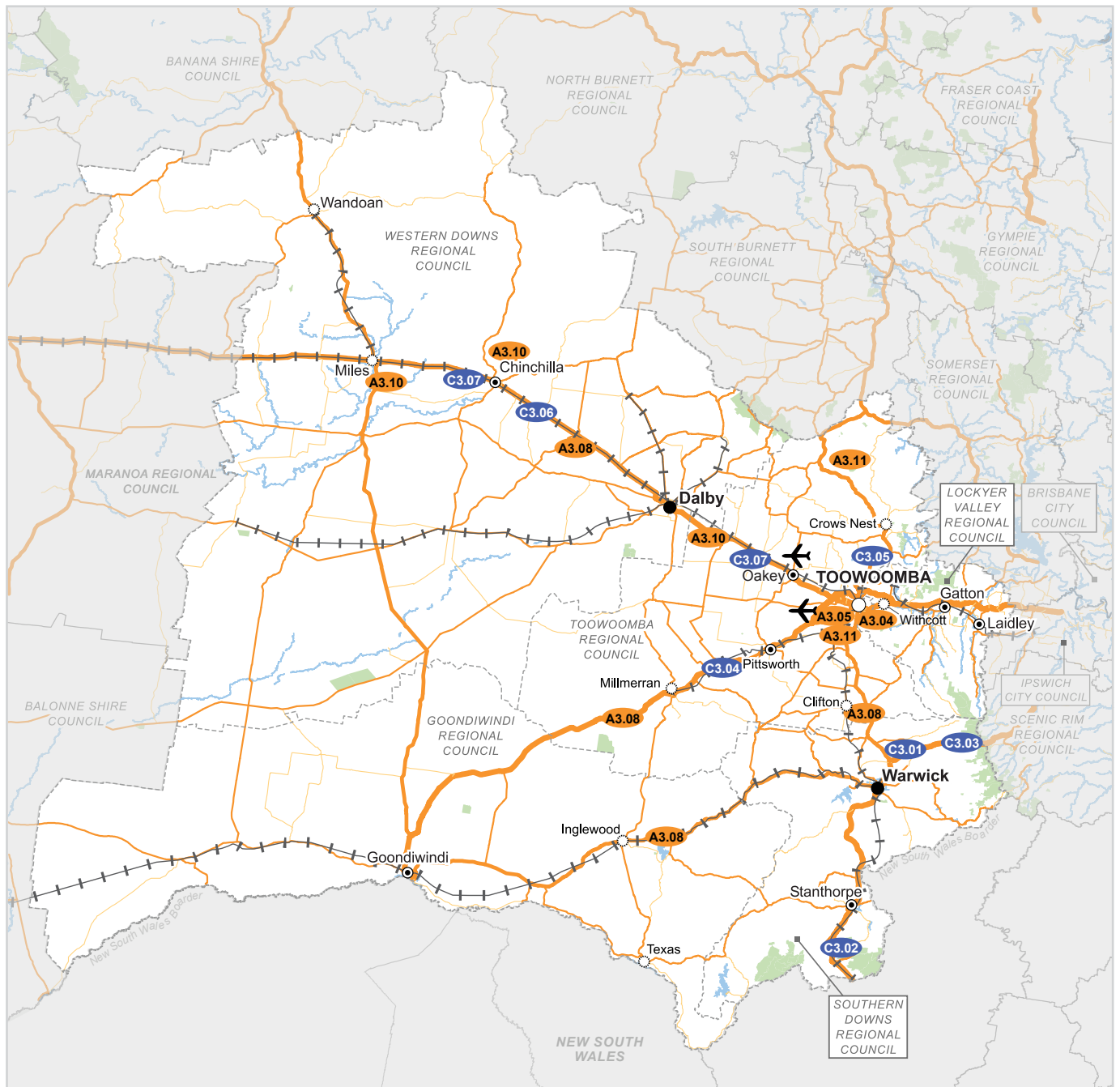
Undertake planning for the Gore Highway (Toowoomba-Athol Road) considering upgrade options between Carrel Drive and Westbrook Road.

3.1 3.2 3.3

	3.1	3.2	3.3
A3.10 Warrego Highway Corridor Planning	✓		
A3.11 New England Highway	✓		
A3.12 Wildlife crashes			✓
A3.13 Stock routes	✓		
A3.14 Gore Highway (Toowoomba-Athol Road)	✓		



Rail level crossing, near Yelarbon



Legend

- National roads
 - State-controlled roads
 - Local roads of regional significance
 - Local government boundary
 - Rail lines
 - ✈ Strategic airport
 - National parks
 - Lakes and rivers
- Key centres – population
- 100,000+
 - 10,000–20,000
 - 2000–9999
 - <2000

Key committed projects

C3.01	Cunningham Highway (Ipswich - Warwick)	Improve intersection/s
C3.02	New England Highway (Warwick - Wallangarra)	Widen pavement
C3.03	Cunningham Highway Safety Package	miscellaneous works
C3.04	Gore Highway (Toowoomba - Millmerran)	Toowoomba – Goondiwindi, undertake miscellaneous works
C3.05	New England Highway (Yarraman - Toowoomba)	Improve intersections – Ruthven / North Street
C3.06	Warrego Highway (Dalby - Miles)	Duplicate from two to four lanes
C3.07	Warrego Highway (Dalby - Miles)	Improve intersection/s

- Action
- Committed project

Disclaimer: This map is indicative to illustrate proposed planning actions and is not intended to be accurate in terms of exact geographic extent.



Figure 12: Priority 3 region map

4.4 Priority 4: Network resilience

A resilient and responsive transport system.

Priority 4 aligns to:

- the Transport Coordination Plan's objective for environment and sustainability
- the *State Infrastructure Plan's* focus on maintenance and rehabilitation of existing infrastructure to reduce the long-term cost of repair and improve network resilience
- Regional planning aims for communities to be safe, fair, sustainable, resilient and prepared for climate change.

Sustainability assessments

Transport and Main Roads (TMR) is implementing government policy by obtaining a formal Infrastructure Sustainability rating through the Infrastructure Sustainability Council of Australia for TMR projects with a business case estimate of \$100 million or over, or undertaking sustainability assessments on projects between \$50–\$100 million. TMR's approach complements Building Queensland's business case framework, policies of other state agencies and addresses the sustainability action point of the *State Infrastructure Plan*.

A resilient transport system enables people and goods to continue moving as safely and efficiently as possible despite incidents or weather events. A resilient transport system is able to adapt to change responding through incident management and resolution to minimise network disruption.

The resilience of the transport system and the natural environment are intrinsically linked. The increase of significant weather events and extreme heat caused by the effect of climate change has the potential to significantly impact road and rail infrastructure in the future.

The transport sector is a significant contributor to greenhouse gas emissions and new transport infrastructure can result in the loss of natural habitats. Targeted infrastructure upgrades should occur in areas of most need, with technology used to fill the gaps to minimise impact on the natural environment.

A resilient and responsive transport system will:

- keep customers moving as safely and efficiently as possible despite disruptions from weather and incidents
- minimise impacts on the region's natural environment.



Impact of bushfire, 2019, Warwick - Wallangarra, New England Highway

Transport objectives

Objective 4.1: Design, construct, operate and maintain the transport system to be resilient to disruptions and support environmental sustainability.

Enhancing the resilience of the transport network enables customers to access the region's essential services, especially during severe weather events. Careful consideration of the design, construction, operation and maintenance of the transport system can minimise disruptions by reducing the impacts of weather on strategic transport infrastructure to maintain connectivity. Building infrastructure to withstand events and providing alternative routes for customers will help maintain connectivity. The upgrading of key routes should also be supported with additional wayfinding and signage to direct customers during these disruptions.

Environmental sustainability is also vital to the region, not just in reducing emissions and impacts towards climate change, but also to support quality of life. Transport is the second largest contributor of greenhouse gas emissions in Queensland and equated to 14.7 per cent of greenhouse gas emissions in 2016.⁸³ Promoting more environmentally sustainable transport options can reduce greenhouse gas emissions due to transport, minimising impacts on climate change.

An integrated and multi-modal approach to minimise environmental impacts from transport considers planning for sustainable transport options, including walking and cycling, and using renewable fuel sources such as low and zero emission vehicles. Low and zero emission vehicles can also be considered for freight as well as planning for an increase of rail to transport goods.

Developing a more resilient and responsive transport system while achieving greater environmental sustainability considers:

- contribution to the state's overall emissions reduction targets
- implementing sustainable infrastructure principles when planning, designing, constructing and operating transport infrastructure
- disaster management and access to essential services during and following extreme weather events
- incorporating planning for additional walking and cycling throughout the region, particularly in the Toowoomba urban area
- supporting the adoption of low and zero emission vehicles by customers
- minimising transport's impact on natural habitats
- flood immunity upgrades at affected sections of the road and rail network
- bridge renewal
- infrastructure design standards to maximise functionality and asset life.

Objective 4.2: Adopt an integrated technology enabled response to minimise the impact of disruptions on customers.

Data and accurate real-time information keeps our customers informed about network conditions, incidents and timeframes for resolution. Connecting residents and tourists with this information can facilitate improved road safety while providing peace of mind. Journeys will be able to be automatically re-routed according to the fastest route and users can make more informed travel choices and contingency plans. Leveraging this information and the data collected from it, infrastructure upgrades can occur on key routes, where they are most needed, which is particularly important in a constrained fiscal environment.

Smart infrastructure approaches will allow for more effective management of assets. Where practical, smart infrastructure will provide real-time data for system operators to maintain the network.

Minimising disruptions through an integrated approach will:

- allow customer access to phone reception at all times and in all weather conditions to keep informed in real-time
- enable automated rerouting support and efficient and affordable monitoring of assets
- support future network planning, where key infrastructure can be upgraded, supported by accurate data and real-time information
- support efficient and affordable monitoring of assets
- enable access to alternative travel options facilitated by technological solutions such as Mobility as a Service.

⁸³ Department of Environment and Science. (2019). *Total annual greenhouse gas emissions*. <https://www.stateoftheenvironment.des.qld.gov.au/pollution/greenhouse-gas-emissions/total-annual-greenhouse-gas-emissions>.

Actions

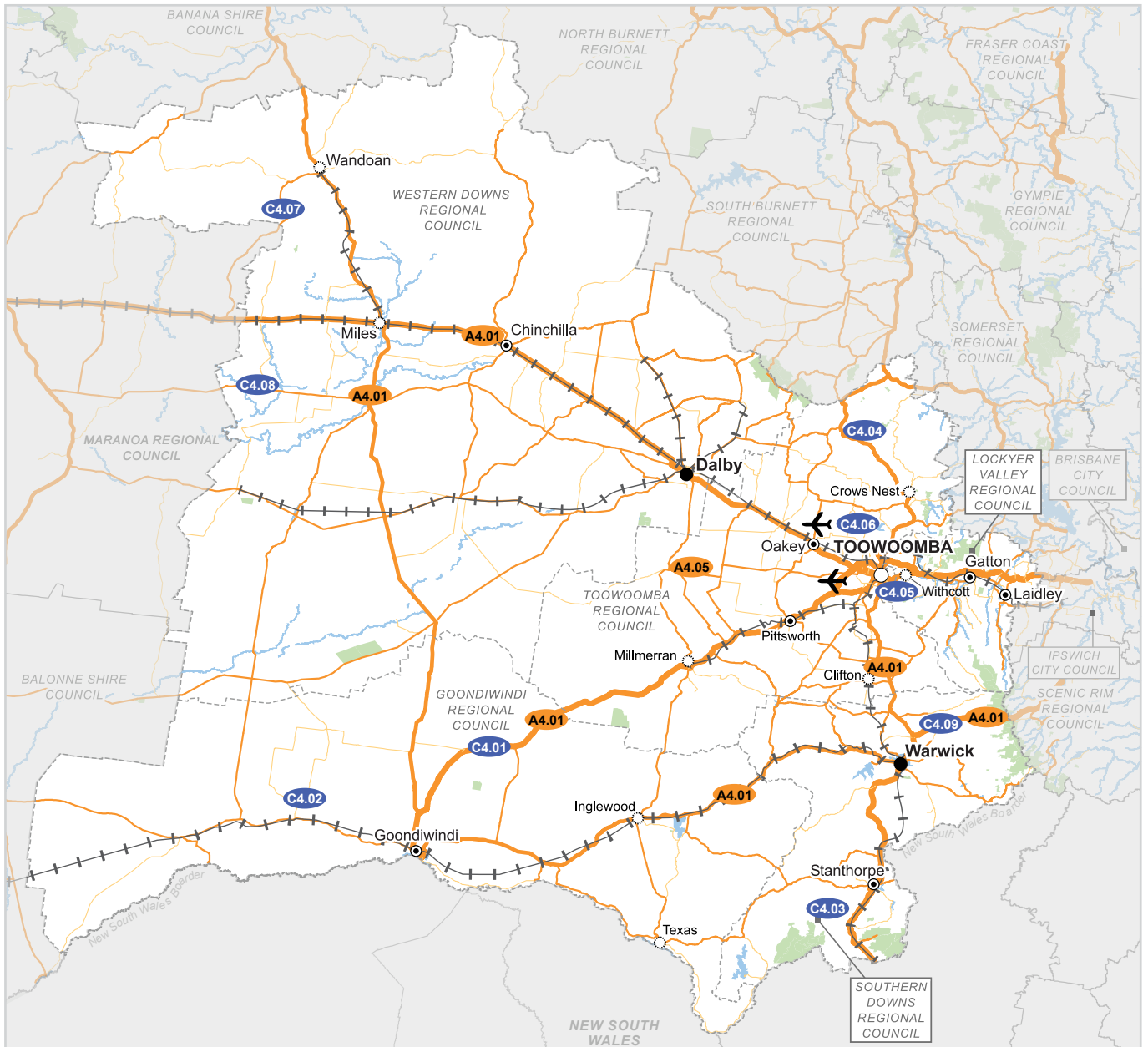
PRIORITY 4: NETWORK RESILIENCE

OBJECTIVES

Objective 4.1: Design, construct, operate and maintain the transport system to be resilient to disruptions and support environmental sustainability.

Objective 4.2: Adopt an integrated technology enabled response to minimise the impact of disruptions on customers.

Actions – short-term	4.1	4.2
<p>A4.01 Flood immunity priorities Undertake planning, design and business case development to upgrade priority flood affected sections of the road network to achieve practicable flood immunity and reroute customers in real-time where technology can be applied. Existing priorities including the Cunningham, Warrego, Gore, Leichardt and New England Highways.</p>	✓	
<p>A4.02 Bridge renewal Using the outputs of regional bridge renewal investigations, commence planning for necessary bridge replacements or structural enhancements across the state-controlled road network for high priority structures in the region. Priorities include timber bridge and single lane/intervention level bridge widths replacement projects and other bridge upgrades at Emu Creek, Accommodation Creek, One Arm Man Bridge and Tchanning Creek Bridge.</p>	✓	
<p>A4.03 Disaster management Continue refining responsive and adaptive disaster management strategies for emergency access, and access to essential goods and services following disruptive events, including extreme weather.</p>	✓	
<p>A4.04 Flood immunity strategy Develop a strategy which identifies affordable flood immunity targets for key links in the state-controlled road network, and develop a high-level program of prioritised flood immunity upgrades to key links and flood-prone locations for potential inclusion in future infrastructure investment programs.</p>	✓	
<p>A4.05 Capital strengthening and widening Undertake planning for priority capital strengthening and widening projects identified in the Surat Basin Planning Study and priority works indicated in link studies and regional multi-criteria analysis assessments.</p>	✓	
<p>A4.06 Structure management Undertake planning activities to prioritise and plan for necessary major culvert replacements on the state and federal network.</p>	✓	✓
Actions – medium/long-term		
<p>A4.07 Low and zero emission vehicles Plan for the future roll out and integration of low and zero emission vehicles (plug-in electric and hydrogen fuel-cell) in regional and remote Queensland, aligning with <i>The Future is Electric – Queensland's Electric Vehicle Strategy</i>, and other relevant State-wide strategies and plans, to ensure integration and connectivity.</p>	✓	
<p>A4.08 Digital communications and connectivity Identify opportunities to improve communications infrastructure and increase the use of innovative technology (e.g. drones) for traffic monitoring, road condition monitoring and the provision of real-time information about network closures and disruptions.</p>	✓	✓
<p>A4.09 Climate change Consider the effect of climate change in the planning of the transport network in the Darling Downs region, through long-term scenario modelling and analysis.</p>	✓	✓



Legend

- National roads
 - State-controlled roads
 - Local roads of regional significance
 - Local government boundary
 - Rail lines
 - ✈ Strategic airport
 - National parks
 - Lakes and rivers
- Key centres – population
- 100,000+
 - 10,000–20,000
 - 2000–9999
 - <2000
- Action
 - Committed project

Key committed projects

C4.01	Gore Highway (Millmerran - Goondiwindi)	Rehabilitate bridge/s and culvert/s
C4.02	Talwood - Boonanga Road	Strengthen bridge/s
C4.03	New England Highway (Warwick - Wallangarra)	Replace bridge/s and approaches
C4.04	New England Highway (Yarraman - Toowoomba)	Upgrade bridge/s
C4.05	Warrego Highway (Ipswich – Toowoomba)	Rehabilitate bridge/s, culvert/s and miscellaneous works
C4.06	Warrego Highway (Toowoomba - Dalby)	Rehabilitate bridge/s and culvert/s
C4.07	Jackson - Wandoan Road	Upgrade bridge
C4.08	Roma - Condamine Road	Replace bridge
C4.09	Palmer Bridge – Freestone	Replace bridge

Disclaimer: This map is indicative to illustrate proposed planning actions and is not intended to be accurate in terms of exact geographic extent.

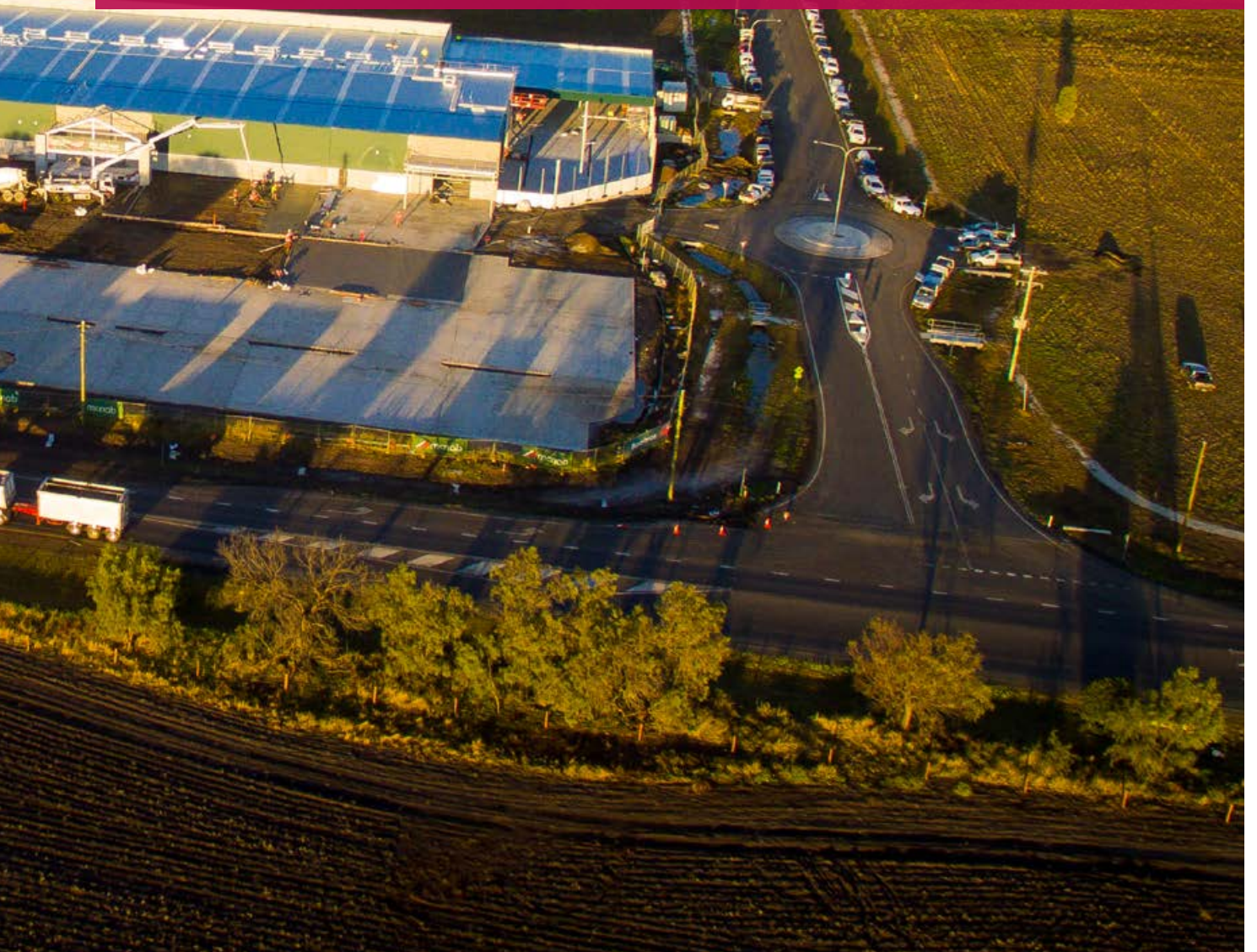


Figure 13: Priority 4 region map



Retail site under construction along Warrego Highway

5. Implementation



5.1 Taking action

Delivering the *Darling Downs 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 14 shows the importance of Regional Transport Plans in the Transport and Main Roads' investment lifecycle.

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

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

- **Informing the *Queensland Transport and Roads Investment Program (QTRIP)***

QTRIP is released annually. It is a funded program of work that will be delivered over the upcoming four years. Projects are listed on QTRIP after having gone through an investment prioritisation process that will be informed by this Plan.

- **Aligning with the *State Infrastructure Plan***

Regional Transport Plans will inform the program 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 to investment proposal activities. Demonstrated alignment with Regional Transport Plans is essential for planning projects to be eligible for funding under the TSPP.

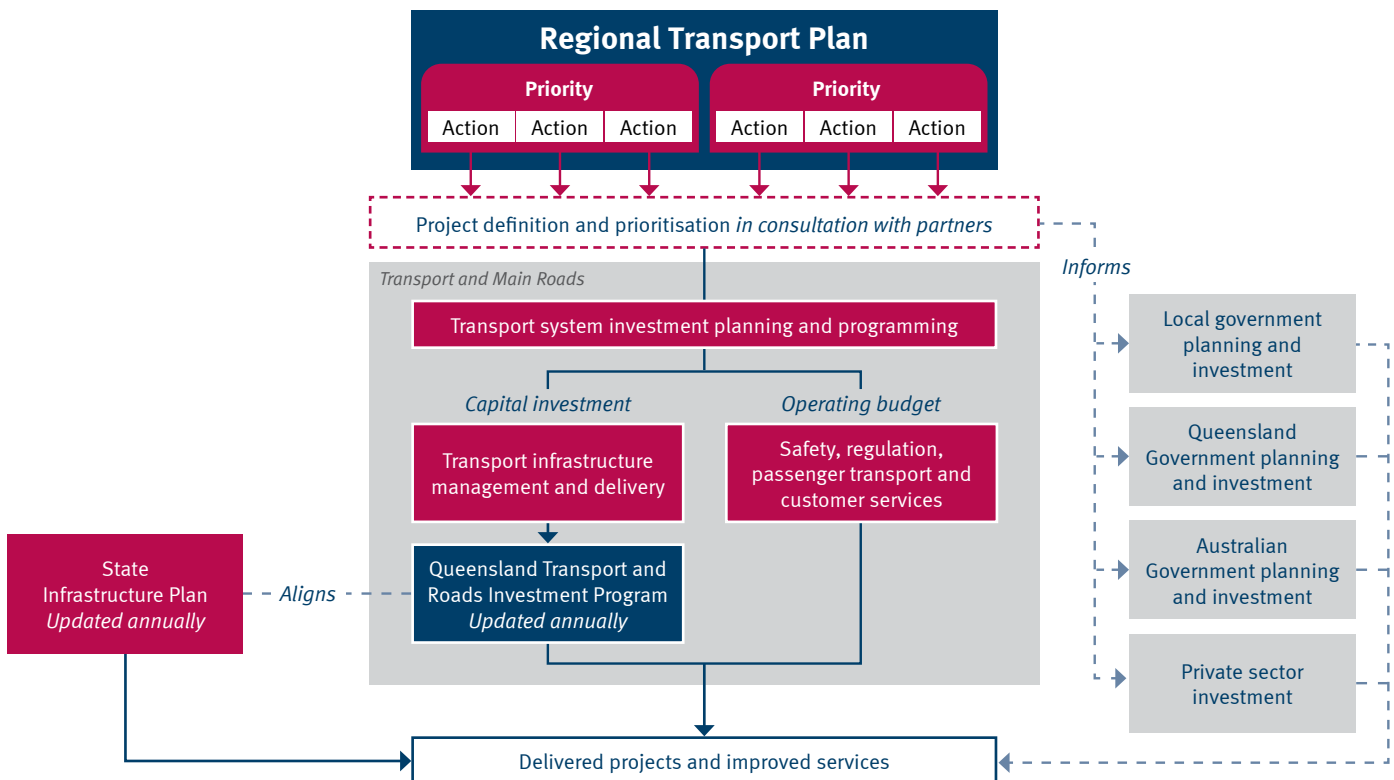


Figure 14: Regional Transport Plans are a critical step in Transport and Main Roads investment lifecycle

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 *Darling Downs Regional Transport Plan*, Transport and Main Roads has built relationships with stakeholders from all levels of government, business and industry. These relationships will be further developed in delivering the actions and opportunities outlined in this Plan. Opportunities for partnering include:

- collaborative planning leveraging knowledge from researchers, universities and education providers
- inviting project development support from individuals or organisations with an interest in implementing an initiative or action
- support and encourage 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 the RRTG in their approach to strategic transport planning and local transport infrastructure investments.



Train tracks, Chinchilla

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. 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: SUPPORTING ECONOMIC GROWTH

MEASURE OF SUCCESS	PROPOSED INDICATOR	SOURCE
Freight productivity improves.	Heavy vehicle operating costs.	Transport and Main Roads
Transport supports the region's tourism economy.	Average travel time to key tourist destinations from major accommodation precincts.	Transport and Main Roads

PRIORITY 2: ENHANCING LIVEABILITY

MEASURE OF SUCCESS	PROPOSED INDICATOR	SOURCE
Greater access and connectivity to places, services and information.	Proportion of the population with good accessibility to a range of essential services in urban areas (by walking, cycling or public transport).*	Transport and Main Roads
Proportion of people choosing to walk, cycle and take public transport increases.	Proportion of people choosing to walk, cycle and take public transport to work.^	Australian Bureau of Statistics
	Proportion of people choosing to walk, cycle and take public transport.*	Transport and Main Roads

PRIORITY 3: TRANSPORT 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

PRIORITY 4: NETWORK RESILIENCE

MEASURE OF SUCCESS	PROPOSED INDICATOR	SOURCE
Reduced frequency and duration of unplanned closures.	Frequency and duration of unplanned closures on the state-controlled transport network due to flooding and other types of incidents.	Transport and Main Roads
Customers are able to safely access digital information on their journey.	Proportion of the state-controlled transport network (rail and road) with mobile reception coverage.	Transport and Main Roads

Figure 15: Measures of success and proposed indicators

* Toowoomba and Lockyer Valley urban areas using the Land Use and Public Transport Accessibility Index (LUPTAI) model to estimate levels of access to destinations by various modes.

^ 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 16).

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.

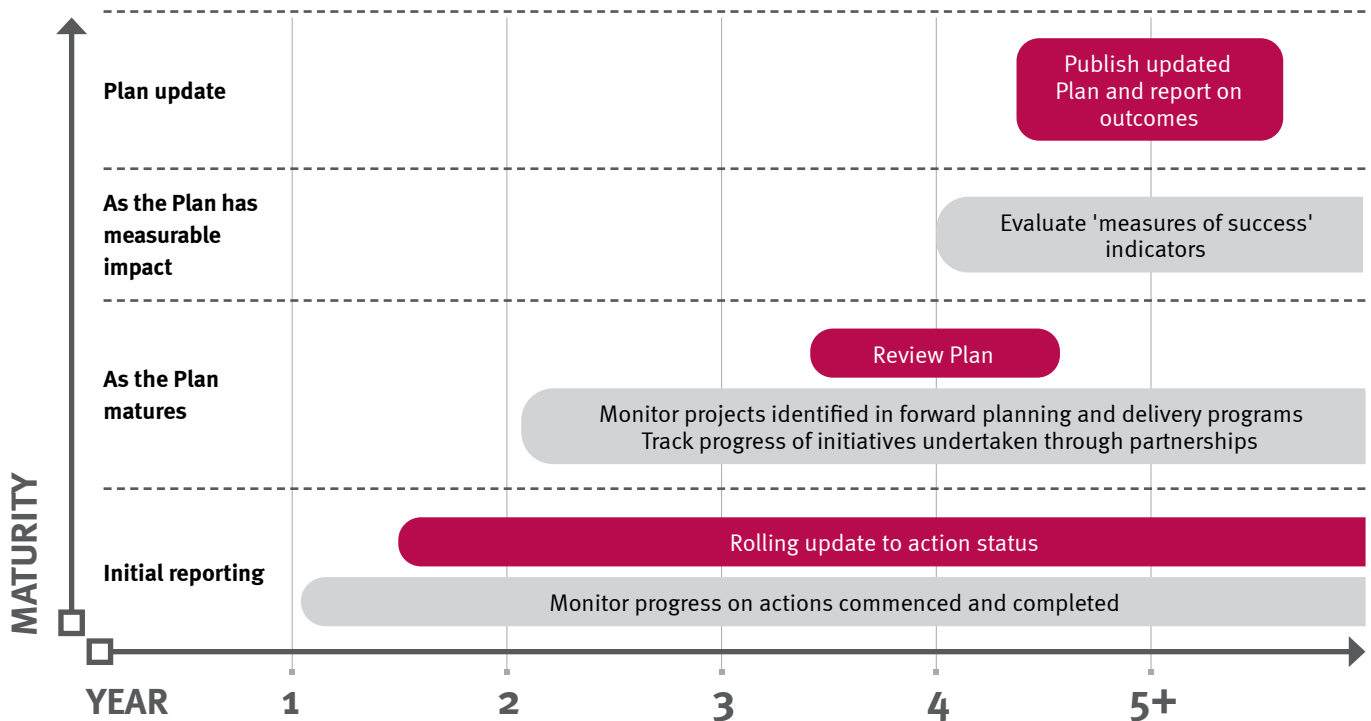


Figure 16: Monitoring, reporting and review as the Plans mature

Further information

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



PHOTO CREDITS

Cover image (insert left), Warwick Town Hall, Southern Downs Regional Council.

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Page 4, Logging truck travelling in Chinchilla, Western Downs Regional Council.

Page 11, Clifton Train Station, Toowoomba Regional Council.

Page 15, Condamine River, Warwick, Southern Downs Regional Council.

Page 16, College View, Warrego Highway, Lockyer Valley, Lockyer Valley Regional Council.

Page 18, Girraween National Park, Southern Downs Regional Council.

Page 21, Goondiwindi, Tourism and Events Queensland.

Page 21, Lockyer Valley, Tourism and Events Queensland.

Page 22, Southern Downs, Tourism and Events Queensland.

Page 22, Toowoomba, Tourism and Events Queensland.

Page 23, Western Downs, Tourism and Events Queensland.

Page 28, Cyclists in rural area, Toowoomba Regional Council.

Page 30, Cattle property, Toowoomba, Toowoomba Regional Council.

Page 32, Freight train, Toowoomba, Toowoomba Regional Council.

Page 36, Mount Whitestone, Gatton-Clifton Road, Lockyer Valley Regional Council.

Page 39, Percy Street, Warwick, Trina Kateifides.

Page 46, Quart Pot Creek, Stanthorpe, Southern Downs Regional Council.

Page 48, Cotton bales, Dalby, Western Downs Regional Council.

Page 49, MacIntyre Bridge, Goondiwindi, Goondiwindi Regional Council.

Page 55, Palmerin Street, Warwick, Southern Downs Regional Council.

Page 57, Lake Apex, Gatton, Lockyer Valley Regional Council.

Page 70, Retail site under construction along Warrego Highway, Western Downs Regional Council.

Page 73, Train tracks, Chinchilla, Western Downs Regional Council.

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