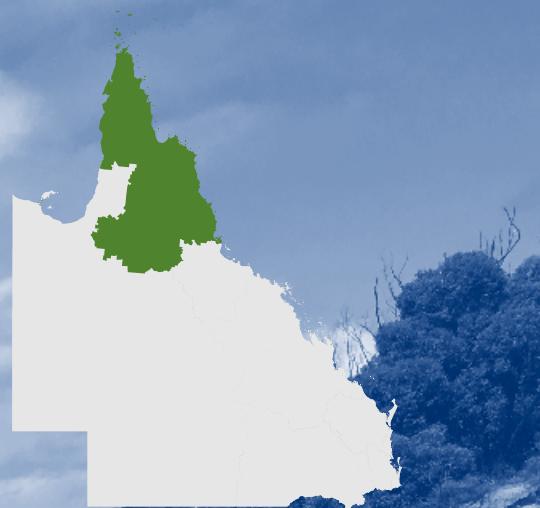


FAR NORTH QUEENSLAND

REGIONAL TRANSPORT PLAN

2019



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We acknowledge the Traditional Owners and Custodians of the land to which this plan applies and pay our respects to their Elders both past and present. Aboriginal and Torres Strait Islander readers are warned, images in this document may contain or represent deceased persons which may cause sadness or distress.

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

Cover images: Elim Beach, Hopevale (background); Moving freight, Thursday Island (inset, left); CBD to Aeroglen Cycleway, Cairns (inset, centre); Cattle on the Mulligan Highway near Lakeland (inset, right).

Inside front cover: Barron River Falls, Smithfield.



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Cyclist on Captain Cook Highway north of Cairns

1. Introduction



1.1 A shared direction for transport

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

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

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

The Far North Queensland region is home to around 286,800 people and includes the 21 local government areas of:

- Aurukun
- Cairns
- Cassowary Coast
- Cook
- Croydon
- Douglas
- Etheridge
- Hope Vale
- Kowanyama
- Lockhart River
- Mapoon
- Mareeba
- Napranum
- Northern Peninsula Area
- Pormpuraaw
- Tablelands
- Torres Strait Island
- Torres
- Weipa¹
- Wujal Wujal
- Yarrabah.

1.2 What is a Regional Transport Plan

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

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

Regional Transport Plans are a fundamental component in the hierarchy of integrated system planning. They have an essential role in defining local responses to wider community goals, system objectives, problems and priorities.

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).

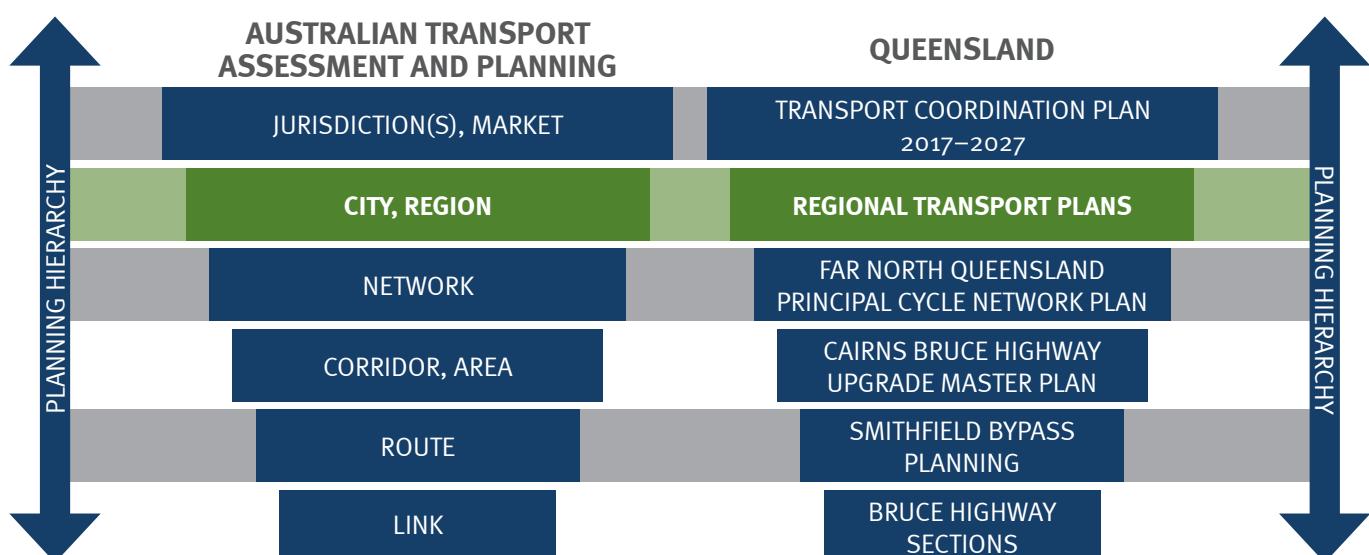


Figure 1: Examples of how Queensland responds to the Australian Transport Assessment and Planning hierarchy

¹ Town Authority

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

- inform 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
- recognises collaboration with local governments is critical to 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*
- *Far North Queensland Regional Plan 2009*
- *Cape York Regional Plan 2014*
- *Gulf Regional Development Plan 2000*
- *Torres Strait and Northern Peninsula Regional Plan 2009*
- local government land use and transport plans, and strategies
- economic development strategies
- the *Australian Infrastructure Plan* (prepared by Infrastructure Australia).

Key planning documents include:

- *Transport Coordination Plan 2017–2027*
- 'Queensland Transport Strategy' (draft)
- *Transport and Main Roads Strategic Plan 2019–2023*
- *Queensland Freight Strategy*
- *Safer Roads, Safer Queensland: Queensland's Road Safety Strategy 2015–2021*
- *Queensland Cycling Strategy 2017–2027*
- *Queensland Walking Strategy 2019–2029*
- *Queensland Tourism and Transport Strategy*
- *Bruce Highway Action Plan*

Priorities and actions identified in the Plan align with current statewide transport policies and objectives. The department regularly reviews and updates statewide strategies and plans and future updates to the Plan will reflect these outcomes.

The future of transport

Queensland Transport Strategy (draft)

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

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

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

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

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

The future of mobility

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

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

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

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

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

Climate change and a low emissions future

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

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

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

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

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

1.4 Alignment with the *State Infrastructure Plan*

The *State Infrastructure Plan* outlines the Queensland Government's strategic direction for the planning, investment and delivery of infrastructure throughout Queensland. This Regional Transport Plan applies the transport policy objectives of the *State Infrastructure Plan* at a regional level. The Queensland Government's strategic direction for transport infrastructure is expressed by the *State Infrastructure Plan* responses (Table 1). Accordingly, many of the planning actions in this Plan respond to these with a particular focus on improving supply chains, safer connections between regional centres, and better use of data and technology.

Table 1: *State Infrastructure Plan* responses (Part A, p 52)

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

1.5 Alignment with the *Transport Coordination Plan 2017–2027*

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

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

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

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

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

1.6 Alignment with the *State Planning Policy*

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

The *State Planning Policy* identifies six state strategic airports within the region—Cairns International, Mareeba, Northern Peninsula (Bamaga), Horn Island, RAAF Base Scherger and Weipa, and five strategic ports—Cairns, Mourilyan, Cape Flattery, Thursday Island and Weipa.

1.7 Alignment with regional planning

Far North Queensland Regional Plan

The *Far North Queensland Regional Plan* includes seven local government areas of:

- Cairns
- Tablelands
- Cassowary Coast
- Wujal Wujal
- Douglas
- Yarrabah
- Mareeba

The 20-year plan outlines objectives, land use policies and strategies to address key issues and achieve desired regional outcomes.

This regional plan's vision is for 'a stronger, more liveable and sustainable community'. The desired regional outcome for transport is 'Communities are connected through an integrated transport system that promotes tourism, public transport use, walking and cycling, provides safe, efficient and effective movement of goods and people, and facilitates access to places and services'.

The *Far North Queensland Regional Plan*'s key objectives for transport are:

- Integrated transport and land use planning—An efficient, integrated transport system that meets community needs, supports a more compact pattern of urban development, maintains efficient transport connections and promotes the self-containment of travel of sub-regions within the Far North Queensland region.
- Transport networks—Highly connected transport networks provide strong links between activity centres and surrounding areas to enable good accessibility, route and mode choice.
- Transport infrastructure—Affordable and efficient air, sea, rail and road transport infrastructure supports a vibrant economy and meets community and tourist needs.



Cairns City bus station

Cape York Regional Plan

The *Cape York Regional Plan* covers 10 local government areas and one town authority including:

- Aurukun
- Cook
- Hope Vale
- Kowanyama
- Lockhart River
- Mapoon
- Napranum
- Northern Peninsula Area
- Pormpuraaw
- Wujal Wujal²
- Weipa Town Authority

The *Cape York Regional Plan* outlines strategic directions, objectives and policies encompassing land use, economy, environment, communities, native title and infrastructure.

The priority outcomes sought by the *Cape York Regional Plan* for the region's transport network is a program management approach to:

- improve the reliability and condition of transport networks for freight and people movement throughout the region
- facilitate multi-user infrastructure upgrades to support economic development in the region.

The state government is interested in ensuring long-term outcomes for state infrastructure and services in the region and therefore expects planning and development outcomes to:

- maximise the benefits of investment in state infrastructure and services through integrated state and local land use planning
- protect state transport infrastructure, corridors and transport networks from the impacts of development to ensure their ongoing safe and efficient operation
- protect strategic airports, aviation facilities, defence facilities including RAAF Base Scherger and marine facilities from incompatible development to ensure their long-term safe and viable operation.³

Gulf Regional Development Plan

The *Gulf Regional Development Plan* includes the local government areas of:

- Burke
- Carpentaria
- Croydon
- Doomadgee
- Etheridge
- Kowanyama⁴
- Mornington.

This regional plan is a non-statutory 20-year plan that outlines strategies, recommendations and priority actions to address key issues for the Gulf of Carpentaria, and provide guidance for policy development and implementation.

The *Gulf Regional Development Plan* contains vision statements and goals for integrated transport covering themes such as:

- an efficient and cost-competitive freight industry operating from a number of regional and interstate sources
- improved range and affordability of goods and services that are available to the Gulf communities
- Karumba has a role as a major economic activity and transportation node for the region
- improved capability to export and import through the Port of Karumba and through Mount Isa, Townsville, Cairns and the Northern Territory and direct to southern markets via rail and road links
- development and integration of key transportation facilities
- state-controlled roads are closed only by major flood events and there is decreased closure on local roads
- improved physical access to and between communities provides a choice of reasonable and affordable means of access within the region and to external service centres
- increased reliability, efficiency, safety and affordability of an integrated transport network
- responding to community needs and economic development requirements whilst developing the transportation system in an ecologically sustainable manner.

² Included in both the *Cape York Regional Plan* and *Far North Queensland Regional Plan*.

³ Department of Local Government and Planning. (2016). www.dlqp.qld.gov.au/resources/plan/cape-york/cape-york-regional-plan.pdf.

⁴ Included in both the *Cape York Regional Plan* and *Gulf Regional Development Plan*.

Torres Strait and Northern Peninsula Area Regional Plan

The *Torres Strait and Northern Peninsula Area Regional Plan* guides development, and ensures opportunities and resources are maximised to secure the region's future through coordinated service delivery. This regional plan is a non-statutory 20-year plan collectively developed by Torres Strait Regional Authority, Torres Strait Island Regional Council, Torres Shire Council and the Northern Peninsula Area Regional Council, and supported by the Queensland Government.

The *Torres Strait and Northern Peninsula Area Regional Plan* acknowledges the role of transport as important to:

- the future development of the region, contributing to economic opportunities
- the level of community economic participation
- public safety objectives, with access to a safe transport system.

Summary of regional planning themes for the Far North Queensland region

The *Far North Queensland Regional Transport Plan* responds to the themes that are common across each of the four regional plans. The key themes relevant to transport are:

- **Safety** – Transport that supports the safe movement of goods and people, by all modes and at all times.
- **Economy** – Transport that facilitates the growth of key industries, and the efficient movement of people and goods for increased regional competitiveness and productivity.
- **Communities** – Integrated and sustainable transport that fosters a more liveable, affordable and accessible region for improved social outcomes.
- **Coordination** – Working in partnership across agencies to maximise the benefits of investment in transport.



Tourists in Cairns

1.8 Achievements to date

The *Far North Queensland Regional Transport Plan* outlines priorities and actions to respond to the challenges and opportunities facing the Far North Queensland region. A snapshot of actions already undertaken or underway include:

Upgrade of Bruce Highway

Recent, current and committed improvement projects for the Bruce Highway include:

- Flood immunity upgrades at Dallachy Road jointly funded by the Australian and Queensland Government.
- Intersection upgrades at Ash, Blackwood and Pine Streets, Innisfail-Japoon Road, Stitt Street and McGowan Drive south of Innisfail jointly funded by the Australian and Queensland Government.
- Upgrades to six rest areas, and installation of two new rest areas between Cardwell and Cairns funded by the Australian Government.
- Corridor planning and preservation for the Innisfail Bypass.

Cairns Southern Access Corridor

The Cairns Bruce Highway Upgrade Master Plan was published in 2010. It was the result of a planning study that investigated long-term, multi-modal transport planning options to address the impacts of urban growth, congestion and traffic accidents through staged upgrades. To date, significant work has been completed under the master plan to manage urban congestion for the Bruce Highway – Cairns Southern Access Corridor.

Construction has commenced for the Cairns Southern Access Corridor Stage 4 widening of Ray Jones Drive from four to six lanes between Golf Links Drive (Kate Street) and Aumuller Street. Construction is scheduled to start in May 2020 for Stage 3 to duplicate a 10km section of the Bruce Highway between Edmonton and Gordonvale.

Captain Cook Highway

The Clifton Beach intersection upgrade was recently completed. Construction has commenced for the \$152 million Smithfield Bypass project between McGregor Road and Caravonica roundabouts. Road safety improvements on the Captain Cook Highway are planned for various locations. Planning has commenced for safety and capacity improvements and future upgrades between Florence Street and Barron River, between Poolwood Road and Endeavour Road, and at the Machans Beach and Holloways Beach roundabouts. \$359 million is committed to deliver capacity upgrades between Cairns city and Smithfield under the Cairns Ring Road initiative.

Flood mitigation

Works have been undertaken to improve flood prone routes in the region and maintain connectivity, including completion of a section of the Kennedy Highway, near Ravenshoe to improve safety and travelling conditions and reduce the impacts of flooding on the important inland highway link.

Safety initiatives

Safety initiatives across the region that have been recently completed or are underway include intersection upgrades, road widening, overtaking lanes and more rest and parking areas for heavy vehicles. Under the High Risk Roads program, safety works have started on the Captain Cook Highway, and works are planned to commence in 2020 for the Kennedy Highway and Gillies Highway.

Passenger transport

Ongoing improvements to Cairns bus infrastructure are planned as part of the Cairns Transit Network. Options analysis and business case investigations have commenced for priority bus stops and corridors across the network. Funding is committed to construct a new bus facility at Raintrees Shopping Centre in partnership with Cairns Regional Council.

Active transport

The Queensland Government and local councils have produced Principal Cycle Network Plans and Priority Route Maps. Councils are eligible for funding to build trails through the Cycle Network Local Government Grants Program. A series of cycle projects, in planning or under construction, include the Captain Cook Highway, Mission Beach, Palm Cove to Trinity Beach, Cairns southern cycleway, Cooktown and Newell Beach to Port Douglas.

Boating

Boating infrastructure upgrades are underway for Clump Point at Mission Beach, and funding is committed to construct the Newell Beach boat ramp.

Northern Australia Roads Program

Within Etheridge Shire Council area, progressive sealing is planned for 36 kilometres of the remaining unsealed Kennedy Developmental Road.

Northern Australia Beef Roads Program

Within Mareeba, Croydon and Tablelands local government areas progressive sealing is planned for 30 kilometres of unsealed roads including the Burke Developmental, Ootann and Richmond-Croydon Roads.

Western Road Upgrade Program

Ongoing road widening and sealing will improve efficiency and safety, and reduce maintenance costs on the Gulf Developmental Road between Croydon and Georgetown.

Cape York Region Package

The \$276 million Cape York Region Package (CYRP) is nearing completion, with 18 priority sections upgraded and sealed on the Peninsula Developmental Road (PDR) and the completion of more than 86 per cent of the community infrastructure works program.

From 2014 to 2019, the CYRP delivered significant achievements including:

- 173 kilometres of upgrades and bitumen seal on the PDR
- sealing of the Endeavour Valley Road between Cooktown and Hope Vale
- completion of key community infrastructure projects delivered with Cape York councils, such as the \$1.35 million airport bridge at Lockhart River. This important project improved flood immunity and reliability on a key route linking the community to the airport and PDR
- completion of more than 50 kilometres of community access roads that connect remote Indigenous communities to the PDR.

The CYRP has improved access across Cape York and empowered local communities through training, employment and business development opportunities. As of November 2019, 18 PDR projects have provided 152,000 hours of training and employment to local Indigenous community members in civil construction, vegetation and road maintenance works.

In addition to this, since 2015, 19 local Indigenous businesses have also been engaged to work in civil construction, vegetation and road maintenance works. \$48 million worth of work has been completed by Indigenous businesses and supported economic development in the region.

Over the life of the program, TMR has awarded 12 secondary and 7 tertiary scholarships to successful applicants with connection to country along the PDR.

Reconciliation Awards for Peninsula Developmental Road Priority Agreement

The Peninsula Developmental Road Priority Agreement won the Partnership Category at the 2016 Queensland Reconciliation Awards. This agreement was developed in consultation with Traditional Owners and ensured

that work carried out on the Peninsula Developmental Road set a new standard for engagement with traditional owners through providing tangible economic opportunities.



Sealing works, Peninsula Development Road



Motorcycles on Mulligan Highway, south of Cooktown

1.9 Developing Regional Transport Plans

Planning principles

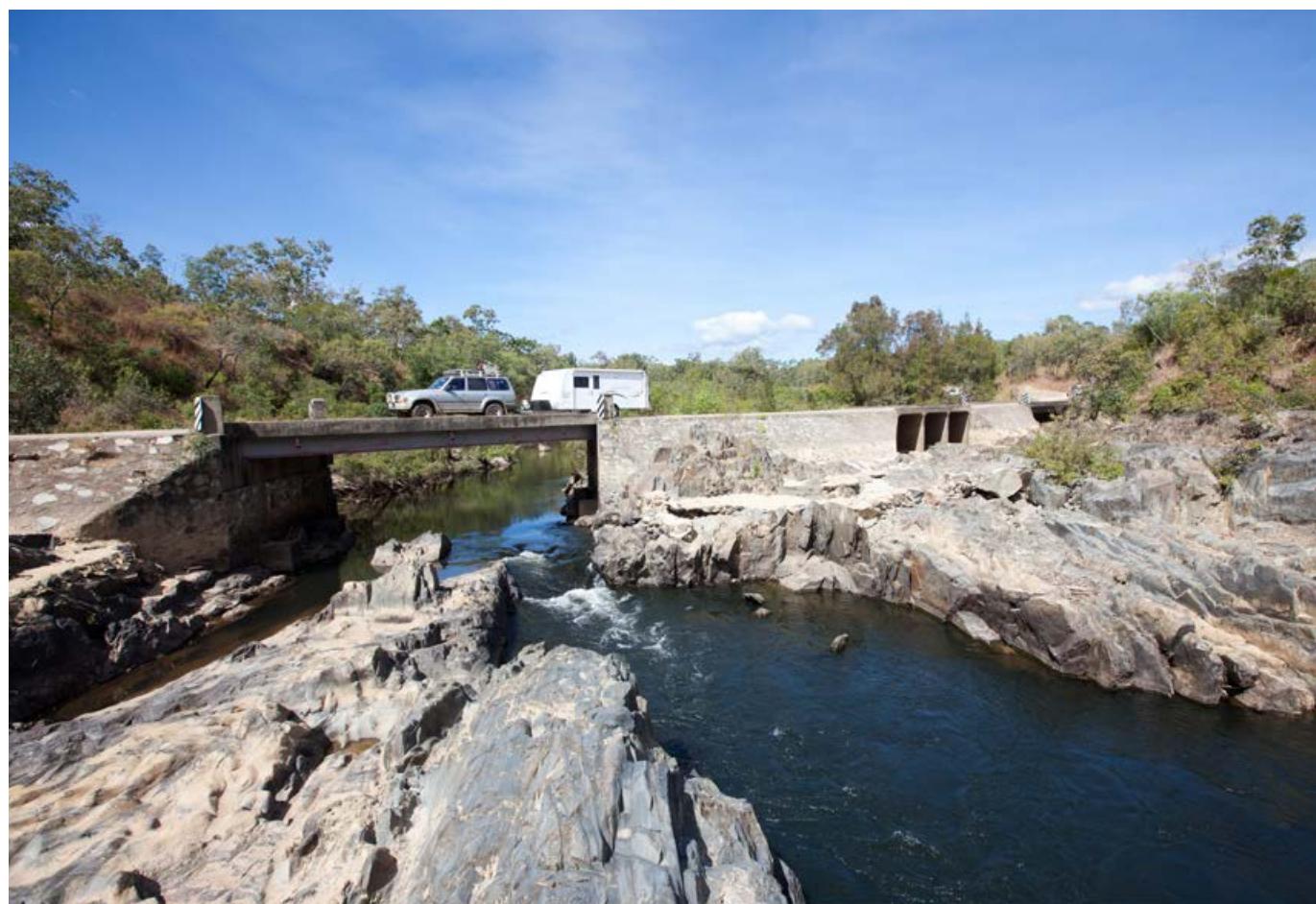
All levels of government routinely face increasing pressure to fund more public services and infrastructure in order to meet community expectations. Funding is limited, so competing priorities must be continually balanced.

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

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

In the context of constrained funding, Regional Transport Plans are being developed with the view that solutions to transport challenges and customer needs are not always about building or expanding existing infrastructure, but include identifying new and innovative ways to do more with less. The best outcome may not be a new road or other type of transport facility. Instead, it may be modification of an existing asset, for example, reconfiguring a road to accommodate bicycle 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 2.



Tourists crossing Annan River Bridge

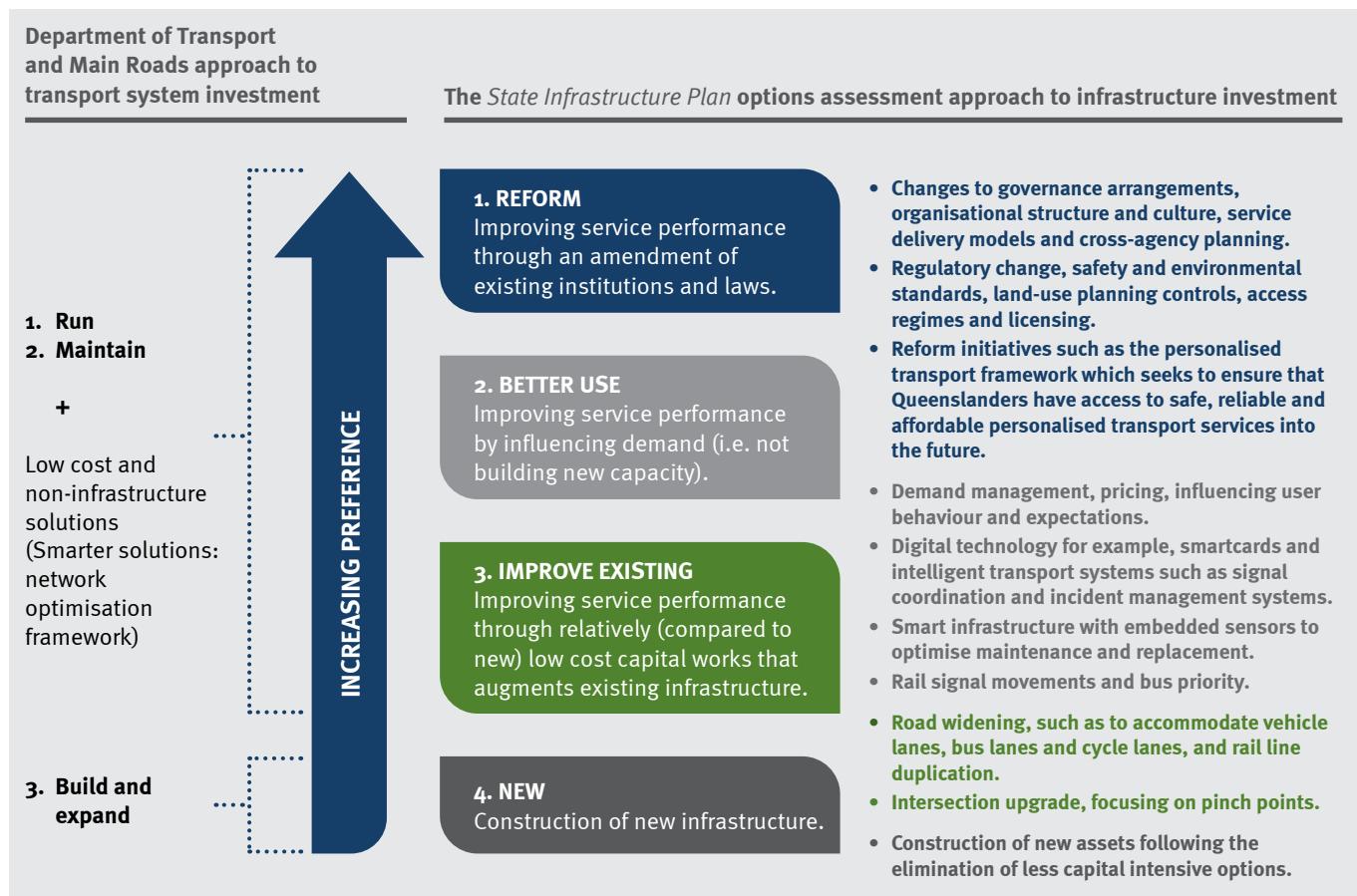
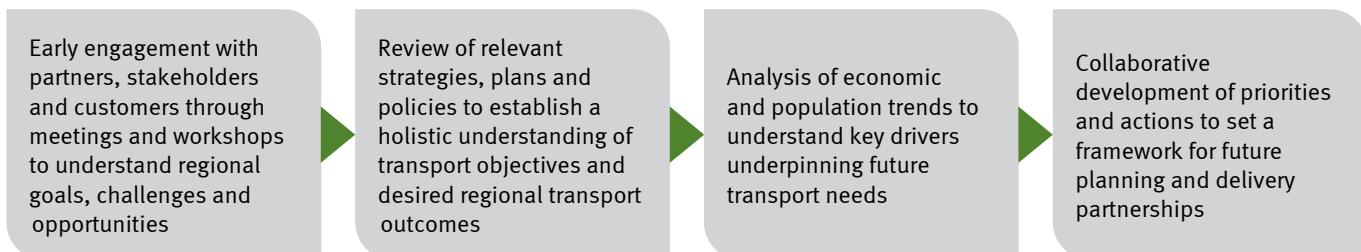


Figure 2: Alignment between the departmental and government approaches to infrastructure investment

Process

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



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 by the different levels of government. Transport and Main Roads' customer-centric approach is central to the way it does business. The approach is about shaping deliverables and services with customers in mind, co-designing solutions that embrace the future, and communicating effectively and meaningfully.

One network

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

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 across agriculture, mining, health, tourism and small business. To gain customer input, Transport and Main Roads hosted workshops, and facilitated a number of one-on-one interviews. Some of the key issues that emerged from this engagement included:

- the size and complexity of the region is a challenge for the effective funding, management and delivery of equitable transport infrastructure and services.
- the geography and climate of the region make the transport network vulnerable and unreliable throughout the year, particularly during the wet season.
- there is a lack of basic access to affordable transport options to connect the more remote parts of the region to goods and services and to other places.
- regional variability in the efficiency and reliability for access to markets by road, rail, sea and air limits investment opportunities and constrains economic sustainability and growth.
- population growth and development is increasing demand pressures on urban transport networks and threatening liveability and productivity in towns and city centres.
- the current transport network is not meeting the diverse and sometimes competing needs of different users resulting in safety issues.

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

Structure

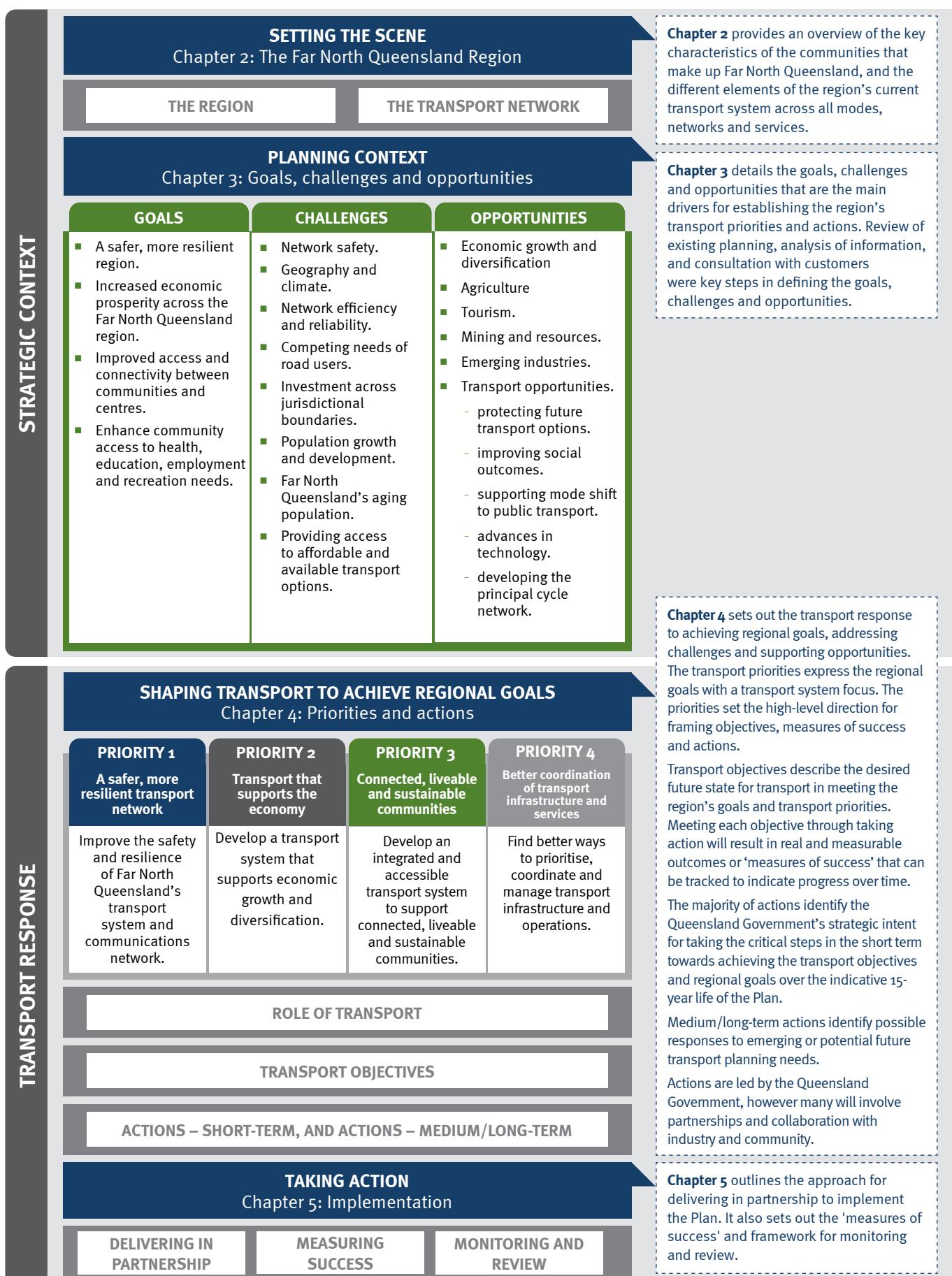
The document comprises five chapters covering an introduction, setting the scene, planning context, transport response and implementation. The sequence and content of chapters reflects the development and implementation stages for the Plan.

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

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

Table 2 outlines the key components of the Regional Transport Plan.

Table 2: Structure of the Far North Queensland Regional Transport Plan





Munro Martin Parklands, Cairns



2. The Far North Queensland Region



2.1 Region overview

The Far North Queensland region covers a vast area extending from the Torres Strait Islands in the north to the top of the Cardwell Range in the south, and from Cairns in the east to Croydon in the west. The region includes 20 local government areas and one town authority.

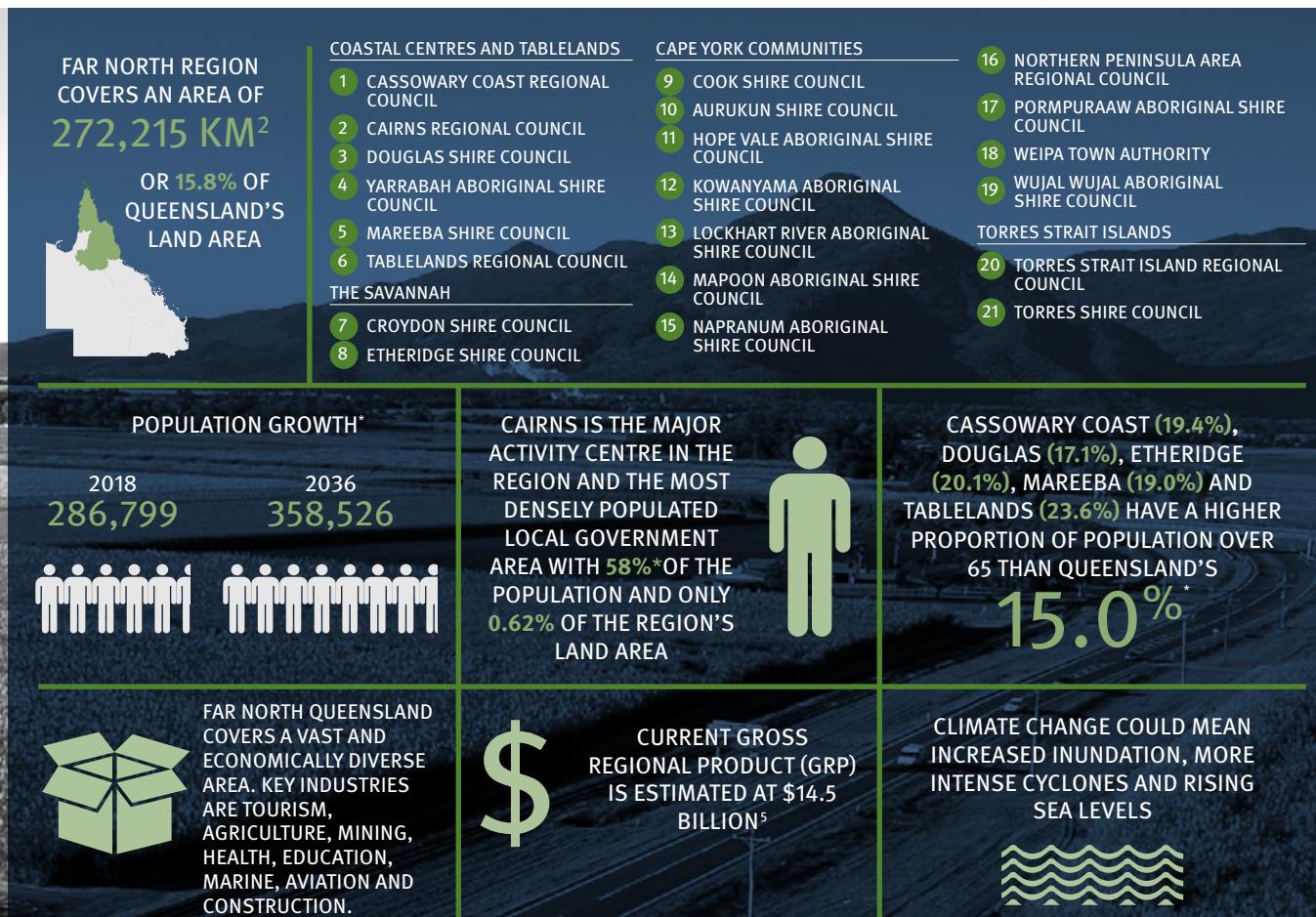
The region is renowned for its rich and diverse natural environment, including two World Heritage Areas, Aboriginal and Torres Strait Islander cultures, and its productive agricultural and resource areas. As part of the

wider northern Australia area and due to its proximity to Asia, Far North Queensland is also recognised for its potential to support economic and population growth.

The size and diversity of Far North Queensland's geography and communities results in different characteristics and challenges for different parts of the region. For this reason, the Far North Queensland region can be considered as four sub-regions made up of local government areas with similar characteristics and transport needs.



Lighthouse on Grassy Hill, Cooktown



KEY FEATURES OF THE REGIONAL ECONOMY



The region has a diverse mix of industries across export and services markets and is further diversifying to become an **education and research hub**



Health care and social assistance is the largest employing industry at **13.1%***



Agriculture is a key industry contributing around **\$1.4 billion** to the regional economy in the year 2015–2016 with opportunities to further expand^{6,7}



HMAS Cairns and RAAF Scherger are both set to undergo upgrades in order to advance defence capabilities in Northern Australia



Growth in knowledge based industries particularly in research expertise in tropical living such as tropical disease and agriculture production



The region is on track to achieve the 2020 visitor expenditure target of **\$3.5 billion⁸**



Far North is expanding in energy markets with **several renewable projects** throughout the region



The region **supports a significant mining, energy and natural resources sector** with downstream sectors, including manufacturing and professional services

⁵ National Institute of Economic and Industry Research 2016 cited by Trade and Investment Queensland. (2019). www.tiq.qld.gov.au/invest/regional-investment-opportunities/far-north-queensland/

⁶ Trade and Investment Queensland. (2016). *Market Profile Far North Queensland*.

⁷ Australian Government. (2015). *Northern Australia White Paper*.

⁸ Tourism Tropical North Queensland. (2018). *Tropical North Queensland Destination Tourism Plan October 2018*.

* Note: *2018 population is sourced from Australian Bureau of Statistics. (2019). *Regional Population Growth, Australia, 2017-18 (Catalogue No. 3218.0)*. Projected population is sourced from Queensland Government Statisticians' Office. (2018). *Projected population (medium series), by local government area, Queensland, 2016 to 2041, 2018 edition*. Employment statistics are sourced from Australian Bureau of Statistics. (2017). *Census of Population and Housing, Australia, 2016, Working Population Profile - Wo9 (place of work) (Catalogue No. 2006.0)*. 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

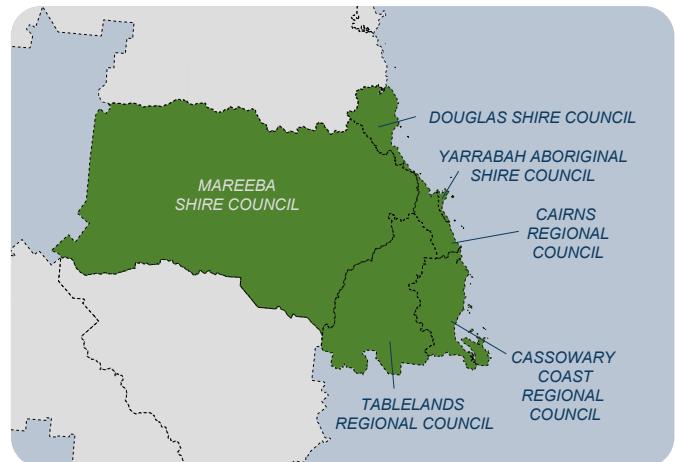


Cycling along Cairns Esplanade

The majority of the Far North Queensland region's population and activity centres are in the Coastal Centres and Tablelands area. The city of Cairns is the principal regional centre, with larger service towns of Mareeba, Atherton, Innisfail and Port Douglas. There are also a number of smaller centres, such as Mossman, Tully, Cardwell, Mission Beach, Malanda, Kuranda and Yarrabah.

The area has an estimated resident population of around 258,000 with an annual projected growth rate of 1.3 per cent.* Major employment is in health care and social assistance (13.2 per cent), and retail trade (10.2 per cent). Tourism is a major economic driver as the region provides access to the world heritage listed Great Barrier Reef Marine Park, and the Wet Tropics World Heritage Area.

The Coastal Centres and Tablelands area is the gateway to the broader region. This area has the highest population, highest density and most extensive demand for transport network infrastructure and services.



* Employment statistics in this section are sourced from Australian Bureau of Statistics. (2017). *Census of Population and Housing, Australia, 2016 – General Community Profile – G51 (Industry of Employment by Age and Sex – place of usual residence)*, (Catalogue No. 2916.0) and unpublished data. Employment industries are categorised as per the employment divisions of Australian Bureau of Statistics. (2013). *Australian and New Zealand Standard Industrial Classification 2006 (Revision 2.0)* (Catalogue No. 1292.0). 2018 population is sourced from Australian Bureau of Statistics. (2019). *Regional Population Growth, Australia, 2017-18* (Catalogue No. 3218.0). 2036 population is sourced from Queensland Government Statisticians' Office. (2018). *Projected population (medium series), by local government area, Queensland, 2016 to 2041, 2018 edition*.

Priority 1	Priority 2	Priority 3	Priority 4	Implementation
Local government*	Key centres	Estimated 2018 population	Projected 2036 population	Economy
Cairns	Cairns, Babinda	165,525	221,242	Health and social services, education, service industries, construction, transport, defence, manufacturing, sugar and tourism
Cassowary Coast	Innisfail, Tully, Cardwell, Mission Beach	29,689	31,502	Sugar, bananas, livestock and tourism
Douglas	Port Douglas, Mossman	12,257	14,428	Sugar and tourism
Mareeba	Mareeba, Kuranda	22,517	27,532	Diverse agriculture sector, tourism, emerging manufacturing and transport industries, mining
Tablelands	Malanda, Herberton, Ravenshoe, Atherton, Yungaburra	25,541	29,233	Diverse agriculture sector and tourism
Yarrabah	Yarrabah	2848	3419	Health and social services, potential for tourism
COASTAL CENTRES AND TABLELANDS		258,377	327,325	

Cairns – the region's principal activity centre

Cairns is the major activity centre in the region and the most densely populated local government area with 58 per cent of the population and only 0.6 per cent of the region's land area. Cairns plays a vital role in servicing the needs of the broader Far North Queensland community as a key destination offering access to government and health services and a larger range of shopping, entertainment and leisure options than available elsewhere in the region. Cairns Airport is a major international and regional airport and serves as a tourism gateway to the region.

The 2016 census data highlights Cairns role in servicing the wider region with 14.4 per cent of employed persons working in the health care and social assistance industry, 10.6 per cent of employed persons worked in retail trade industry and 10 per cent in accommodation and food services reflecting the demand for workers to support the tourism industry.

Cairns Regional Council's population is expected to grow by around 56,000 people between 2018 and

2036, catering to the majority of the wider region's population growth. Around half of this growth will occur in southern Cairns' greenfield sites including the emerging community of Mount Peter, between Edmonton and Gordonvale. The Coordinator-General has declared the Cairns South State Development Area between Edmonton and Gordonvale as a major future employment hub to support population growth.



Cairns Reef Terminal Jetty

* Employment statistics in this section are sourced from Australian Bureau of Statistics. (2017). *Census of Population and Housing, Australia, 2016 – General Community Profile – G51 (Industry of Employment by Age and Sex – place of usual residence)*, (Catalogue No. 2916.0) and unpublished data. Employment industries are categorised as per the employment divisions of Australian Bureau of Statistics. (2013). *Australian and New Zealand Standard Industrial Classification 2006 (Revision 2.0)* (Catalogue No. 1292.0). 2018 population is sourced from Australian Bureau of Statistics. (2019). *Regional Population Growth, Australia, 2017-18* (Catalogue No. 3218.0). 2036 population is sourced from Queensland Government Statisticians' Office. (2018). *Projected population (medium series), by local government area, Queensland, 2016 to 2041, 2018 edition*.

SAVANNAH



Undara Lava Tubes, Etheridge Shire Council

Croydon and Etheridge are located in the far west of the Far North Queensland region. This area is part of the *Gulf Regional Development Plan* and has strong connections to the neighbouring *North West Queensland and Northern Queensland Regional Transport Plans*.

The area is accessible by the Gulf Developmental Road, Gregory Highway and Kennedy Developmental Road. The Savannahlander and Gulflander tourist rails are an iconic feature of the area's tourism industry.

The 2016 Census data indicates the major employing industries are agriculture (44.3 per cent) and public administration and training (16.8 per cent). Cattle and tourism are also significant industry sectors.



Local government*	Key centres	Estimated 2018 population	Projected 2036 population	Economy
Croydon	Croydon	288	284	Agriculture, predominately cattle, and tourism, including organised tours, tourist rail and self-drive tourism.
Etheridge	Mount Surprise, Forsayth, Georgetown, Einasleigh	804	708	

SAVANNAH

1092

1002

* Employment statistics in this section are sourced from Australian Bureau of Statistics. (2017). *Census of Population and Housing, Australia, 2016 – General Community Profile – G51 (Industry of Employment by Age and Sex – place of usual residence)*, (Catalogue No. 2916.0) and unpublished data. Employment industries are categorised as per the employment divisions of Australian Bureau of Statistics. (2013). *Australian and New Zealand Standard Industrial Classification 2006 (Revision 2.0)* (Catalogue No. 1292.0). 2018 population is sourced from Australian Bureau of Statistics. (2019). *Regional Population Growth, Australia, 2017-18* (Catalogue No. 3218.0). 2036 population is sourced from Queensland Government Statisticians' Office. (2018). *Projected population (medium series), by local government area, Queensland, 2016 to 2041, 2018 edition*.

TORRES STRAIT

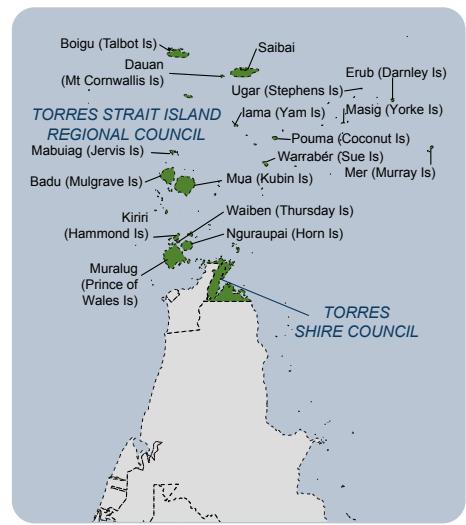


Poruma (Coconut Island), Torres Strait

Located in the northern most part of Queensland, Torres Strait is close to the border of Papua New Guinea and includes 17 populated islands within two local government areas. The Torres Shire Council includes Waiben (Thursday Island), the major administrative and service centre, and Ngurupai (Horn Island) with the main airport. Air services connect to Cairns, Weipa, Bamaga and other Torres Strait Islands. Passenger ferry services operate between Waiben and Ngurupai, and between Waiben and Seisia on the Cape York Peninsula.

Most of the remaining islands are included in the Torres Strait Island Regional Council area. Air and water services and infrastructure are critical for the movement of people and goods in the Torres Strait.

Major employing industries in the Torres Strait are public administration and safety (25.4 per cent) and health care and social assistance (18.2 per cent). The tourism and fishing industries have potential for growth. The Torres Strait's high cost of living is linked to a reliance on imports and the high cost of transporting goods to these remote and island based communities.⁹



Local government* Key centres

Local government*	Key centres	Estimated 2018 population	Projected 2036 population
Torres	Waiben (Thursday Island), Ngurupai (Horn Island) and Muralug (Prince of Wales Island)	3848	4221
Torres Strait Island	Eastern Islands: Mer (Murray Island), Erub (Darnley Island), Ugar (Stephen/s Island) Central Islands: Iama (Yam Island), Masig (Yorke Island), Warraber (Sue Island), Poruma (Coconut Island) Western Islands: Badu (Mulgrave Island), Mua Island-Arka (Kubin), Mua Island-Wug (St. Pauls), Mabuyag (Jervis Island) Southern Islands: Kiriri (Hammond Island) Top Western Islands: Saibai Island, Boigu (Talbot Island), Dauan (Mt Cornwallis Island)	4994	5093

TORRES STRAIT

8842

9313

⁹ Torres Strait Regional Authority. (2009). www.tsra.gov.au/_data/assets/pdf_file/0018/1773/ts-npa-rp-09-29.pdf, page1.

* Employment statistics in this section are sourced from Australian Bureau of Statistics. (2017). *Census of Population and Housing, Australia, 2016 – General Community Profile – G51 (Industry of Employment by Age and Sex – place of usual residence)*, (Catalogue No. 2916.0) and unpublished data. Employment industries are categorised as per the employment divisions of Australian Bureau of Statistics. (2013). *Australian and New Zealand Standard Industrial Classification 2006 (Revision 2.0)* (Catalogue No. 1292.0). 2018 population is sourced from Australian Bureau of Statistics. (2019). *Regional Population Growth, Australia, 2017-18* (Catalogue No. 3218.0). 2036 population is sourced from Queensland Government Statisticians' Office. (2018). *Projected population (medium series), by local government area, Queensland, 2016 to 2041, 2018 edition*.

CAPE YORK

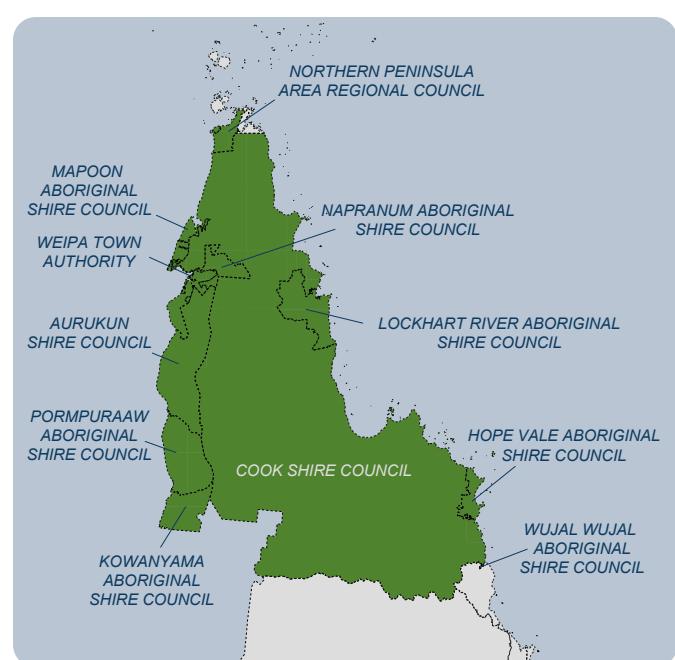


Quintell Beach, Lockhart River

Cape York is a large, remote and sparsely populated area made up of 11 local governments containing many small remote communities spread across a land mass of 128,330km². The main access into the Cape via the Peninsula Developmental Road is subject to frequent and lengthy closures or load restrictions as a result of wet season flood events. Seasonal road access restrictions can leave many of the Cape communities isolated for weeks and even months at a time. Air and sea transport provide vital access when road closures isolate communities.

Of the local government areas in Cape York, Cook Shire, Weipa Town Authority and Northern Peninsula Area have the largest populations. Key centres include the administrative and service hub of Cooktown in Cook Shire, the mining town of Weipa, and the service and administrative hub of Bamaga in the Northern Peninsula Area. Small towns, service centres and roadhouses, along the Peninsula Developmental Road in Cook Shire, play an important role in servicing the needs of residents, visitors, service providers and freight operators travelling through the region.

The 2016 Census data indicates the major employing industries are public administration and safety (14.6 per cent) and mining (16.7 per cent). Local Government is the main employer for most Cape communities aside from Rio Tinto's mining operations in Weipa. Cape York communities pursue the diverse economies of fishing, agriculture, tourism and tropical expertise.



Priority 1	Priority 2	Priority 3	Priority 4	Implementation
Local government*	Key centres		Estimated 2018 population	Projected 2036 population
Aurukun			1382	1519
Cook	Cooktown, Coen, Lakeland, Laura		4445	4816
Hope Vale			1081	1149
Kowanyama			977	1070
Lockhart River			782	841
Mapoon			325	363
Napranum			1048	1105
Northern Peninsula Area	Bamaga, Seisia, New Mapoon, Umagico, Injinoo		3069	3732
Pormpuraaw			833	880
Weipa			4240	5125
Wujal Wujal			306	254
CAPE YORK			18,488	20,854

FAR NORTH QUEENSLAND REGION TOTAL

Estimated 2018 population

286,799

Projected 2036 population

358,526

* Employment statistics in this section are sourced from Australian Bureau of Statistics. (2017). *Census of Population and Housing, Australia, 2016 – General Community Profile – G51 (Industry of Employment by Age and Sex – place of usual residence)*, (Catalogue No. 2916.0) and unpublished data. Employment industries are categorised as per the employment divisions of Australian Bureau of Statistics. (2013). *Australian and New Zealand Standard Industrial Classification 2006 (Revision 2.0)* (Catalogue No. 1292.0). 2018 population is sourced from Australian Bureau of Statistics. (2019). *Regional Population Growth, Australia, 2017-18* (Catalogue No. 3218.0). 2036 population is sourced from Queensland Government Statisticians' Office. (2018). *Projected population (medium series), by local government area, Queensland, 2016 to 2041, 2018 edition*.

2.2 Transport network

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

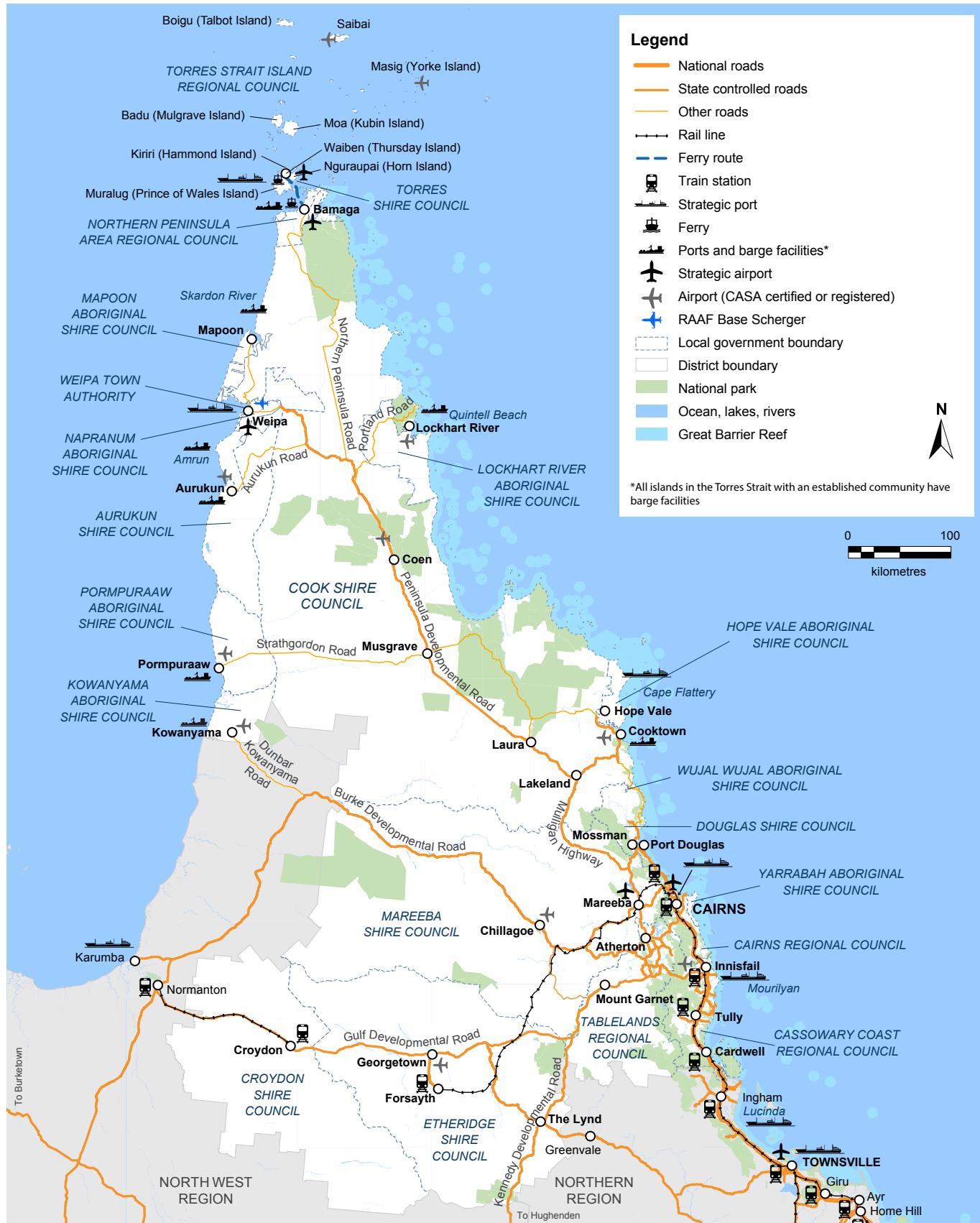


Figure 3: The Far North Queensland region transport network

OVER
5.2 MILLION
 PASSENGERS PASSED THROUGH
 CAIRNS AIRPORT IN THE 2018
 FINANCIAL YEAR¹⁰



THE REGION'S PORTS
 ARE INTEGRAL FOR THE SUPPLY OF
 GOODS TO LOCAL COMMUNITIES
 THAT ARE ISOLATED DURING
 WET SEASONS



THE REGION'S TRADING PORTS
 HANDLED OVER
40 MILLION
 TONNES OF THROUGHPUT IN THE
 2017 FINANCIAL YEAR¹¹



THE LOCAL FARE SCHEME
 PROVIDES RESIDENTS IN
 REMOTE COMMUNITIES
AFFORDABLE ACCESS
 AIR TRAVEL TO CAIRNS



THE KURANDA HISTORICAL
 RAILWAY ATTRACTS
400,000¹²
 PASSENGERS ANNUALLY



217 KM
 NATIONAL LAND TRANSPORT
 NETWORK
2,941 KM
 STATE-CONTROLLED ROADS
15,454 KM
 LOCAL GOVERNMENT
 MANAGED ROADS



IN THE FAR NORTH,
 HOUSEHOLDS WITHOUT A
 PRIVATE VEHICLE RANGE FROM
0% AND 68%
 ACROSS LOCAL GOVERNMENT
 AREAS¹³



SOME TOWNS IN THE REGION ARE
 ISOLATED FOR OVER
**5 MONTHS
 OF THE YEAR**
 DUE TO FLOODING



IN THE TORRES STRAIT
 COMMUNITIES
BOATING
 IS AN IMPORTANT
 FORM OF TRANSPORT



¹⁰ Cairns Airport. (2019). www.cairnsairport.com.au/corporate/performance/passenger-statistics/.

¹¹ Department of Transport and Main Roads. (2018). *Trade Statistics for Queensland Ports*.

¹² Queensland Rail. (2018). *Queensland Rail Annual and Financial Report 2017-18*.

¹³ Australian Bureau of Statistics. (2017). *Census of Population and Housing, Australia, 2016 – General Community Profile – G30 (Number of motor vehicles by dwellings – place of usual residence)*, (Catalogue No. 2916.0).

Roads

The Bruce Highway forms the north-south coastal route that connects Cairns with major population centres to the south and a strategic transport connection between Brisbane and Cairns. It caters for both long and short-distance freight and passenger movements.

Cairns, as the gateway for Far North Queensland, is connected to the rest of the region by a number of major routes:

- Mulligan Highway to Cooktown
- Kennedy Highway to Mareeba, Atherton and ultimately to Central Queensland
- Peninsula Developmental Road connecting to communities in Cape York
- Gulf Developmental Road to Croydon and Etheridge
- Burke Developmental Road providing a connection between Cairns and Gulf of Carpentaria communities.

With higher population densities, and as the region's major centre, roads in and around Cairns experience the greatest traffic volumes. Population centres such as Atherton, Mareeba and Innisfail include links attracting average daily traffic of more than 10,000 vehicles per day. Outside these centres, traffic volumes are low and generally roads have a higher proportion of heavy vehicles. This demonstrates their importance in delivering essential supplies to communities and products to markets.

Road network accessibility is highly affected by climatic conditions particularly north of Cairns. Many communities in Cape York are inaccessible by road for the duration of the wet season, with complete reliance on sea and air transport for the supply of goods and passenger travel outside their community. This leads to an increase in the cost of living, adverse social and economic impacts for these communities and significant annual maintenance costs for the road network.



Passengers on bus, Mareeba

Bus and coach

The region's bus and coach network includes scheduled public bus services in Cairns and Innisfail, school bus services across the region, and long-distance coach services.

The Cairns urban bus network consists of 16 bus routes extending from Palm Cove in the north, to Gordonvale in the south. The Cairns bus network plays an important role for tourist travel, as reflected by the increase in patronage figures during the peak tourism season.

The Innisfail bus network comprises five bus routes, providing services from Belvedere in the west to Flying Fish Point in the east.

School students in Cairns can travel to and from school on any TransLink service. In many parts of the region, where a TransLink service is not available, students may travel on a designated school bus service. Buses provide an important service in ensuring that children have access to educational opportunities, particularly in areas where travel distances can be significant and car ownership low. School transport services are monitored and reviewed regularly, as part of a statewide program, to ensure that school transport services meet the needs of school students in the Far North Queensland region.

There are currently three government regulated long-distance coach services operating in the Far North Queensland region. These include two routes between Cairns and Cooktown (inland and coastal) and a route between Cairns and Karumba.

Other coach services include the Brisbane to Cairns route operating daily, and routes from Cairns to Atherton, stopping at Mareeba and Kuranda. Connections for this service are available to Malanda, Yungaburra, Herberton, Ravenshoe, Dimbulah and Chillagoe.

Supporting regional connectivity and the tourism industry are a number of local privately operated, and airport connection, shuttle services. These connect Cairns to Port Douglas, Mission Beach, Cooktown, Kuranda, Mareeba, Biboohra, Mt Molloy, Mt Carbine, Palmer River, Lakeland and the Lion's Den. There are also many privately owned coaches operating in Cairns and across the region that transport tourists to attractions.

Active Transport

High quality and connected pedestrian and bicycle infrastructure in the region is generally limited to urban areas and town centres. The large distances between communities, lack of amenities at destinations and along routes, and the region's climate and geography make it challenging to provide connected cycling routes linking towns. Long-distance active transport journeys are primarily associated with touring cyclists and organised charity and sports events such as the Cairns to Karumba Bike Ride, Townsville to Cairns Bike Ride, Cardiac Challenge (Cairns to Cooktown), and Tour of the Tropics stage race.

The *Far North Queensland Principal Cycle Network Plan* (FNQPCNP) sets a framework for the planning, design and construction of core cycle routes to connect places where people live to key destinations such as schools, commercial centres and attractions.¹⁴ The FNQPCNP and associated Priority Route Maps identify priority principal and iconic recreational routes in the local government areas of:

- Cairns
- Douglas
- Cassowary Coast
- Tablelands
- Mareeba
- Yarrabah
- Wujal Wujal
- Cook
- Napranum
- Weipa
- Thursday Island
- Torres Strait
- Northern Peninsula Area.

Principal routes are planned to support high levels of bicycle accessibility within urban areas where demand is highest, and the need is greatest. Iconic recreation routes, including the Atherton Tablelands rail trails, are identified for their potential to support cycle tourism as they comprise long distance routes linking town centres, and scenic routes connecting to the region's natural attractions and tourist destinations.

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.

Rail

The North Coast line extends from Brisbane to Cairns, and connects the region's coastal towns. The line is primarily a single track rail line with short passing loops. Speed is limited by tight bends and numerous open level crossings. The Spirit of Queensland passenger service operates five return trips per week between Cairns and Brisbane. The journey spans 1,681 kilometres over 24 hours. Freight on the North Coast line includes containerised and general freight, industrial products, sugar and molasses.

The Kuranda Scenic Railway is a popular tourist rail journey that operates twice daily return trips and attracts over 400,000 passengers annually.¹⁵ The Savannahlander tourist motor rail operates on the same line as the Kuranda Scenic Railway, between Cairns and Kuranda, and then continues on to Forsayth. The Gulflander motor rail runs between Croydon and Normanton on a line that was originally built in 1888 to transport gold from Croydon gold mines. Both motor rail services undertake limited trips throughout the week, varying in trip itinerary from two hours to three days. The Kuranda Scenic Railway and the Gulflander are both operated by Queensland Rail.¹⁷ The Savannahlander is a privately owned and operated service.¹⁷

A 20-kilometre single line railway is privately owned and operated by Rio Tinto Alcan and connects the bauxite mine, north of the Embley River, to the Port of Weipa.¹⁸

The sugar industry is supported by an extensive cane rail network in the cane producing areas of the region. Cane railway systems provide an efficient way to move cane from farms to mills, with a lower impact on the major transport corridors, than if it was transported on the road network.

¹⁴ Transport and Main Roads. (2016). *Far North Queensland Principal Cycle Network Plan*.

¹⁵ Queensland Rail. (2018). *Queensland Rail Annual and Financial Report 2017–2018*.

¹⁶ Queensland Rail. (2016). www.queenslandrailtravel.com.au/.

¹⁷ The Savannahlander. (2016). www.savannahlander.com.au/.

¹⁸ Rio Tinto Alcan. (2016). www.riotinto.com/documents/Amrun_project_fact_sheet.pdf.

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

Air

Cairns Airport is a privately owned regional airport catering to over 5 million passengers annually with air links to a range of domestic and international locations.¹⁹ It is Australia's seventh busiest international airport and the only one in Queensland with no existing airport curfews. Cairns Airport also supports the movement of high value freight to international and domestic markets including Asia and New Zealand. The Queensland Government recently announced \$10 million in funding to develop an export hub at Cairns Airport.

The Cape and Torres Strait communities are serviced by airports located in Weipa, Pormpuraaw, Northern Peninsula Area, Lockhart River, Kowanyama, Horn Island, Cooktown, Coen and Aurukun, with frequent scheduled services by aircraft with more than 30 seats. Other aerodromes and airfields across the Far North Queensland region cater for smaller aircrafts and are generally used for agriculture, tourism, private charter, community and emergency access. The Upgrade of Mareeba Airport is

considered a key opportunity to support the aviation industry and provide the region with an alternative to Cairns International Airport for light aircraft movements, pilot training and aviation maintenance facilities. Mundoo Airport near Innisfail is identified by council for potential future development as an aviation and freight logistics hub due to its strategic proximity to major road and rail connections.

Air transport is extremely important for remote and regional areas such as the Cape and Torres Strait. Accessible and affordable air travel is important for economic and social outcomes. The department regulates and, in some cases, subsidises passenger transport air services so that residents of rural and remote communities can access a range of services in larger centres.

Ongoing improvements and upgrades to airports and associated infrastructure (runways, terminals, access roads, car parks, fencing and so on) is required to maintain, and improve access. Pavement failures on runways is a common issue for airports across the region, resulting in the need for constant repair and maintenance.

CASE STUDY: Far North Queensland – Local Fare Scheme trial

The Local Fare Scheme (the Scheme), which commenced on 20 July 2015, aims to improve the standard of living in remote parts of the Far North Queensland region by reducing the cost of air travel for eligible residents. The Scheme seeks to increase accessibility of those living in remote communities to basic health, employment, and educational facilities. Through financial assistance, the Scheme allows eligible residents to move around more frequently, enabling social and recreational benefits that, in turn, will help boost the local economy.

The Scheme provides subsidised air travel to eligible residents of the Cape York, Gulf of Carpentaria and Torres Strait through an airfare discount of up to \$400 for return flights. The Scheme is administered through participating airlines and local councils from selected airports in Cape York, Gulf of Carpentaria and the Torres Strait including Aurukun, Coen, Kowanyama, Lockhart River, Northern Peninsula, Pormpuraaw, Weipa, Doomadgee, Mornington Island and Horn (Ngurupai), Badu, Talbot (Boigu), Coconut (Poruma), Darnley (Erub), Mabuiag, Kubin, Murray (Mer), Saibai, Sue (Warraber), Yam (Iama) and Yorke (Masig) Islands.²⁰

The Scheme has been extended to 30 June 2021.

More information can be viewed at www.tmr.qld.gov.au/Travel-and-transport/Local-Fare-Scheme-Far-North-Queensland.aspx



Aerial view of Poruma (Coconut Island), Torres Strait

¹⁹ Cairns Airport. (2019). www.cairnsairport.com.au.

²⁰ Department of Transport and Main Roads. (2019). www.tmr.qld.gov.au/Travel-and-transport/Local-Fare-Scheme-Far-North-Queensland.aspx.

Sea

The Far North Queensland region's ports and marine facilities connect industries to global markets, support the supply of goods to communities in Cape York, and the Torres Strait islands, and provide a gateway for visitors to access the Great Barrier Reef.

There are nine declared ports in Far North Queensland, five of which are state Strategic Ports. Declared ports are located at Cairns, Cape Flattery, Cooktown, Mourilyan, Skardon River, Quintell Beach, Thursday Island, Weipa and Amrun. An overview of port functions is provided in Table 3.

Table 3: Far North Queensland declared ports^{21,22,23}

Port	Overview	Controlling Authority
Cairns*	<p>Cairns Seaport is a multi-purpose regional port that caters to bulk cargo, general cargo, project cargo, cruise ships, domestic cruise vessels, superyachts, and reef passenger ferries.</p> <p>Cairns Seaport is one of Australia's busiest cruising destinations, home to the HMAS Cairns Royal Australian Navy base, and one of Australia's largest fishing fleets and is supported by extensive marine industry services including ship building and maintenance.</p>	
Cape Flattery*	Cape Flattery exports silica sand from the Cape Flattery mine – the highest production silica sand mine in the world.	
Cooktown	Cooktown attracts some cruise ships and tourism vessels; however no commercial trade currently takes place.	Far North Queensland Ports Corporation Limited (trading as Ports North).
Thursday Island*	Thursday Island is a community port servicing the needs of the Torres Strait and operates as a major transhipment point and a strategic base for Customs and Fisheries patrols.	
Mourilyan*	Mourilyan caters to the export of raw sugar and molasses from the surrounding sugar growing districts. It also has the capacity and facilities to support mining, livestock, forestry and medium-bulk cargo exports.	
Skardon River	Barge facilities upstream currently facilitate bauxite exports from Bauxite Hills Mine.	
Quintell Beach	Quintell Beach is a community port servicing Lockhart River and remote grazing properties.	
Weipa*	Weipa exports bauxite from Rio Tinto's mining operations, and handles general cargo, fuel and live cattle.	North Queensland Bulk Ports Corporation Limited.
Amrun	New port facilities support bauxite exports from Rio Tinto's expanding mining operations south of the Embley River.	Rio Tinto Limited.

*Indicates state Strategic Port

21 Department of Transport and Main Roads. (2019). www.tmr.qld.gov.au/business-industry/Transport-sectors/Ports

22 Ports North. (2019). www.portsnorth.com.au

23 North Queensland Bulk Ports Corporation. (2019). www.nqbp.com.au/our-ports/weipa

Other smaller ports and marine facilities (jetties and barge landings) located at Seisia, Aurukun, Kowanyama and Pormpuraaw have an important role for supply of goods when road access into Cape York is cut off due to flooding.

Boat ramps, moorings and jetties throughout the region support the fishing industry, the tourism industry and recreational boating. Marine facilities throughout the Torres Strait Islands are critical for supply of goods and movement of people. Travel by boat is a key means of daily transportation for many residents and the primary means for inter-island travel.

Port of Cairns

The Port of Cairns (also known as the Cairns Seaport) is a multi-purpose regional port that caters to bulk cargo, general cargo, project cargo, cruise ships, domestic cruise vessels, superyachts, and reef passenger ferries. Bulk cargo shipped through Port of Cairns includes petroleum products, sugar and fertiliser. It is the northern-most trading port on the eastern seaboard of Australia and is the centre for supplies shipped to mining and coastal communities north and west of Cairns. Cairns Seaport is one of Australia's busiest cruising destinations, home to the HMAS Cairns Royal Australian Navy base, and one of Australia's largest fishing fleets. It is supported by extensive marine industry services including ship building and maintenance with a number of slipways and dry docks with up to 3,000 tonne capacity.

The Port of Cairns is a key focus area for planning and investment towards developing economic growth opportunities for Far North Queensland. Key initiatives to enable economic growth through expansion of port activities include:

- The \$127 million Cairns Shipping Development Project to widen and deepen the existing port channel will allow access for larger cruise ships to berth at the Cairns Cruise Liner Terminal, as well as enabling the future expansion of HMAS Cairns base and improving the efficiency of bulk cargo shipping operations. The project will facilitate access for larger vessels up to 300 metres and cater to up to 150 cruise ships a year by 2031.[^] Channel dredging is complete with wharf upgrades to accommodate larger ships due for completion in mid-2020.
- The development of a Tropical North Global Tourism Hub – a high quality tourism accommodation and entertainment precinct – is proposed on the Cityport precinct adjacent the Cairns Cruise Liner terminal. An economic impact analysis showed that a Global Tourism Hub in the Cityport precinct could create as many as 2,300 jobs in Tropical North Queensland and attract an additional 50,000 extra tourists a year once fully operational.^{^^}



Port of Cairns

[^] Ports North. (2019.) <https://www.portsnorth.com.au/ports-north-projects/cairns-shipping/>

^{^^} Department of Innovation and Tourism Industry Development. (2019). Monthly updates May to August 2019. <http://www.ditid.qld.gov.au/tourism/special-projects/global-tourism-hubs/tropical-north/news-updates>

Mobility and community transport services

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

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

Cairns, Atherton, Mareeba, Port Douglas, Weipa, Innisfail, Mission Beach, Bamaga, Cooktown, Mossman, Waiben (Thursday Island), Gordonvale, Yarrabah and Kuranda have access to taxi services, providing accessibility for short trips. Other personalised transport services such as booked-hire services now also play a role in the region's transport system. This trend towards more diverse transport options offers customers improved choice about how they travel.

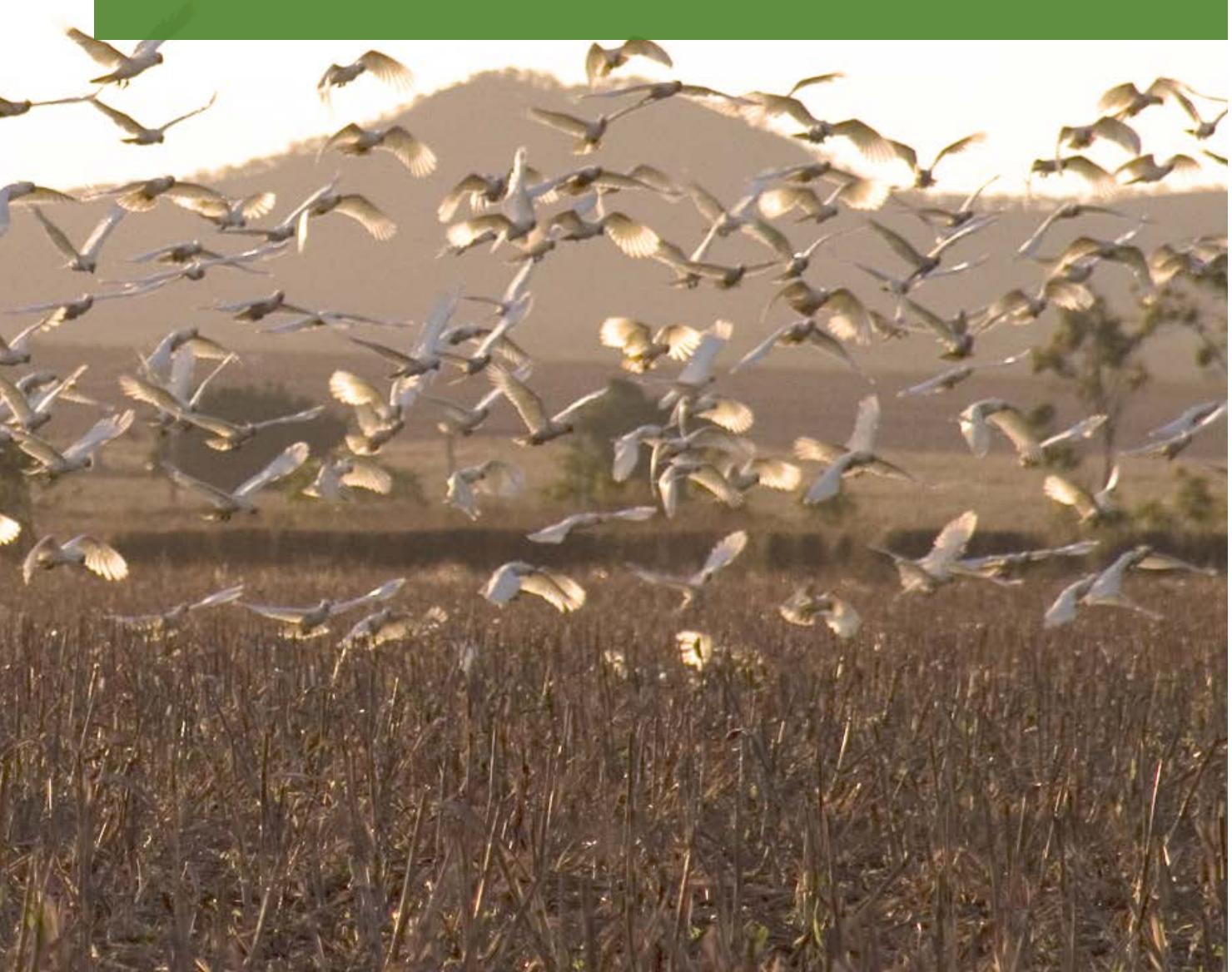


Passengers boarding a bus



Cockatoos near Lakeland

3. Goals, challenges and opportunities



3.1 Goals

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

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

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

3.2 Challenges

Network safety

In the five-year period to the end of 2018 there were 116 fatalities and 2,231 hospitalisations resulting from crashes on Far North Queensland roads, with alcohol, fatigue, speed, road geometry and driver behaviour cited as contributing factors. Disruptions, damage, hospitalisations and fatalities resulting from incidents on the transport network come at a high cost to the community.

Safety for transport users can be influenced by a number of factors, including their awareness and respect for other road users (like heavy and recreational vehicles), changing road environments as the surrounding land uses change (for example, heavy vehicles passing through busy city centres, with people and cyclists in close proximity) and how different users share infrastructure (for example, rest areas with mixed vehicle usage, such as cars and heavy vehicles).

FAR NORTH QUEENSLAND REGIONAL TRANSPORT PLAN GOALS



PLANNING CONTEXT

TRANSPORT PRIORITIES

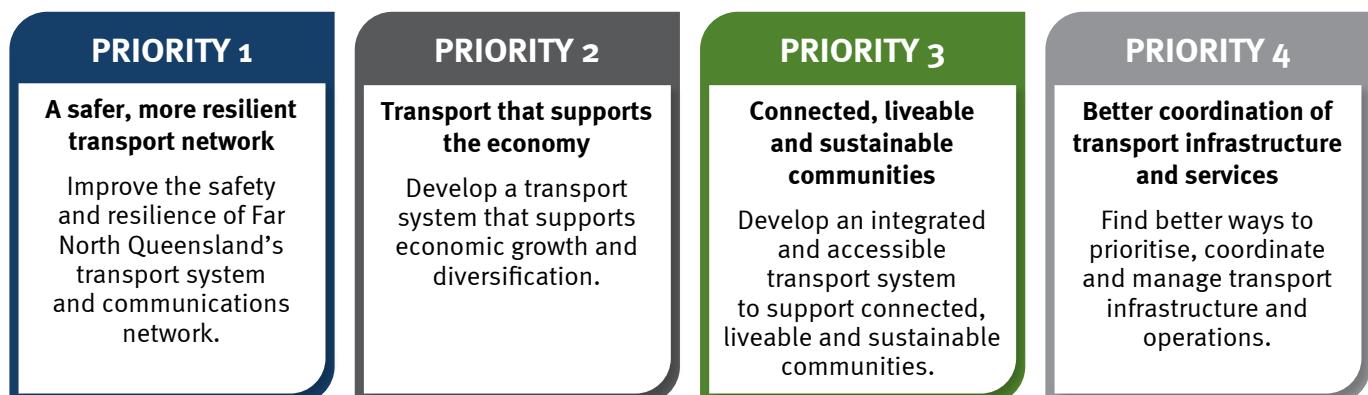


Figure 4: Regional goals, and relationship to transport priorities

High Risk Roads

The High Risk Roads approach to developing effective road safety improvement projects recognises that some of the factors contributing to high risk on the network are route based or network wide issues.

The High Risk Roads program identifies that the existing Black Spot and Safer Roads Sooner programs tend to address issues at discrete locations. In some circumstances a more coordinated, whole route approach is required that analyses and assesses safety issues together. This approach can achieve greater benefit and lower cost.

High Risk Roads projects are underway or committed for Captain Cook Highway, Gillies Range Road and Kennedy Highway.



Aerial view of Gillies Range Road, Atherton Tablelands

The region is prone to the impacts of seasonal flooding and cyclone events that can create hazards such as landslips, floodwaters, debris washouts and potholes. Damage to road network infrastructure can be unseen and cause dangerous driving conditions. Crash risks are heightened during bad weather through a combination of road conditions and poor driver behaviour. For example, situations where there is limited access to information, no known alternate routes, or where alternative routes may add hours to the journey, can lead to risk taking behaviour such as attempting to cross flooded roads.

Maritime safety is also an important issue in the region. In 2017, the Cairns maritime region recorded 34 marine incidents, with one person admitted to hospital, and no fatalities for 22,001 registered recreational vessels.²⁴ Although consistent with the state average for marine incidents, Maritime Safety Queensland's research and anecdotal evidence of volunteer rescue organisations suggests that the number could be higher. Marine incidents continue to go unreported, in particular those not resulting in either damage or serious injury, and those occurring in more remote locations.

Torres Strait Marine Safety Program

Private boats are a common form of inter-island transport throughout the Torres Strait Islands. Lack of awareness of safe sea travel, combined with unpredictable weather conditions, leads to a high rate of boating incidents requiring search and rescue.

The Torres Strait Maritime Safety Program is a joint program delivered by Maritime Safety Queensland, Torres Strait Regional Authority, Queensland Police Service and the National Maritime Authority of Papua New Guinea. The program seeks to promote and improve boating safety throughout the Torres Strait and as a consequence reduce the need for search and rescue operations, improve survival rates for those lost at sea and support the coastal maritime industry. Initiatives include maritime safety education workshops which have been delivered at 23 school campuses since July 2014.

Since the program's inception in 2006, there has been a 50 per cent reduction in boating incidents in the Torres Strait.



Boats at Engineers Jetty Pontoons (Thursday Island)

²⁴ Department of Transport and Main Roads. (2018). *Marine incidents in Queensland, 2017*.

Geography and climate

The size of the region and the climate present significant challenges for maintaining a connected and accessible transport system.

The region comprises a single regional city, Cairns, in the south-east and becomes increasingly remote the further the network extends to the north and west. At the furthest reaches of the region, the Torres Strait Island communities are highly reliant on sea and air transport to connect people with goods and services.

Generally, with greater distance comes lower population and demand, and higher social and economic disadvantage.

Distance:

- increases the cost of goods to market making business marginal
- dictates the road standard achievable with available funds
- increases the time required to undertake repairs and
- results in a higher delivery cost of transport services.

The wet season impacts transport networks, their dependent communities and businesses from December to May. Cyclones further impact already vulnerable areas, and climate change may exacerbate existing conditions. Wet season rains reduce the time available to undertake repairs and capital works. A more resilient network relies on improvements that will decrease repeat maintenance costs.

Improved road conditions and increased traffic from the far north raises the potential biosecurity risk, including the spread of human, animal and plant disease, weeds and other pests.

Network efficiency and reliability

The ability to deliver efficient freight movements between key production areas and markets is dependent on the weakest link in the transport network. Varying standards and road conditions, including load restrictions and road closures, cause serious impacts on the efficiency of the network.

The region's road network is limited in its ability to support high productivity freight vehicles. Constraints on the efficient movement of freight include, poor vertical and horizontal alignment, narrow pavement widths, poor flood immunity, road surface roughness and bridge load capacity. With the exception of bridge load capacity, these same issues affect the quality of the self-drive tourism experience.



The cost of transport for livestock from Northern Australia can be up to 35 per cent of the market price.²⁵



Flooding near Malanda

²⁵ CSIRO. (2019). www.csiro.au/en/Research/LWF/Areas/Landscapes/Transport-logistics-TRANSIT/Livestock-logistics.

Competing needs of road users

The growth of the self-drive tourism market is positively contributing to the region's economy. Its further expansion is a key economic development strategy of the various local governments. With the progressive sealing of the Peninsula Developmental Road, the Far North Queensland region will be more reliable and accessible for both tourists and road freight vehicles, heightening the interaction between inexperienced rural/remote road users and high-efficiency freight vehicles. It will also result in an increased demand on the limited rest areas available.

The differing customer needs of a rural and regional network are recognised as a challenge nationally. The *National Remote and Regional Transport Strategy* identifies that standards and regulations can hinder economic and social development because they cannot be applied flexibly in ways that are relevant to remote areas.²⁶

A key challenge for the region is improving global competitiveness of Queensland's industries through reduced freight costs.

Changes required to meet this challenge are:

- better, safer roads
- optimised road network access for High Productivity Vehicles (HPVs) on key road freight links
- facilitation of oversize overmass loads along key transport routes.

Lifeline freight routes

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

In mid-2016, Austroads released a tool designed to identify and support investment in 'Life Line' freight routes.²⁷ 'Life Line' freight routes are highly valued by local communities and regions but due to traffic volumes may not deliver positive outcomes in traditional upgrade project priority assessments.

A risk indicator tool, has been developed for use by road managers to establish if a route is a 'Life Line' and which routes have the greatest claim for project funding based on 'Life Line' needs. The Excel based tool considers factors relevant to determining priority for road upgrade investment including the:

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



Road train on unsealed road, Cape York

²⁶ Transport and Infrastructure Council. (2015). *National Remote and Regional Transport Strategy*.

²⁷ Austroads. (2016). *Identification of a Risk Indicator to Support 'Life Line' Freight Routes*.

Investment across jurisdictional boundaries

Many communities rely upon roads that are owned and managed by an adjacent local government. To maintain access, adjacent local governments need to invest in roads that offer little direct benefit to their own communities. This challenge is common across Australia but is compounded by Far North Queensland region's vast distances, climate, limited alternative routes and the need for network connectivity to isolated coastal local government areas. Revenue of remote-area local governments is limited and the distance of roads requiring investment is immense. Affordability of the road network is a major challenge.

Communication and coordination amongst local governments in the management of 'one network' can improve reliability, not just for investment purposes, but also in providing road condition and scheduled road works information to minimise inconvenience for transport customers.



Works on Pormpuraaw Access Road

Cook Shire Council

The Cook Shire Council is responsible for 2,927 kilometres of local roads. The size of the road network and the impacts of the wet season on its condition are a significant challenge in meeting the needs of the Shire's residents.

Pormpuraaw, Lockhart River, Northern Peninsula Area and Aurukun are reliant on community access roads owned and managed by Cook Shire.

These roads are essential for adjacent local governments but deliver little direct benefit to residents of Cook Shire.



Distances from Musgrave Roadhouse on the Peninsula Developmental Road

Population growth and development

While population growth and development provides economic growth and opportunities for the region, it also results in transport challenges, particularly for the Cairns urban area (Palm Cove to Gordonvale) where the majority of the population growth is likely to occur. With 56,000 more people living in the Cairns area by 2036, pressure on the transport system will increase, especially if the population's reliance on private vehicle travel continues.



85.6 per cent of all trips in Cairns were completed in a private vehicle, either as a driver (59.2 per cent), or a passenger (26.4 per cent)²⁸

To protect the liveability and productivity of the Cairns urban area, more trips need to be completed with sustainable travel modes, such as public or active transport, hence freeing up valuable road space for the efficient movement of goods and services.

Improving the attractiveness of public and active transport is essential in supporting a mode shift from private to public transport. Affordable, frequent and reliable services to where people want to go and delivering equivalent or better travel times, will improve the attractiveness of public transport over private vehicles.

Safe and direct active transport routes and end of trip facilities are important in attracting customers to walking and cycling. Locally, within and around some communities, dedicated pathways are limited due to safety implications resulting from pedestrian and heavy vehicle conflicts.

Planning and delivery of direct and high quality shared paths, cycle tracks and public transport corridors is an important step towards encouraging more trips by sustainable modes. Higher density infill development is planned around key centres and along key public transport routes in Cairns, including for Smithfield, Cairns City, Earlvile, and Edmonton, to provide greater accessibility by walking, cycling and public transport. Higher density, mixed use, transit oriented communities aim to reduce demand on roads and car parking and dependence on private vehicle trips.

An efficient network reduces the cost of congestion and its impact on work travel time, goods delivery time, overall transportation cost and quality of life.

Far North Queensland's aging population

The region's overall percentage of people over 65 is lower, at 13.4 per cent, than Queensland's 14.4 per cent, but the variance of age profile across the region's local government areas is significant, with Tablelands (21.3 per cent), Etheridge (19.4 per cent), Cassowary Coast (18.5 per cent) and Mareeba (18.1 per cent).^{*} As the population ages the need to access health and community services increases, while the ability to independently access these services often decreases. In response, public and community transport services become increasingly important. Dispersed settlement and the distance between communities presents a challenge to meeting the needs of our aging population.

Providing access to affordable and available transport options

A transport system that supports the social and economic health of the region is designed around the knowledge that socio-economic factors intensify with distance and climatic challenges. The region includes a number of communities with high rates of unemployment, low vehicle ownership and low levels of education.

In the Far North Queensland region, 8 per cent of households are without a private vehicles compared to the Queensland average of 6 per cent. This figure does not give a clear picture at a local level because circumstances vary greatly across the region. Most households in the Savannah region have a private motor vehicle, with only 1.5 per cent of households without a vehicle. Of households in the Coastal Centres and Tablelands, 6.6 per cent are without a private vehicle. This is in contrast with the more remote communities in Cape York and the Torres Strait where vehicle ownership is very low, for example, 68 per cent of households in Aurukun Shire are without a private vehicle.*

Well planned urban development is important in managing demand on the transport network. In Cairns, local area planning for emerging communities such as Mount Peter will provide housing for around 32,000 people, as well as industrial and commercial areas to supply jobs and activity centres. The aim is to achieve greater self-containment and a lesser dependence on the Bruce Highway, southern access commute to Cairns city.

²⁸ Department of Transport and Main Roads. (2014). *Household Travel Survey Cairns*.

* 2018 population is sourced from Australian Bureau of Statistics. (2019). *Regional Population Growth, Australia, 2017-18 (Catalogue No. 3218.0)*. 2036 population is sourced from Queensland Government Statisticians' Office. (2018). *Projected population (medium series), by local government area, Queensland, 2016 to 2041, 2018 edition*. Motor vehicle statistics are sourced from Australian Bureau of Statistics. (2017). *Census of Population and Housing, Australia, 2016 – General Community Profile – G30 (Number of motor vehicles by dwellings – place of usual residence)*, (Catalogue No. 2916.0).

3.3 Opportunities

Supporting economic growth and diversification

Far North Queensland is a vast and economically diverse region. Key industries are tourism, agriculture, mining, health, education, marine, aviation and construction.²⁹

The transport system is integral to the productivity and future growth and diversification of far north Queensland's industry sectors.

Located close to Asia, with international gateways through Cairns International Airport and major seaports, and road and rail links to Brisbane and other major cities, the region is strategically connected to export markets and trade and investment opportunities.

A key opportunity to support economic growth and diversification is improving the reliability and efficiency of

transport networks to move people and freight, connect producers to consumers and export markets, and support trade links and expansion of new economic development areas.

Strategic directions for transport to support the economy include:

- improving the resilience and efficiency of road connections linking primary production and industrial areas, to seaports, airports and rail terminals.
- developing a more reliable, efficient and sustainable multi-modal urban transport system in Cairns to meet increased demand to move people and goods as the city grows.
- providing seamless connections and high-quality experiences for visitors arriving through major gateways and travelling on to key attractions across the region.



Lakeland farm

²⁹ Trade and Investment Queensland. (2019). www.tiq.qld.gov.au/invest/regional-investment-opportunities/far-north-queensland.

Agriculture

Agriculture is one of far north Queensland's largest sectors, contributing around \$1.4 billion to the regional economy in the year 2015–2016, and providing 6.2 per cent of employment in the region.^{30,31}

The growth of Asian markets and their proximity to the far north creates economic development and export opportunities for the region. The availability of suitable land provides significant potential for future growth in the agriculture sector.

The region has many well-established agricultural production areas, expanding areas, and potential new opportunities for continued growth.

Key agricultural production areas include:

- The Lakeland Downs area 250km north of Cairns produces a wide range of crops and fruit, with potential for expansion through the Lakeland Irrigation Area Project.
- The Tablelands agricultural production area on the elevated eastern highlands extending from Julatten to Ravenshoe supports a large variety of plant and animal industries including tree crops, field crops, horticulture, livestock, and dairy. Proposed future water supply projects, such as the Nullinga Dam, have the potential to support expansion of irrigated agriculture in the Tablelands region.

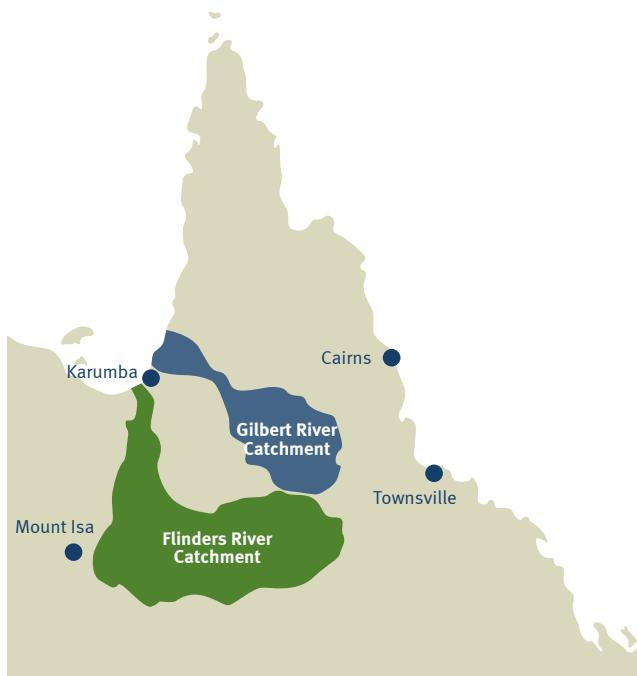


Figure 5: Location of the Flinders Gilbert agricultural area³²

■ The coastal region extending from Mossman to Cardwell is a significant sugar and banana production area. Around three quarters of Australia's bananas are produced in the Cassowary Coast local government area.³² Mourilyan plays a major role in the export of raw sugar and molasses from the surrounding sugar production area.

■ Cattle grazing occurs throughout the region and accounts for around 57 per cent of land use in the Cape York Peninsula.³³ Access, reliability and conditions of roads linking cattle production areas to abattoirs, saleyards and export ports has a significant impact on stock condition, market prices, and operating costs for producers.

Potential future agriculture expansion areas include the Flinders River Catchment and Gilbert River Catchment. Development of these areas would likely generate additional freight movement across the region's road network connecting to ports and inter-regional highways.

The region supports a large fishing industry, supplying Asian and domestic markets with fresh and frozen products. The aquaculture sector produces prawns, barramundi and red claw crayfish for local markets.



Port Douglas Markets

³⁰ Trade and Investment Queensland. (2016). www.tiq.qld.gov.au/download/business-interest/about-queensland/qld-regional-market-profiles/TIQ-16-767-Regional-Overview_Cairns_final.pdf.

³¹ Australian Bureau of Statistics. (2019). *Value of Agricultural Commodities Produced, Australia, 2017-2018*. (Catalogue No. 7503.0).

³² Department of Agriculture, Fisheries and Forestry. (2013). *Queensland Agricultural Land Audit: Far North Queensland*.

³³ Department of Agriculture, Fisheries and Forestry. (2013). *Queensland Agricultural Land Audit: Cape York*.

Tourism

Cairns and tropical north Queensland is renowned as the gateway to the iconic Great Barrier Reef Marine Park and Wet Tropics World Heritage Areas. Far North Queensland offers a diverse range of attractions, destinations, nature-based and cultural experiences, events and accommodation choices.

Cairns International Airport is a major gateway for visitors catering to over 4.3 million domestic and 696,000 international passenger movements in the 2017 – 2018 financial year.³⁴



In 2016–17 the cruise shipping market contributed over \$85 million in direct expenditure to the region's economy³⁵

Cairns Seaport is one of Australia's busiest cruise destinations and in 2016–17 the cruise shipping market contributed over \$85 million in direct expenditure to the region's economy.³⁶ The widening and deepening of the Trinity Inlet shipping channel as part of the Cairns Shipping Development Project will facilitate access for larger vessels up to 300 metres, catering to forecast demand of up to 150 cruise ships a year by 2031.³⁷

Adjacent the cruise liner terminal is the preferred site for future development of a Tropical North Global Tourism Hub - a new high quality tourism accommodation and entertainment precinct to deliver an iconic tourism asset and attract more visitors. Other cruise destinations in the region are Yorkeys Knob, Port Douglas, Cooktown and Thursday Island. The quality and capacity of maritime infrastructure including passenger jetties for ferry services are important for visitor access and experiences and supporting growth in tourism across the region.

Drive tourism is a key target area for providing a quality visitor experience and encouraging visitation to regional destinations and attractions. Drive tourism provides a number of benefits particularly for businesses in rural and regional locations where drive tourists are encouraged to buy local tourist products and services, and basic travel necessities outside of the major tourism centres. Enhancing tourist drive routes through targeted safety measures, signage and wayfinding, provision of rest areas, scenic lookouts and other visitor amenities are ways to support and manage growth in drive tourism in the region. Improving the resilience and reliability of tourist drive routes is another key opportunity to provide greater levels of year-round visitor access to more remote and regional destinations, particularly to places where road access is periodically restricted due to wet season flooding.

Queensland Tourism and Transport Strategy

The *Queensland Tourism and Transport Strategy* (QTTS) has been developed jointly by the Department of Transport and Main Roads and the Department of Innovation, Tourism Industry Development and the Commonwealth Games.

The QTTS details the Queensland Government's plan to improve access to our world class tourism destinations

in an effort to enhance the visitor experience and grow the tourism industry.

Actions will be achieved through strong coordination and collaboration between government and industry to invest in infrastructure and services that enhance access and improve connectivity.



Trinity Wharf, Cairns

³⁴ Cairns Airport. (2019). www.cairnsairport.com.au/corporate/performance/passenger-statistics/

³⁵ Cruise Down Under. (2018). Annual report 2017–2018. Retrieved from: <https://www.australiancruiseassociation.com/reports>

³⁶ Ibid.

³⁷ Ports North. (2019.) <https://www.portsnorth.com.au/ports-north-projects/cairns-shipping/>

Future development in mining and resource industry

The mining and resources sector delivers significant economic benefits to Far North Queensland. Most of the region's mining operations are in Cook, Mareeba, Etheridge, Croydon and Tablelands local government areas. The region produces bauxite, kaolin, gold, tin, zinc, lead, silver, silica, marble, limestone, perlite and copper.³⁸ Major operations include the largest silica sand mine in the world at Cape Flattery, and bauxite mining in Weipa and western Cape York.

There are many undeveloped mineral deposits and resource areas across Far North Queensland with potential to support future mining activities should global market conditions make extraction commercially viable. Considering such potential as part of future planning and development of road freight routes and port connections is a key opportunity to position the region to support new mining projects.

Emerging industries

Energy

Large scale energy projects are proposed and underway across the region and include a combination of hydroelectric, wind, solar and biofuel energy projects.

Examples include the Kidston solar and hydro electricity project in Etheridge Shire Council, the Lakeland Solar and Storage Project in Cook Shire and the use of sugar cane waste to generate electricity. Like the mining and resource industry, the transportation and movement of large components is critical in the construction and establishment phase of many large scale energy projects. Road network planning and operations have an essential role in facilitating safe transportation of large components using over-size over mass vehicles, while minimising impact and disruption on roads and the community.

Shipbuilding, maintenance and home porting

Shipbuilding and maintenance is seen as a potential growth industry and will help to strengthen the position of Cairns as a major marine service centre in the Asia-Pacific region. Opportunity exists for shipbuilding, maintenance and home porting for defence, cruise shipping, private luxury yachts and general marine.

Education

The research and education sector is a potential future growth industry for the region. Providing a safe, convenient and easy to use transport system that connects Cairns city and airport with universities, student accommodation, colleges and campuses helps the region to attract domestic and international students, educators, researchers and academics.



Cape Flattery

³⁸ Queensland Government. (2015). *Business and Industry Portal: Cairns and the Far North*.

Transport opportunities

Protecting future transport options

As the region's population grows, particularly in Cairns, it is important to protect corridors from urban development to ensure future infrastructure can be delivered when needed to support a growing transport task. For example, the Smithfield bypass corridor is now being developed in response to urban development north of Cairns and a need for increased capacity on the Captain Cook Highway. Key future transport infrastructure corridors that are currently preserved in the region include:

- Innisfail bypass
- Mareeba bypass
- Atherton bypass
- Cairns Transit Network.

Cairns Transit Network

The Cairns Transit Network will improve public transport in Cairns by giving public transport priority, either in separate transit lanes or on dedicated bus-only lanes (busways), separated from general traffic. The Cairns Transit Network will make it easier for people to move around Cairns on public transport, now and into the future. It will connect Cairns from Palm Cove to Gordonvale and the neighbourhoods in between. It will help make public transport an attractive alternative to traveling by car, ensuring faster, more frequent and reliable trips. Local area planning for emerging communities such as Edmonton and Mount Peter, includes sections of the Cairns Transit Network which will provide high quality public transport connections to cater to the population growth expected in this area. It is a long-term vision for the future of Cairns and is planned to be built and opened in stages.



Passengers at James Cook University bus station

Improved social outcomes

The transport system can help improve social outcomes and contribute to liveability by providing reliable, accessible, equitable and affordable travel options to connect people to places, services and each other.

Transport initiatives to improve social outcomes include:

- The Local Fare Scheme trial to reduce the cost of air travel to increase accessibility to health services, education and employment for people living in remote communities.
- Transport and Main Road's *Disability Service Plan 2017–2020* aims to improve the accessibility of our transport network, making it easier for everyone, including people with disability, to participate in our community.³⁹
- The *Queensland Cycling Strategy 2017–2027* and *Queensland Walking Strategy 2019–2029* aim to deliver health and wellbeing benefits by supporting and encouraging active transport across the state.

Mode shift to public transport

Public transport, mostly in the form of urban bus services, is available in the urban areas of Cairns and Innisfail. Initiatives to improve customer experience for current services aims to attract more trips to public transport, reduce pressure on the broader transport network, and improve the viability of public transport operations. Encouraging sustained growth in public transport mode share provides the opportunity for future enhancement of public transport services and infrastructure, further improving the convenience and comfort for public transport users.

Protection of future public transport needs can be achieved through corridor preservation, for example the Cairns Transit Network, facilitating direct and prioritised connections for public transport in the future.

Advances in technology

Advances in technology offer opportunities to achieve transport objectives and address a range of challenges for the Far North Queensland region, including for safety, increased connectivity, and better transport outcomes.

Communications technology such as video-conferencing and online services can reduce some of the need to travel allowing individuals to work, access distance education, seek healthcare and socialise with others, regardless of location. It also offers opportunity for an improved user experience through the provision of real-time information about transport network conditions, road works and services to help journey planning and travel choices, and alert travellers of potential safety hazards.

³⁹ Transport and Main Roads. (2017). www.tmr.qld.gov.au/Travel-and-transport/Disability-access-and-mobility/Disability-Service-Plan.aspx.

At present, the mobile communication network coverage in the region is not complete, but improvements are continuing as part of the Australian Government's Mobile Black Spot Program.

Improved technology in road building is another opportunity to find solutions to regional challenges such as remoteness and impacts of seasonal flooding. Advances in design and construction techniques for roads could reduce repair costs and improve resilience of the transport network.

Advances in vehicle technology, sensors and alerts continue to offer safety benefits for the trucking and transport industry, and general road users (for example, wildlife collision avoidance technology).

Priority cycle network

Priority cycle networks have been identified in the *Principal Cycle Network Plans* across the Far North Queensland region (Figure 6). The most extensive networks of cycle trails are committed in Cairns, the region's principal activity centre.

Ongoing implementation seeks to:

- achieve a mode shift to active transport
- provide viable alternatives to private vehicle travel, particularly during peak demand periods
- support healthier lifestyles
- improve economic opportunities such as cycle tourism.

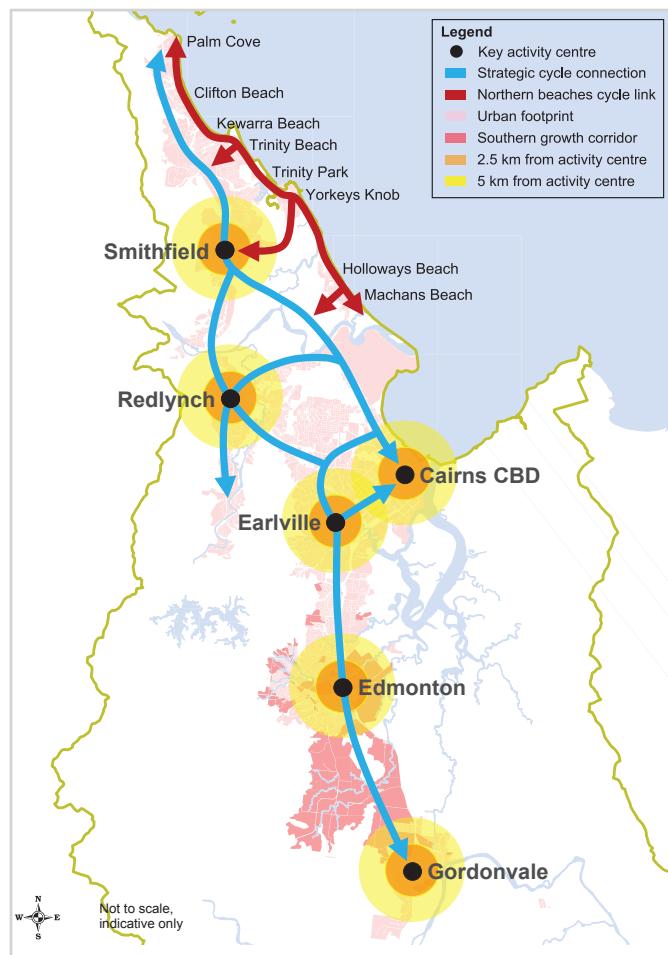


Figure 6: Strategic cycle network for Cairns, Far North Queensland Principal Cycle Network

Cooperative Intelligent Transport Systems

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

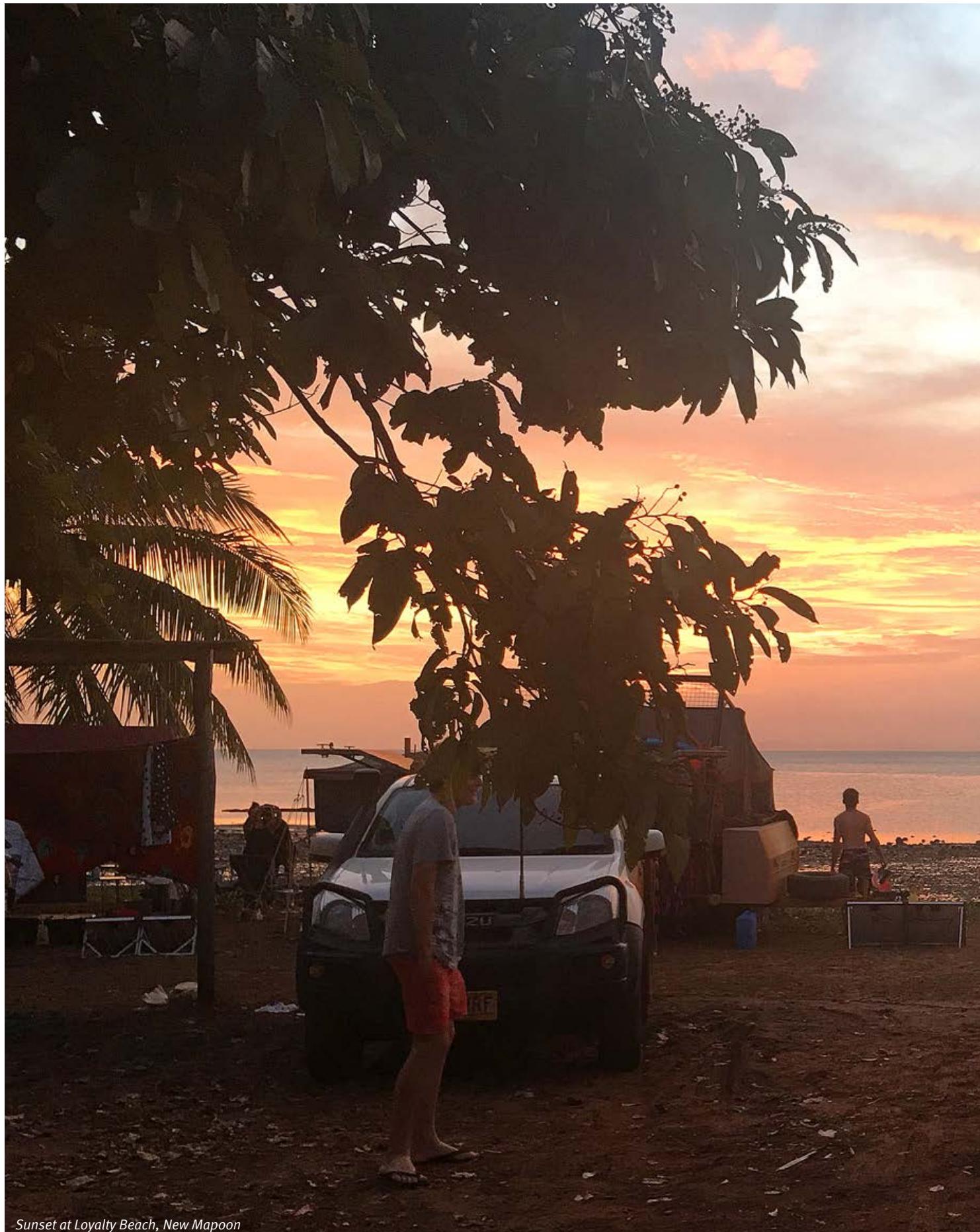
The Cooperative and Automated Vehicle Initiative (CAVI) will be delivered by the Department of Transport and Main Roads to help prepare for the arrival of new vehicle technologies with safety, mobility and environmental benefits on Queensland roads. The CAVI Pilot will take place on public roads in and around the City of Ipswich from 2019 for up to one year. It is the largest Australian on-road testing trial of cooperative intelligent transport systems. There will be 500 public and fleet vehicles fitted with devices. These devices allow vehicles and infrastructure to talk to each other to share real-time information about the road and to generate safety-related warning messages for drivers.

Find out more at www.qld.gov.au/transport/projects/cavi.

Transport for New South Wales is trialling the technology with heavy vehicles in the Illawarra area. Heavy vehicles fitted with the technology receive safety messages about upcoming hazards and potential crashes.

Messages include:

- intersection collision warning
- forward collision warning
- heavy braking ahead warning
- traffic signal phase information
- speed limit information
- location and availability of rest areas.



Sunset at Loyalty Beach, New Mapoon

4. Priorities and actions



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

- **Priority 1:** A safer, more resilient transport network
- **Priority 2:** Transport that supports the economy
- **Priority 3:** Connected, liveable and sustainable communities
- **Priority 4:** Better coordination of transport infrastructure and services

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

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

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

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

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



Laura Aboriginal Dance Festival 2017

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

TRANSPORT SYSTEM				
RTP PRIORITIES	PRIORITY 1 A safer, more resilient transport network	PRIORITY 2 Transport that supports the economy	PRIORITY 3 Connected, liveable and sustainable communities	PRIORITY 4 Better coordination of transport infrastructure and services
ROLE OF TRANSPORT	<p>Responding to the challenges of:</p> <ul style="list-style-type: none"> improving road, rail and maritime safety climate change, extreme weather and annual wet season impacts competing needs of different road users. <p>And opportunities for:</p> <ul style="list-style-type: none"> advances in technology. <p>By taking action to:</p> <ul style="list-style-type: none"> build, maintain and operate safe and resilient transport infrastructure and facilities encourage safe travel behaviour review and improve emergency and disaster management and recovery efforts identify and target resilience issues reduce repair and rehabilitation costs improve reliability and access improve connectivity. 	<p>Responding to the challenges of:</p> <ul style="list-style-type: none"> moving freight efficiently managing growth network efficiency and reliability. <p>And opportunities for:</p> <ul style="list-style-type: none"> growth and productivity in key industries – agriculture, tourism, resources and education facilitating new industries better use of existing transport infrastructure advances in technology. <p>By taking action to:</p> <ul style="list-style-type: none"> build, maintain and operate transport networks to support industry and unlock growth plan and prioritise capacity upgrades and new infrastructure where it supports industry and productivity most understand and respond to the travel needs of the tourism market. 	<p>Responding to the challenges of:</p> <ul style="list-style-type: none"> population growth and changing needs improving public transport competitiveness providing affordable and accessible transport to all. <p>And opportunities for:</p> <ul style="list-style-type: none"> improved social outcomes better use of existing infrastructure advances in technology sustainable transport. <p>By taking action to:</p> <ul style="list-style-type: none"> plan places so they are easy to move around provide infrastructure and services that are equitable and meet diverse community needs deliver transport projects in line with best practice environmental standards and sustainability principles support economic and social development across the region. 	<p>Responding to the challenges of:</p> <ul style="list-style-type: none"> cross boundary infrastructure investment prioritising between urban and remote demands. <p>And opportunities for:</p> <ul style="list-style-type: none"> an integrated transport system that caters for all users and manages demand equitable transport infrastructure development in remote areas to maximise access to services and freight routes. <p>By taking action to:</p> <ul style="list-style-type: none"> work together to overcome regional challenges for design, and delivery of transport infrastructure and services.
TRANSPORT OBJECTIVES	<p>1.1 Develop a transport network that allows customers to travel safely.</p> <p>1.2 Ensure customers are aware of potential hazards and can make informed decisions about their travel options.</p> <p>1.3 Develop a more resilient and reliable transport system through disaster response strategies and infrastructure improvements.</p>	<p>2.1 Optimise supply chains to efficiently link producers, distributors and consumers on an integrated network.</p> <p>2.2 Realise the tourism potential of the region by improving tourism accessibility with a focus on the self-drive market.</p>	<p>3.1 Develop a transport system that connects customers to jobs, schools, shops and services by a range of transport options.</p> <p>3.2 Manage congestion in urban areas.</p> <p>3.3 Create a sustainable transport system that protects the environmental quality of the region and supports the lifestyle values of residents.</p>	<p>4.1 Achieve more efficient transport planning and delivery, with a greater focus on partnerships.</p>
MEASURES OF SUCCESS	<ul style="list-style-type: none"> Reduction in transport-related incidents, crashes, injuries and fatalities. Reduced frequency and duration of unplanned closures. 	<ul style="list-style-type: none"> Maintain or improve road network reliability. Freight productivity improves. Transport supports the region's tourism economy. 	<ul style="list-style-type: none"> Level of transport disadvantage decreases. Greater access and connectivity to places by sustainable transport modes. 	<ul style="list-style-type: none"> Build and maintain strong partnerships to deliver successful transport projects.

4.1 Priority 1: A safer, more resilient transport network

Improve the safety and resilience of Far North Queensland's transport system and communications network.

Priority 1 aligns to:

- the Transport Coordination Plan's objectives for transport that is safe and secure for customers, and is resilient to Queensland's weather extremes
- the *State Infrastructure Plan*'s focus on transport infrastructure that reduces the long-term cost of repair, improves infrastructure resilience, and improves safety and security
- regional planning objectives that support the safe movement of goods and people, by all modes and at all times.

Road safety has many dimensions and includes road conditions as well as driver behaviour. *Safer Roads, Safer Queensland – Queensland's Road Safety Strategy 2015–2021* and the *Heavy Vehicle Safety Action Plan 2019–2021* both identify the importance of safety across a range of factors including roads and roadsides, vehicles speeds and human behaviour.

A safe transport network is needed to ensure customers can reach their destination without incident. Transport users should feel safe using the transport system and behave in a way that promotes the safety of themselves and others.

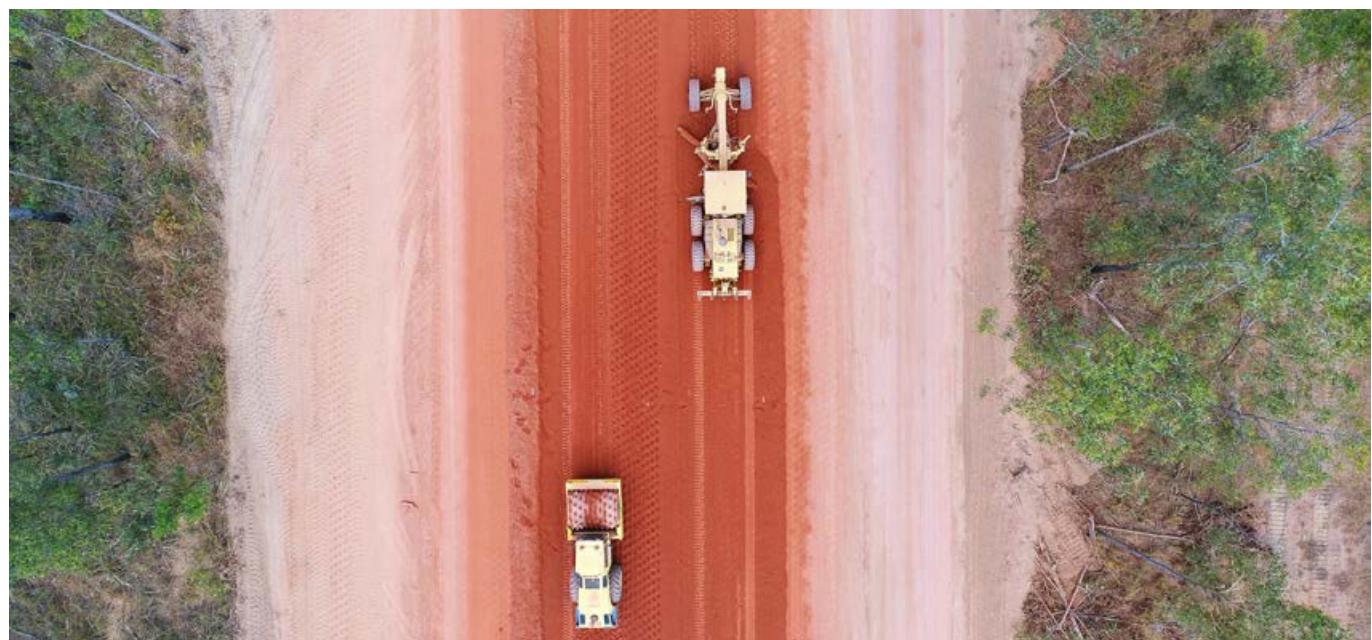
Examples of initiatives that support and encourage safety include:

- rest areas to mitigate driver fatigue
- way-finding to promote legibility on the roads
- wide centreline treatment to reduce the risk of head-on crashes.

Improving resilience and safety in the Far North Queensland region can be achieved through a combination of improved infrastructure, information, communication technology and education. Identifying safety issues and vulnerable parts of the network are important steps towards addressing safety risks, and developing strategies to keep people safe during and after extreme weather events.

Examples include:

- identifying alternative routes around flood-prone parts of the network
- improving real-time communication systems to keep customers informed
- prioritising rest area provision or upgrades where most needed to reduce driver fatigue.



Grader and roller on Aurukun Access Road

Transport objectives

Objective 1.1: Develop a transport network that allows customers to travel safely.

Identifying and managing transport safety risk is an essential part of working towards zero deaths, and reducing trauma on the Far North Queensland region's roads, rail networks, pathways and waterways. Personal safety is an equally important aspect of improving conditions for our customers who need to feel safe, regardless of how they choose to travel.

Improving the safety and security of the transport network will:

- reduce the number of crashes on our road network
- reduce fatalities and hospitalisations
- lead to economic and social benefits
- achieve a greater sense of personal safety for our customers.

Objective 1.2: Ensure customers are aware of potential hazards and can make informed decisions about their travel options.

Accurate, convenient and timely information provides customers with a sense of certainty by keeping them informed and increasing their situational awareness. Information can influence a person's decision about if and when to travel, and inform them on the best route to take. Timely and effective communication of travel conditions can empower customers to make informed decisions and will:

- reduce confusion and uncertainty when disruptive weather events and transport incidents occur
- manage customer expectations regarding the operation of the transport network during and after disruptions
- allow customers to rely on communications networks to keep them updated on their travel options
- provide customers a greater sense of awareness regarding transport decisions that affect their safety.



Flooded causeway McLeod River, Mulligan Highway

Objective 1.3: Develop a more resilient and reliable transport system through disaster response strategies and infrastructure improvements.

The frequency and duration of closures of roads, ports, airports and pathways can have a considerable impact on freight transport, local businesses, visitors, travellers and residents, particularly for remote customers. Network closures occur annually and can be lengthy. They cost industry money, disconnect residents and inconvenience visitors and travellers. Maintaining access to essential services, especially during severe weather events, is necessary to keep people safe and healthy.

First responders also need the transport system to access people requiring assistance. The transport system can be developed to maintain connectivity by providing alternatives to routes that regularly flood, and reducing the impacts of inundation so roads can be opened immediately after the water recedes. Safety can be improved by mapping alternative routes, providing real-time information to customers about road closures and network conditions, and preparing contingency strategies.

Summer wet season events and cyclones can't be avoided, but more resilient infrastructure, and better management systems and response times can reduce their impacts on the region's transport network. Developing a more resilient and reliable transport system will:

- reduce the frequency and duration of road closures thereby reducing disruption to supply chains, service delivery and commercial activity
- improve transport options for our customers and protect the economic function of the region
- improve access to essential services, including emergency services, during and immediately after extreme weather events
- improve network safety
- reduce the cost of disaster recovery and repairs to the transport system.

Queensland Traffic Reporting Service

This service reports on flood and road conditions, mainly in Queensland's rural areas. Automated flood-warning systems are being trialled in the Far North Queensland region, using river height gauges. The system alerts district Transport and Main Roads officers and traffic managers via email and SMS.⁴⁰

40 Department of Transport and Main Roads. (2016). www.tmr.qld.gov.au/business-industry/Road-systems-and-engineering/Innovation.

Actions

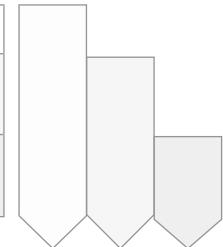
PRIORITY 1: A SAFER, MORE RESILIENT TRANSPORT NETWORK

OBJECTIVES

Objective 1.1: Develop a transport network that allows customers to travel safely.

Objective 1.2: Ensure customers are aware of potential hazards and can make informed decisions about their travel options.

Objective 1.3: Develop a more resilient and reliable transport system through disaster response strategies and infrastructure improvements.



Actions – short-term	1.1	1.2	1.3
A1.01 Road safety projects Continue to identify, prioritise and nominate candidate sites for road safety treatments as part of High Risk Roads, Safer Roads Sooner and Black Spot programs, and through other opportunities such as planned upgrades. Focus areas include priority intersection and mid-block safety upgrades across the regional state-controlled road network, progressive sealing and widening (particularly single lane sections) of developmental roads, and implementation of High Risk Roads priority safety treatments.	✓		
A1.02 Bruce Highway – Cairns southern access Continue planning and implementation for the staged delivery of the Cairns Bruce Highway Upgrade Master Plan to improve safety, capacity and resilience of the Bruce Highway south of Cairns.	✓		
A1.03 Safety of range roads Investigate innovative solutions (for example Intelligent Transport Systems) to respond to increasing traffic demand and improve safety on range roads where topography limits the safety treatments available. Key range roads in the region include the Kennedy Highway (Kuranda Range), Gillies Range Road, Pine Creek-Yarrabah Road, Palmerston Highway and Mossman-Mount Molloy Road (Rex Range).	✓	✓	✓
A1.04 Overtaking lanes and wide centreline Continue to assess and prioritise the need for additional overtaking lanes and wide centreline on key road corridors throughout the region, including: <ul style="list-style-type: none">▪ in high priority locations identified in the district-wide overtaking lane business case▪ through continued roll-out of overtaking lanes identified under the Bruce Highway Upgrade Program▪ as part of treatments identified under High Risk Roads planning.	✓		
A1.05 Rest areas that meet different customers' needs Continue to identify investment priorities for new or upgraded rest areas to address driver fatigue risks, encourage safe travel, and provide sufficient capacity and amenities to enhance customer experiences, particularly on drive tourism routes. Ensure planning and provision of rest areas addresses safety risks associated with shared use by trucks and recreational vehicles.	✓	✓	
A1.06 Facilities to support a safe trucking and transport industry Carry forward the strategic intent of Queensland's <i>Heavy Vehicle Safety Action Plan 2019–2021</i> by progressing planning and delivery of stopping places and rest areas to support safe trucking and transport operations across Far North Queensland including investment planning for priority rest areas, decoupling sites and stopping places such as those identified in the Tablelands Heavy Vehicle Management Strategy.	✓	✓	✓
A1.07 Rail crossing safety Continue to improve safety at rail level crossings and cane rail crossings through initiatives such as reducing the number of open level crossings, improving infrastructure and exploring new technology to align with the <i>Queensland Level Crossing Safety Strategy 2012–2021</i> .	✓		

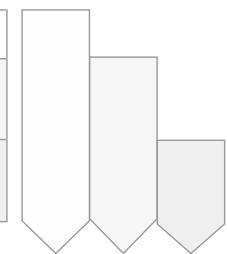
PRIORITY 1: A SAFER, MORE RESILIENT TRANSPORT NETWORK (cont.)

OBJECTIVES

Objective 1.1: Develop a transport network that allows customers to travel safely.

Objective 1.2: Ensure customers are aware of potential hazards and can make informed decisions about their travel options.

Objective 1.3: Develop a more resilient and reliable transport system through disaster response strategies and infrastructure improvements.



Actions – short-term (cont.)	1.1	1.2	1.3
A1.08 Raising customer awareness about safe travel behaviour Continue to develop region-specific education, promotion and communication campaigns in partnership with community, industry and other authorities to encourage safe travel behaviour (for all modes and all customers). This includes education relating to maritime safety and continuing the Torres Strait Maritime Safety Program and Torres Strait Maritime Pathways Project.	✓	✓	✓
A1.09 Tourist safety Continue to identify opportunities to improve safety and customer experience on tourist routes such as the Great Inland Way, the Pacific Coast Way, the Great Tropical Drive and the Savannah Way, through initiatives such as signage, and targeted communication about safe driving in Far North Queensland. This includes ‘keep left’ initiatives, delivered in partnership with local government, which uses line marking and signage to remind overseas tourists to drive on the correct side of the road.	✓	✓	
A1.10 Personal security Work with local government to improve customer safety and amenity at passenger transport stops, stations and terminals.	✓	✓	
A1.11 Resilience analysis and flood immunity Continue to identify and prioritise transport infrastructure upgrades to improve flood immunity and accessibility during the wet season and major weather events, including through studies such as the Cape York Access Strategy, and for priority locations such as: <ul style="list-style-type: none">■ the Bruce Highway at Dallachy Road■ Archer River on the Peninsula Developmental Road■ Spear Creek, Rifle Creek and McLeod River on the Mulligan Highway■ Gilbert River and Routh Creek on the Gulf Developmental Road.	✓	✓	✓
A1.12 Intelligent Transport Systems (ITS) Undertake planning to implement Intelligent Transport System (ITS) initiatives identified in the district wide ITS Strategy to assist in the management of traffic operations on key routes across Far North Queensland.	✓	✓	
A1.13 Technology Identify opportunities for the innovative use of new technology as part of road system management including for example, improved capabilities to communicate with customers, smart sensors to monitor transport infrastructure conditions, and use of drones for safer and more efficient infrastructure condition inspections.	✓	✓	✓
A1.14 Improving mobile coverage Investigate potential solutions to improve mobile coverage across the region's transport network, particularly for remote areas.	✓	✓	✓

PRIORITY 1: A SAFER, MORE RESILIENT TRANSPORT NETWORK (cont.)

OBJECTIVES

Objective 1.1: Develop a transport network that allows customers to travel safely.

Objective 1.2: Ensure customers are aware of potential hazards and can make informed decisions about their travel options.

Objective 1.3: Develop a more resilient and reliable transport system through disaster response strategies and infrastructure improvements.

Actions – medium/long-term	1.1	1.2	1.3
A1.15 Wildlife collision avoidance Investigate mitigation and intervention strategies and the use of collision avoidance technology to reduce crashes with wildlife and stray livestock, including for example: <ul style="list-style-type: none">▪ developing a Cassowary Strike Management Plan▪ trialling the QLDTraffic Mobile App cassowary reporting feature▪ trialling cassowary detection technology at Mission Beach.	✓	✓	
A1.16 Emergency transport access Continue to develop and adopt best practices for coordination between Transport and Main Roads and emergency management agencies to facilitate efficient and effective responses to critical incidents and extreme weather events.	✓	✓	✓
A1.17 Scenario planning for the longer term Commence long-term planning for scenario changes, such as rising sea levels and more frequent and extreme weather events. Incorporate strategic recommendations into updates of transport network plans.			✓



Signage on El Arish – Mission Beach Road, Mission Beach



Signage alerting drivers of kangaroos

Benefits of sealing roads in the Far North Queensland region⁴¹

If a whole of life cost analysis was adopted for evaluating roads in the Far North Queensland regions and other relevant Queensland regions, a greater portion of roads could be sealed, thereby reducing the financial burden on the road operator, providing economic benefits to the region and reducing calls for National Disaster Relief and Recovery Arrangements (NDRRA) funding over the long term.

It can be more expensive to construct or rehabilitate a sealed road, however a sealed road often requires less frequent repair and is more resilient to flood damage. Progressive sealing of roads in the Far North Queensland region could result in significant cost savings over a short-term period, providing more resilient infrastructure, reducing maintenance costs, and resulting in significant economic and social benefits across the regions. The table below outlines the potential benefits associated with whole-of-life costing and subsequent road sealing in the Far North Queensland region.

A key example is the Cape York Region Package for sealing sections of the Peninsula Developmental Road, Endeavour Valley Road and community infrastructure works identified by the Torres Cape Indigenous Council's Alliance.

Benefits of this program are improved access to Cape York for freight, tourists and other road users, improved safety, reduced ongoing road maintenance costs, improved community infrastructure, employment and training and business development opportunities for indigenous and non-indigenous people.



Sealing works Peninsula Developmental Road, near Archer River 2017

Road operator benefits:	Economic benefits:	Social benefits:	Environmental benefits:
<ul style="list-style-type: none"> ▪ more resilient infrastructure ▪ reduced damage from road trains, especially when the road base is saturated ▪ reduced cost to source and haul road aggregate to repeatedly repair flood damage ▪ reduced annual maintenance costs ▪ reduced flood repair and rehabilitation. 	<ul style="list-style-type: none"> ▪ reduced travel time ▪ improved road access ▪ increased productivity ▪ increased freight capacity ▪ reduced vehicle maintenance costs. 	<ul style="list-style-type: none"> ▪ reduced isolation for remote aboriginal and pastoral communities ▪ enhanced opportunities for wealth creation via more reliable transport links to local enterprise ▪ improved access for freight and produce, permitting farmers to better capitalise on seasonal market prices ▪ improved road safety, resulting in fewer crashes, injuries and fatalities. 	<ul style="list-style-type: none"> ▪ reduced pollution from unsealed road aggregate washing into nearby waterways ▪ decreased damage to flora and fauna due to a decreased need to access aggregate for the repair of unsealed roads ▪ reduced air pollution from hauling aggregate to work sites.

⁴¹ Alan Stanton. (2014). *Sealing the Case for Change*.

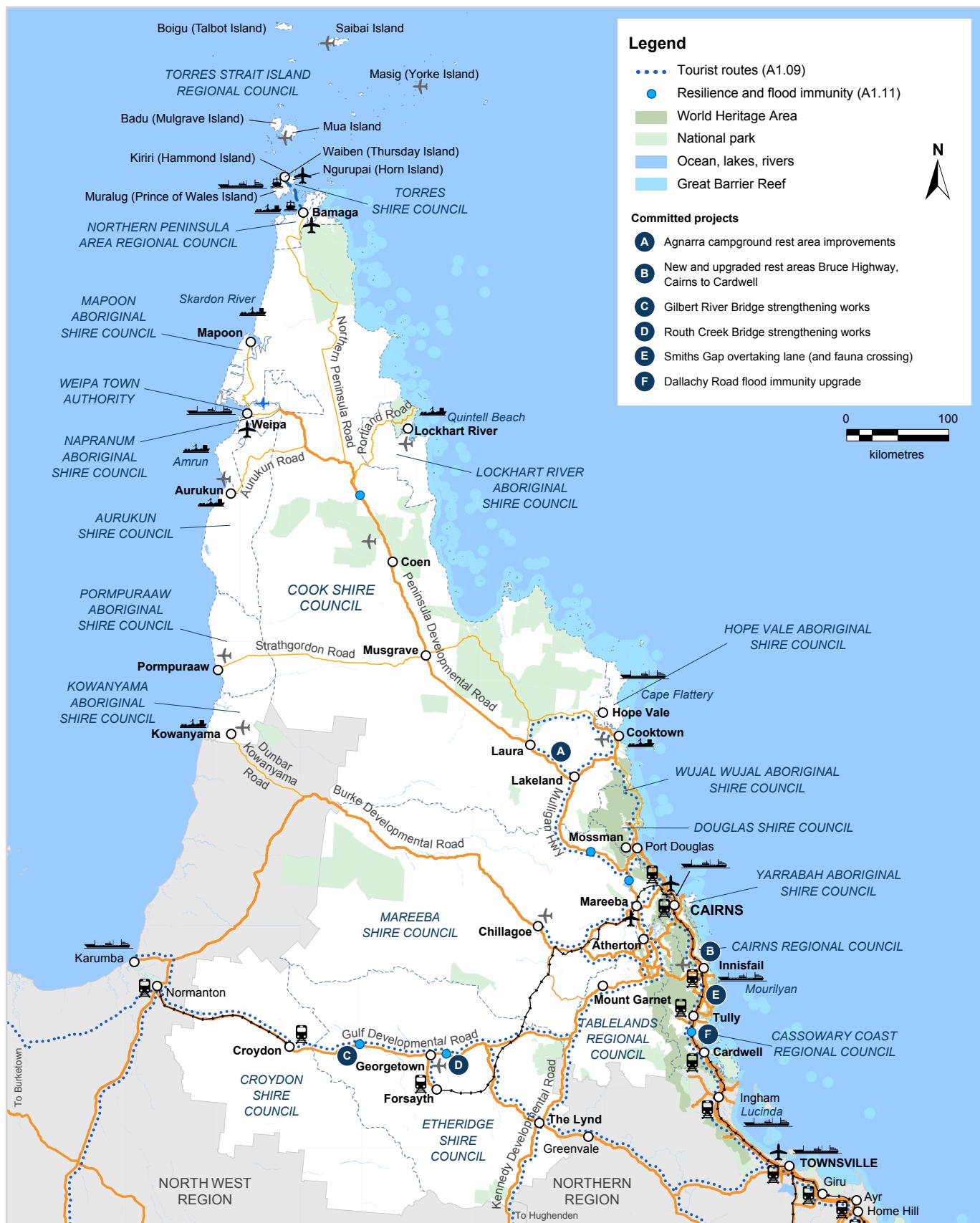


Figure 7: Priority 1 region map

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



Figure 8: Priority 1 Cairns and surrounds map

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

4.2 Priority 2: Transport that supports the economy

Develop a transport system that supports economic growth and diversification.

Economic productivity and growth is essential for the Far North Queensland region's prosperity particularly in relation to sustaining employment for strong communities. Transport has a central role in supporting the economic function of the region. The transport network is required for an efficient and reliable supply chain that underpins the productivity of the Far North Queensland region. The role of the transport network in supporting the economy extends beyond its freight and commercial transport function. The Far North Queensland region covers a number of sub-regions with varied regional and local economic drivers—tourism, agriculture and mining being long-established industries. While growth and diversification within these industries will continue, emerging industries such as education, tropical health and expertise and clean energy offer new economic opportunities.

Priority 2 aligns to:

- the Transport Coordination Plan's objective for transport that facilitates the efficient movement of people and freight to grow Queensland's economy
- the *State Infrastructure Plan*'s focus on transport infrastructure that unlocks the potential of critical supply chains by identifying and improving the freight network
- the common theme across the four regional land use plans for 'economy'—transport that facilitates the growth of key industries, and the efficient movement of people and goods for increased regional competitiveness and productivity.



Sugar cane train, Tully

Transport objectives

Objective 2.1: Optimise supply chains to efficiently link producers, distributors, exporters and consumers on an integrated network.

The efficient movement of goods between producers, manufacturers, exporters and customers is important for the future growth of the Far North Queensland region's economy. Resilience is a significant issue in the region, impacting network reliability and therefore efficiency of the transport network. Resilience is addressed in Priority 1. The other aspect of efficiency is ensuring entire routes, regardless of ownership, provide for high productivity freight vehicles, and, in addition, cater to all users of the system and provide reliable travel times.

To enable supply chain efficiency, the freight network needs to be planned holistically with consideration of the entire supply chain. Only then can the region's economic assets be connected through the optimised end-to-end supply chain. An optimised supply chain will:

- minimise unnecessary load transfers, splitting or handling, thus allowing direct connections between producers and receivers
- minimise transportation costs for producers, transporters, distributors and consumers
- provide reliable and direct access to transport hubs such as air and sea ports
- enable freight operators and network managers to make informed decisions as part of a connected network.

Objective 2.2: Realise the tourism potential of the region by improving tourism accessibility with a focus on the self-drive market.

The way visitors access the region's attractions is part of their overall experience. Ease of access, feeling safe on the journey, wayfinding signage and information, and access to high quality facilities including rest stops and scenic lookouts, are all parts of a positive experience. This is relevant for all transport modes, networks and passenger terminals catering to visitors including drive tourist routes, iconic cycling routes, airports, and bus, coach, rail, ferry, rail and cruise ship terminals.

Realising tourism potential through improvements to the transport system will:

- help strengthen the tourism industry by making destinations and attractions convenient, safe and easy to access
- make experience destinations and touring routes more accessible and attractive
- improve boating, air, road, cycling and rail infrastructure, passenger facilities and associated services that are integral to the viability and success of the tourism industry.

Improving cattle industry productivity in the Far North Queensland region

Ootann Road is a local government road that provides a north-south link between the Burke Developmental Road and Kennedy Highway. The majority of the road is unsealed, with poor vertical and horizontal geometry, and has a high proportion of heavy vehicle and livestock traffic including Type 2 (larger) road trains. The Northern Australian Beef Roads Program includes funding for sealing key sections of Ootann Road.⁴² The project will deliver the following improvements to the cattle supply chain:

- improved productivity and travel times by sealing unsealed sections of road
- improved accessibility for all road users
- improved road safety by upgrading road quality
- reduced damage and stress to livestock by increasing the sealed length of the link and reducing the overall roughness of the link
- reduced road closures during the wet season
- reduced whole-of-life asset management costs by strengthening and widening pavements to reduce accelerated road wear and damage by heavy vehicles.

⁴² Australian Government. (2018). www.investment.infrastructure.gov.au/infrastructure_investment/northern_australia_beef_roads.aspx.

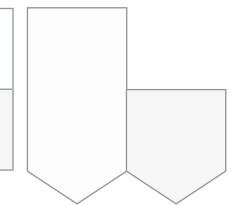
Actions

PRIORITY 2: TRANSPORT THAT SUPPORTS THE ECONOMY

OBJECTIVES

Objective 2.1: Optimise supply chains to efficiently link producers, distributors, exporters and consumers on an integrated network.

Objective 2.2: Realise the tourism potential of the region by improving tourism accessibility with a focus on the self-drive market.



Actions – short-term	2.1	2.2
A2.01 Strategic corridors Undertake strategic corridor planning to support supply chains, regional productivity and access to markets. Core priorities for strategic corridor investigations are: <ul style="list-style-type: none">■ Palmerston Highway linking Port of Mourilyan and Innisfail to the Tablelands and beyond■ Kennedy Highway linking key freight generators and population centres between Cairns and Mareeba■ Cairns Western Arterial Road linking Earlville to Smithfield■ Cairns Ring Road from Bruce Highway to Kennedy Highway via Captain Cook Highway to connect to Cairns International Airport and Smithfield■ regional developmental roads.	✓	
A2.02 Road hierarchy Review road network link plans to ensure the regional and urban road hierarchy considers purpose, function and different user needs. The review will inform future planning and design of road upgrades to support economic growth and manage congestion. Review of Cairns' urban network is a high priority and will include consideration of capacity upgrades and network optimisation solutions such as bus priority treatments.	✓	✓
A2.03 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 future resource and agricultural sector freight requirements; access and movement requirements for oversize over-mass and high productivity vehicles; first and last mile links; and the role of the region's ports, airports, rail terminals, and key freight routes.	✓	
A2.04 Industrial access Work with local government, the private sector and other government agencies to provide an appropriate level of access to industrial areas at existing and proposed new industrial areas and transport industry hubs including for Mareeba, Innisfail, Cairns and Cairns South State Development Area.	✓	✓
A2.05 Bridge renewal Continue planning for necessary bridge replacements or structural enhancements (to address resilience, load limits and safety issues) across the state-controlled road network in the region including: <ul style="list-style-type: none">■ Spear Creek Bridge, Rifle Creek Bridge and McLeod River Bridge on the Mulligan Highway■ Centenary Bridge and Bamboo Creek Bridge on the Bruce Highway■ Gilbert River Bridge and Routh Creek Bridge on the Gulf Developmental Road■ Archer River on the Peninsula Developmental Road.	✓	✓

PRIORITY 2: TRANSPORT THAT SUPPORTS THE ECONOMY (cont.)

OBJECTIVES

Objective 2.1: Optimise supply chains to efficiently link producers, distributors, exporters and consumers on an integrated network.

Objective 2.2: Realise the tourism potential of the region by improving tourism accessibility with a focus on the self-drive market.

Actions – short-term (cont.)	2.1	2.2
A2.06 Tourism and transport Undertake a regional transport needs analysis to understand the travel needs of tourists and visitors, and strategic opportunities to improve visitor access, connectivity to tourist destinations and experience across the region's transport system.		✓
A2.07 Cruise ship industry Investigate opportunities for the region to support a growing cruise ship industry, including improvements in port-to-destination customer experience, and considering the outcomes of the Cairns Shipping Development Project.		✓
A2.08 Transport that supports major events Continue to work in partnership with local government and events organisers to coordinate transport system management to support major events such as Ironman Asia Pacific Championship, Cairns Marathon and Targa Great Barrier Reef, while minimising disruptions to the transport network.		✓
A2.09 Strategic outlook for mining Ensure transport network planning and prioritisation appropriately considers existing operations and potential future development and diversification in the mining and resources industry including in the North East Minerals Province and in western Cape York.	✓	
A2.10 Future road corridors Plan and protect future road corridors including the Mareeba, Atherton, and Innisfail bypass corridors.	✓	
Actions – medium/long-term	2.1	2.2
A2.11 North Coast line Develop a North Coast line action plan to prioritise planning that will support rail freight and passenger efficiency improvements. This may include opportunities to reduce the number of level crossings, increase the length of passing loops, improve flood resilience, and re-align low speed sections of the North Coast line.	✓	✓
A2.12 Innisfail freight network Improve road access between the Palmerston Highway and the Port of Mourilyan, and Bruce Highway south of Innisfail including as part of the Innisfail Bypass – Plan and Preserve Corridor project.	✓	

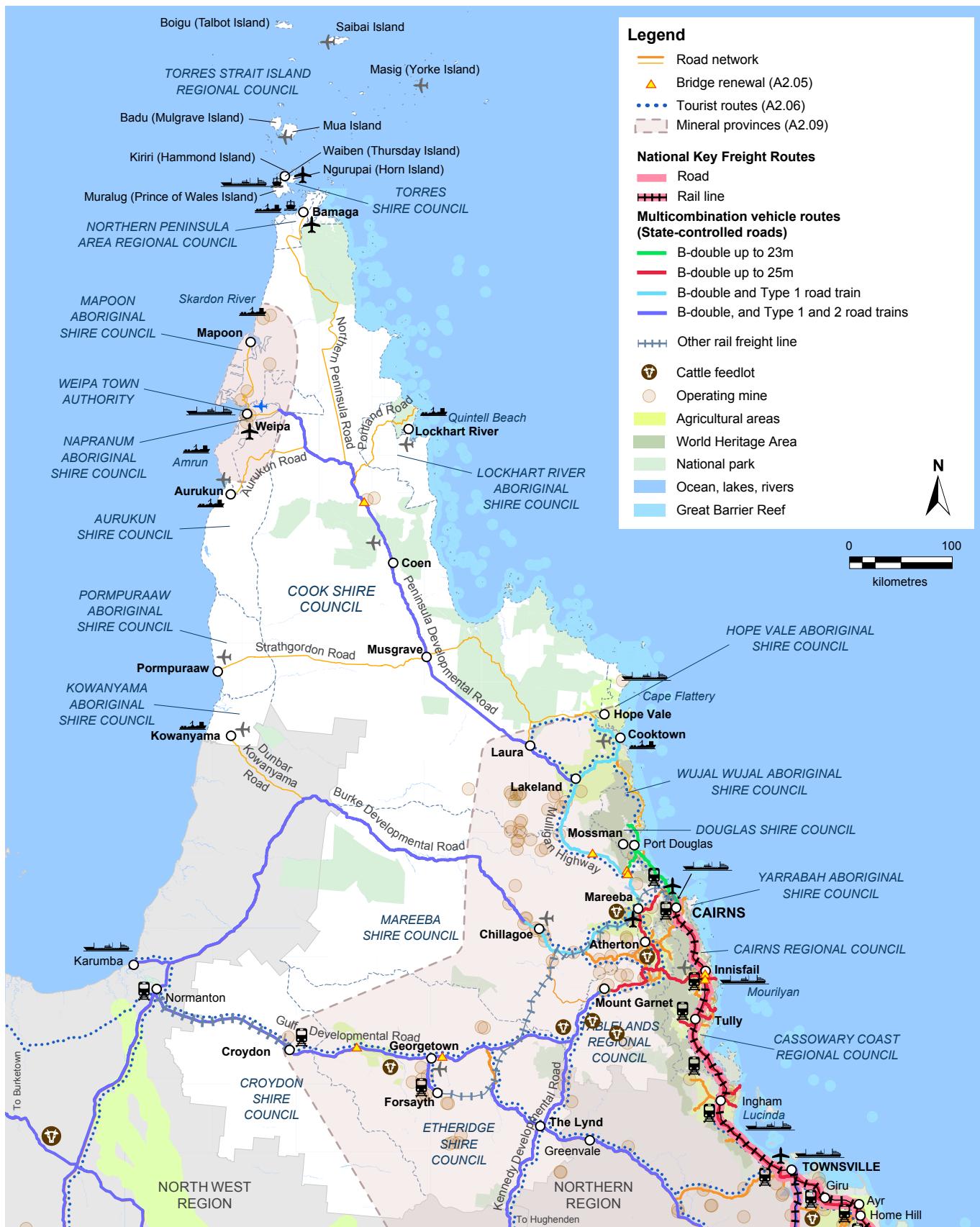


Figure 9: Priority 2 region map

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



Figure 10: Priority 2 Cairns and surrounds map

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

4.3 Priority 3: Connected, liveable and sustainable communities

Develop an integrated and accessible transport system to support connected, liveable and sustainable communities.

Priority 3 aligns to:

- the Transport Coordination Plan's objectives for transport that meets the needs of all Queenslanders, now and into the future, connects communities to employment and vital services, and contributes to a cleaner, healthier and more liveable environment.
- the *State Infrastructure Plan*'s focus on transport infrastructure that seeks innovation and technology solutions to create a better performing and lower emissions transport system, and connects regional communities with access to essential services and opportunities.
- regional planning objectives for integrated and sustainable transport that supports a more liveable, affordable and accessible region for improved social outcomes across diverse communities.

Access and connectivity plays a major role in creating liveable places, and promoting positive health and social outcomes. Integrated land use and transport planning, including convenient and affordable transport options, has an essential role in creating attractive, safe and permeable built environments that are easy for people to get around regardless of age, ability or income. Different communities and customers have different access needs and challenges. A considered and tailored approach to transport planning and service provision is essential to ensure transport options are appropriate, affordable and meet the needs of the region's diverse communities and people.

Responsible development and operation of transport networks is important for building a sustainable region. Integrated land use and transport planning is critical to ensure the transport system meets customers' needs, minimises environmental footprint, and reduces the land and resources required for transport purposes. Sustainable development of the transport system is essential for meeting the region's goals and protecting lifestyle and environmental values.

This priority can be achieved through integrated land use and transport planning, supporting a more compact urban form, encouraging a shift towards sustainable travel behaviour, and applying best practice in planning, design and delivery of transport projects.



Cairns City bus station

Transport objectives

Objective 3.1: Develop a transport system that connects customers to jobs, schools, shops and services by a range of transport options.

This objective includes improved and affordable access to service centres, educational opportunities and basic goods and services such as nutritious foods. With varied challenges across the region, improving connectivity will require the planning and delivery of a mix of solutions encompassing infrastructure, transport services and funding schemes. A connected transport system in the urban areas of the Far North requires different actions to achieve a connected transport system in the more remote parts of the region.

A transport system that supports the needs of a community will:

- connect residents to essential services
- connect towns to one another
- connect communities to larger services centres
- include a flexible and diverse range of transport modes.

Objective 3.2: Manage congestion in urban areas.

Managing congestion requires strategies that address a range of factors including travel choice, network capacity and operations, and land use planning.

Land use planning has a significant role in managing congestion in urban centres. The development of mixed use centres means people can live, work, shop and play in the same area. This promotes shorter trips, more trips by walking and cycling, and less dependency on lengthy commutes to access destinations. Higher density self-contained mixed use centres can help to achieve reduced travel distances and expenses, reduced demand on the overall network, and reduced greenhouse gas emissions. The distance between, and location of, trip origins and destinations is a key factor affecting urban traffic congestion.

Capacity upgrades and improved operations on the urban road network is another way to meet increases in demand as a city grows. There are a number of projects underway aimed at improving capacity and traffic flow at congestion hotspots, including projects such as the Smithfield Bypass and Bruce Highway upgrade works.

Managing congestion in urban areas will:

- reduce work travel time
- improve transport reliability
- reduce freight delivery time and cost
- reduce vehicle and fuel expenditure
- improve health outcomes.

Objective 3.3: Create a sustainable transport system that protects the environmental quality of the region and supports the lifestyle values of residents.

The Far North Queensland region's natural features annually attracts more than 2 million domestic and 860,000 international tourists, provides recreational opportunities for residents and visitors, include coastline and beaches, the world heritage listed Great Barrier Reef and Wet Tropics of Queensland areas and national parks. Delivering transport services and infrastructure initiatives that lessen impacts on the environment, and help to protect the amenity of residents, is important for lifestyle, sustainability and the tourism values of the Far North Queensland region. Environmental considerations are a core business of Transport and Main Roads, and the department will continue to improve its environmental practices. Access to natural and recreational assets is important in attracting residents and tourists to the Far North Queensland region.

A compatible transport system will:

- support the lifestyle values of residents
- protect the unique environmental and aesthetic values of the region
- respect the landscapes in which it is developed.



Undara Experience, Undara

CASE STUDY: Transport planning for cassowaries

Transport and Main Roads takes the issue of cassowary protection very seriously and has been working closely with community cassowary advocacy groups since 2015 to find effective and innovative solutions to reduce cassowary vehicle strikes, and assist in protecting these iconic birds. Death from motor vehicle strikes is an ongoing problem, and is the largest known killer of cassowaries within the Cassowary Coast local government area.⁴³ The cassowary is considered an endangered species and in 2006, it was found that only 25 per cent of its former habitat remained.

Transport and Main Roads recognises the challenges facing the remaining cassowary population and the concerns of local residents, and is committed to finding innovative solutions to reduce cassowary road strikes on state controlled roads.

Measures already implemented include:

- Warning signs, line-marking and speed reductions.
- Vegetation management along key roads in the Mission Beach area to increase visibility of cassowary chicks during the breeding season.
- Installation of Variable Message Signs on the Kuranda Range, which are being used to notify drivers of road hazards, including cassowary sightings.

A fauna crossing is being delivered as part of the Smiths Gap overtaking lane project on the Bruce Highway, approximately 2km south of El Arish. The fauna crossing will link critical corridors of known cassowary habitat in the Smiths Gap Cassowary Corridor.

Reporting of cassowary sightings is being considered as an enhancement to the QLD Traffic mobile application. A trial feature that allows cassowary reporting and alerts drivers was released in early 2019.

Transport and Main Roads will undertake cassowary management planning to investigate measures to further prevent vehicle strike on state controlled roads in cassowary habitat.

Transport and Main Roads will continue to meet regularly with the Cassowary Recovery Team to discuss ideas, seek feedback and monitor safety initiatives.



Cassowary crossing road

Reef 2050 Plan

The Reef 2050 Plan was released by the Australian and Queensland governments in March 2015 and is the overarching framework for protecting and managing the Great Barrier Reef until 2050. The Reef 2050 Plan is a world-first document that outlines management measures for the next 35 years to ensure the outstanding universal value of the reef is preserved now and for generations to come. The plan firmly responds to the pressures facing the reef and will address cumulative impacts, and increase the reef's resilience to longer term threats such as climate change.⁴⁴

The Reef 2050 Plan contains implementation actions across all levels and areas of government. Transport and Main Roads has a strong role in implementing actions relating to dredging, trans-shipping,

bulk goods carrier safety standards and vessel crew competency standards. In November 2016 the *Maintenance Dredging Strategy* was delivered by Transport and Main Roads in response to the Reef 2050 Plan.⁴⁵



Fitzroy Island

⁴³ James Cook University. (2011). *Mission Beach Road Research: Traffic Impacts on Cassowaries and Other Fauna and Strategies for Mitigation*.

⁴⁴ Australian Government. (2017). www.environment.gov.au/marine/gbr/long-term-sustainability-plan.

⁴⁵ Department of Transport and Main Roads. (2016). *Maintenance Dredging Strategy*.

Actions

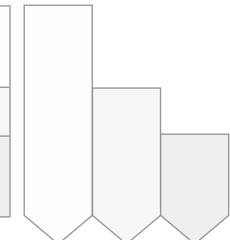
PRIORITY 3: CONNECTED, LIVEABLE AND SUSTAINABLE COMMUNITIES

OBJECTIVES

Objective 3.1: Develop a transport system that connects customers to jobs, schools, shops and services by a range of transport options.

Objective 3.2: Manage congestion in urban areas.

Objective 3.3: Create a sustainable transport system that protects the environmental quality of the region and supports the lifestyle values of residents.



Actions – short-term	3.1	3.2	3.3
A3.01 Network optimisation solutions Work with Cairns Regional Council to investigate opportunities to optimise transport network operations and manage congestion pressures for the major urban arterial road network of Cairns, including considering Smarter Solutions such as lane-use management systems, improved traffic signal coordination, smart signalised pedestrian crossing sensors, and bus priority intersection treatments.	✓	✓	✓
A3.02 Cairns Transit Network Work with Cairns Regional Council to continue the staged planning for the Cairns Transit Network to create more efficient and reliable bus journeys on key corridors connecting Cairns city with a focus on priority corridors linking to James Cook University and Edmonton.	✓	✓	✓
A3.03 Capacity upgrades Undertake planning to inform investment decisions for priority capacity upgrades to state-controlled roads in the Cairns urban network to address congestion issues. Key priorities include: <ul style="list-style-type: none">▪ ongoing investment planning for staged upgrades identified in the Bruce Highway Upgrade Master Plan▪ corridor planning and detailed investment planning for priority upgrades to Cairns Ring Road (via Captain Cook Highway) and Cairns Western Arterial Road.	✓	✓	✓
A3.04 Urban bus services For existing urban bus services in the region, review and optimise bus routes and consider bus stop upgrades at key locations to respond to customer requirements. Locations identified as priority candidates for upgrade assessments within the Cairns area include Smithfield, Cairns Hospital, Earlville, Westcourt and Mount Sheridan.	✓	✓	✓
A3.05 Smart ticketing Investigate opportunities to implement smart ticketing for transport servicing Cairns and potentially linking to other regional areas. Consideration should include pricing incentives and innovative products to encourage greater passenger transport use.	✓	✓	✓
A3.06 Access for people with disabilities Improve the end-to-end journey for people with a disability by working in collaboration with key stakeholders to achieve the objectives of the <i>Disability Action Plan 2018-2022</i> .	✓		✓
A3.07 Improved walkability and amenity Work with local government to investigate and prioritise opportunities to improve the pedestrian environment in town centres throughout the region to strengthen walkability and local amenity.	✓	✓	✓

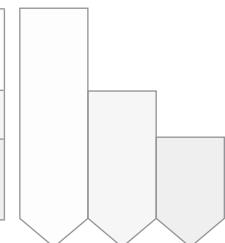
PRIORITY 3: CONNECTED, LIVEABLE AND SUSTAINABLE COMMUNITIES (cont.)

OBJECTIVES

Objective 3.1: Develop a transport system that connects customers to jobs, schools, shops and services by a range of transport options.

Objective 3.2: Manage congestion in urban areas.

Objective 3.3: Create a sustainable transport system that protects the environmental quality of the region and supports the lifestyle values of residents.



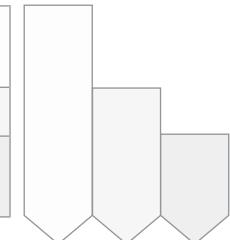
Actions – short-term (cont.)	3.1	3.2	3.3
A3.08 Principal Cycle Network Plan Undertake planning to deliver the Principal Cycle Network to support more cycling, more often on safe, direct and connected routes via: <ul style="list-style-type: none">▪ options analysis and business case development for cycling infrastructure on highest priority routes, including for example Tolga–Atherton, Barron River (Stratford)–Smithfield, and Redlynch–Cairns CBD▪ provision for cycling infrastructure as part of planning for other TMR funded projects on principle cycle routes, including for example, delivery of off-road cycling facilities as part of Cairns Bruce Highway Southern Access Corridor projects.	✓	✓	✓
A3.09 End of trip facilities Support local governments to design and construct mid-trip and end-of-trip facilities under TMR's Cycle Network Local Government Grants program.	✓	✓	✓
A3.10 Transit oriented places Work with local government and other authorities, to encourage the development of transit oriented communities, and more compact mixed-use urban forms in close proximity to existing and proposed major centres (such as Palm Cove, Smithfield, Redlynch, Cairns central business district, Earlvile, Edmonton and Gordonvale).	✓	✓	✓
A3.11 Passenger connectivity Investigate options to improve passenger connectivity between local and regional passenger transport services including connections to air, rail, sea and long distance coaches. Cairns Airport is considered as a significant passenger transport node in the region, requiring improved connectivity to other modes.	✓	✓	✓
A3.12 Boating infrastructure prioritisation Continue to prioritise investment in boating infrastructure across the region based on an assessment of demand and input from the community and stakeholders using tools such as the <i>Recreational Boating Facilities Demand Forecasting Study</i> (for individual local government areas).	✓		✓
A3.13 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. Key opportunities include the Tip of Australia Way Cycling and Walking Track in the Northern Peninsula Area, Wangetti Trail linking Palm Cove to Port Douglas, and the Atherton Tablelands rail trails between Mareeba and Ravenshoe.	✓		✓
A3.14 Environmental outcomes Work with key stakeholders to identify and prioritise opportunities to improve environmental outcomes in developing and operating the transport system, including vegetation management, visual amenity, water quality management, protection of the Great Barrier Reef and improved wildlife movement, for example through projects such as the Smiths Gap overtaking lane and fauna crossing (in a known cassowary habitat corridor).			✓

PRIORITY 3: CONNECTED, LIVEABLE AND SUSTAINABLE COMMUNITIES (cont.)**OBJECTIVES**

Objective 3.1: Develop a transport system that connects customers to jobs, schools, shops and services by a range of transport options.

Objective 3.2: Manage congestion in urban areas.

Objective 3.3: Create a sustainable transport system that protects the environmental quality of the region and supports the lifestyle values of residents.



Actions – short-term (cont.)	3.1	3.2	3.3
A3.15 Local Fare Scheme Evaluate the continued implementation of the Local Fare Scheme in Cape York, Torres Strait and Gulf of Carpentaria in reducing the cost of air travel and enabling residents to move around more frequently.	✓		
A3.16 Cape York and Torres Strait Access Continue to progressively improve key transport infrastructure in Cape York and the Torres Strait including the Peninsula Developmental Road, community access roads, airstrips and marine facilities, and the accesses to those facilities. Key initiatives include Cape York Region Package Stage 2 program of works, Jardine River bridge business case, Cape York and Torres Strait access strategy, and Seisia marine hub master planning.	✓		✓
A3.17 Remote community access and cost of living Work with other government agencies to investigate freight and passenger transport options to help address the cost of living, and improve access to basic goods and services for the more remote parts of the region (such as the Torres Strait islands, and Cape York communities). The investigation should consider options to improve access of remote communities to fresh produce, services and employment, for improved health and social outcomes.	✓		✓
A3.18 Principal Cycle Network Plan update In collaboration with local governments update the <i>Far North Queensland Principal Cycle Network Plan</i> every five years and accompanying <i>Priority Route Maps</i> every two years for the townships and cities in the far north region. Consider as part of review of the Principal Cycle Network an expanded geographic scope to include additional townships across the region.	✓	✓	✓
Actions – medium/long-term	3.1	3.2	3.3
A3.19 Community connection Support local government in identifying opportunities to improve access to transport services suited to their communities.	✓	✓	✓
A3.20 Low and zero emissions 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.			✓
A3.21 Capacity pressures on range roads Consider the role of changing vehicle technology, intelligent transport systems, and options for innovative road corridor upgrade solutions to manage increasing commuter and freight demands on constrained range roads, particularly the highly trafficked Kuranda Range Road (Kennedy Highway), and the Palmerston Range (Palmerston Highway) B-Double freight route.	✓	✓	✓

Tip of Australia Way Cycling and Walking Track

A study has been conducted to further the idea of a network of shared walking and cycling paths to link the five communities of the Northern Peninsula Area - Injinoo, Umagico, Bamaga, New Mapoon and Seisia.⁴⁶

The current roads between each of these communities are high-speed (80km/hr) environments and walking and cycling occurs on the road shoulders. As the communities are located only three to four kilometres from each other, and have low vehicle ownership, a cycling and walking track network would provide an ideal opportunity to promote physical activity between each town. It is anticipated that the track would have the following benefits for the Northern Peninsula Area community:

- improve health of Aboriginal and Torres Strait Islander peoples by facilitating a safe and healthy exercise culture
- promote a healthy active lifestyle for school children that may translate to a physically active culture in later years
- improve safety through dedicated cycling and walking paths, in place of using the shoulders of existing highways
- promote Northern Peninsula Area as a tourist destination, with the tracks becoming an iconic feature in the area for general tourism, sporting events and guided tours
- create employment and business opportunities resulting from construction and maintenance of the track, as well as tourism employment opportunities, for example, bike hire, tours and so on.



View from Tip of Australia Way track, Seisia

⁴⁶ Department of Transport and Main Roads. (2016). *Far North Queensland Principal Cycle Network Plan*.

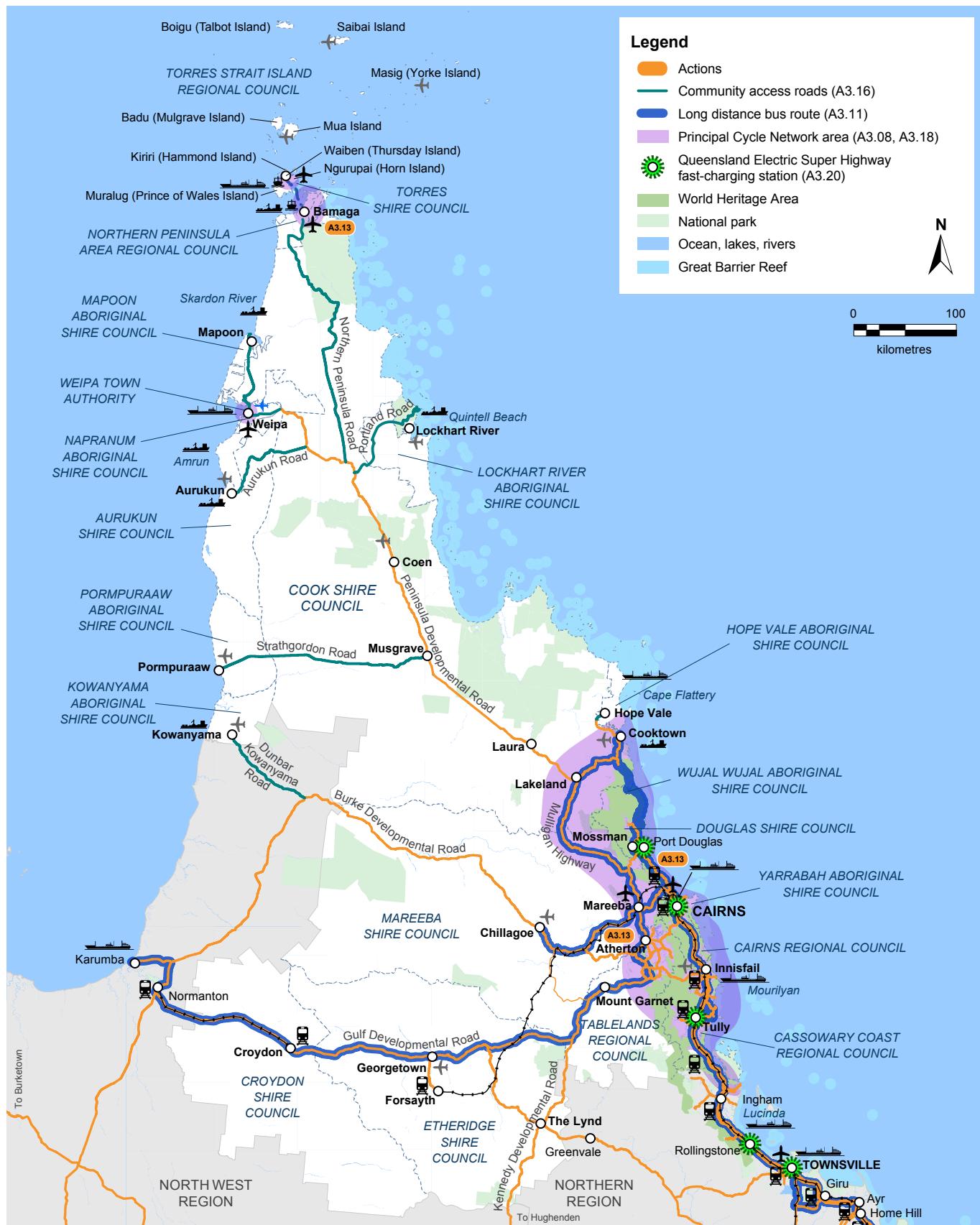


Figure 11: Priority 3 region map

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

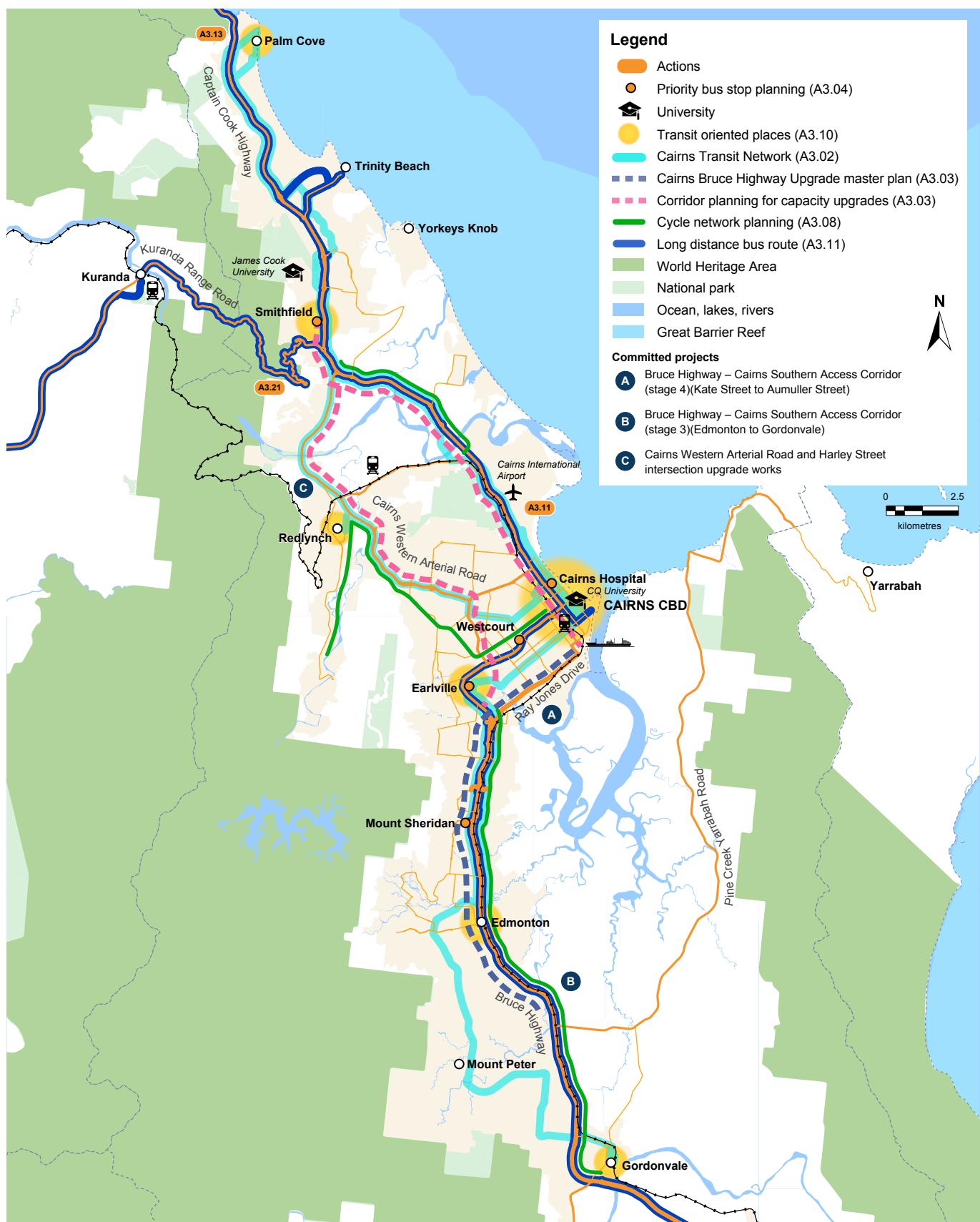
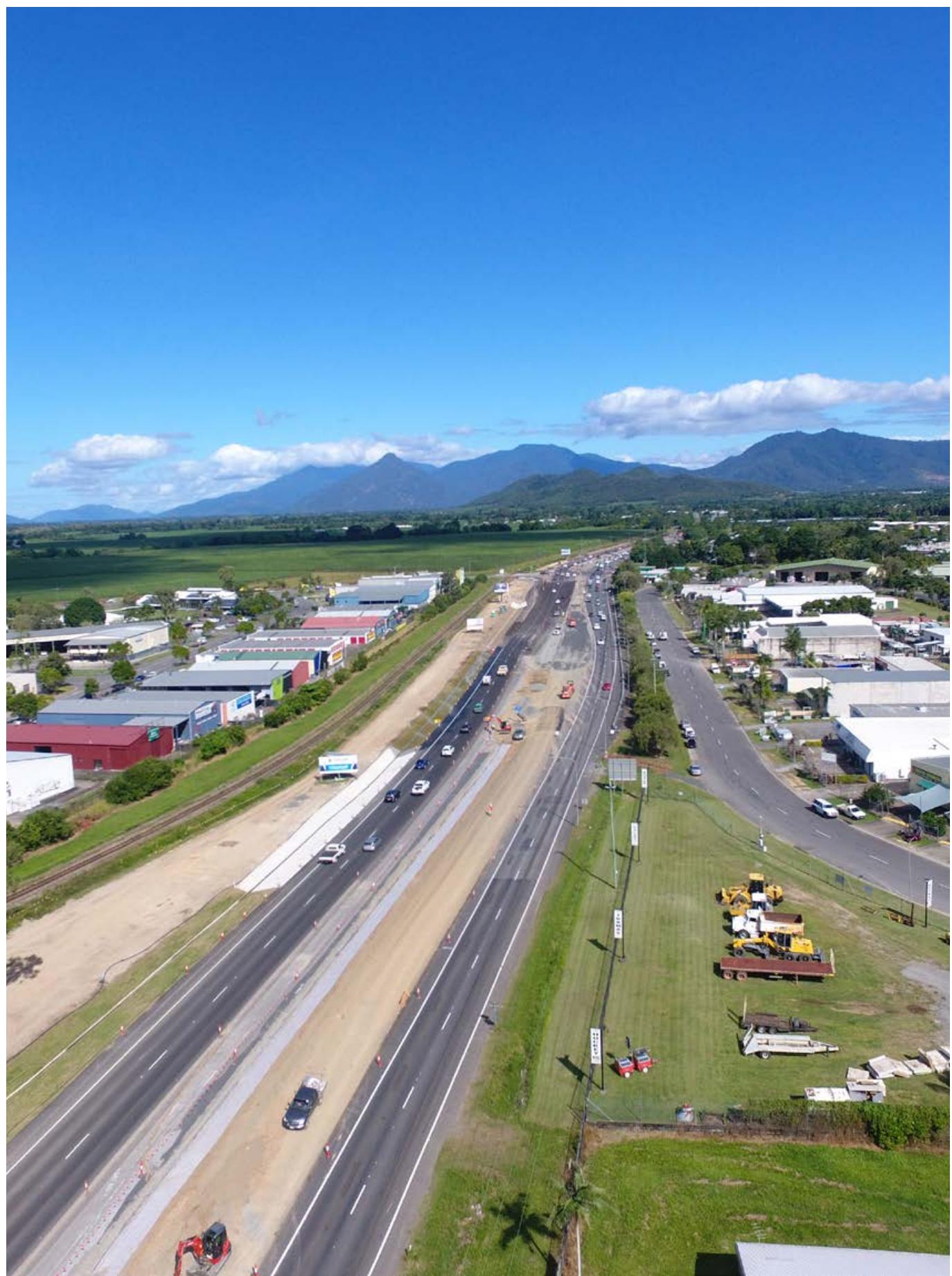


Figure 12: Priority 3 Cairns map

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



Construction works, Bruce Highway Cairns Southern Access (Stage 2)

4.4 Priority 4: Better coordination of transport infrastructure and services

Finding better ways to prioritise, coordinate and manage transport infrastructure and operations.

Priority 4 aligns to:

- the Transport Coordination Plan's principles and priorities for decision-making to ensure proposals provide maximum net benefit to the community and represent value for money
- the *State Infrastructure Plan*'s focus on maintenance and rehabilitation to reduce the long-term cost of repair, seeks innovation to create a better performing transport system, and connects regional communities with access to essential services and opportunities
- regional planning objectives for a coordinated approach to transport system management, and working in partnership across agencies to maximise the benefits of investment in transport.

Attracting investment in the region's transport network is essential in meeting many of the priorities outlined in this Regional Transport Plan. Attracting investment can be a challenge, particularly when comparing the number of rural and remote road users 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. For the Far North Queensland region, this is further complicated for communities who rely on investment by neighbouring local governments for access to their towns.

It is acknowledged that attracting funding to remote and regional projects cannot be directly compared to those in metropolitan and inner regional areas because the benefits differ and are often difficult to quantify in dollar terms. The traditional cost benefit analysis is 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.⁴⁷



Trinity Bay unloading at Seisia

⁴⁷ Austroads. (2016). *Identification of a Risk Indicator to Support 'Life Line' Freight Routes*.

Transport objective

Objective 4.1: Achieve more efficient transport planning and delivery, with a greater focus on partnerships

Improving flexibility in the approach to planning and delivery of the transport system should open up further opportunity to deliver essential and suitable infrastructure to support the region's economy and community access. Taking a partnership approach to manage the system as one network can open up options to achieve efficiencies

and provide a more consistent network across ownerships and jurisdictional boundaries.

A more coordinated transport delivery program will:

- be fit for purpose and place
- result from cooperation with other providers to maximise delivery and reduce cost
- be prioritised using an equitable measure.

Actions

PRIORITY 4: BETTER COORDINATION OF TRANSPORT INFRASTRUCTURE AND SERVICES

Objective 4.1: Achieve more efficient transport planning and delivery, with a greater focus on partnerships.

Actions – short-term

A4.01 Design standards fit for remote conditions

In partnership with local government, consider 'fit for purpose' transport infrastructure design standards for rural and remote areas to achieve value for money outcomes, including applying solutions that were developed in sealing the Peninsula Developmental Road and community roads under the Cape York Region Package.

A4.02 Business case methodologies

Develop informed business cases to investigate ways in which evaluation and assessment methodologies can better reflect the benefits of investing in remote and regional transport projects.

A4.03 Sharing resources and information

Work with partners to identify opportunities to improve sharing and coordination of information and resources to more efficiently deliver transport investment programs, particularly for smaller local governments with limited financial and technical capabilities. Foster funding collaboration between government agencies to enable transport outcomes in Aboriginal and Torres Strait Islander council areas.

A4.04 Coordinated road network stewardship

Continue to work with local government under road maintenance and performance contract arrangements for coordinated management and stewardship of the road network.

Actions – medium/long-term

A4.05 Travel surveys and data collection

Continue to undertake regular travel and transport surveys and data collection to better understand travel behaviour patterns and trends to inform integrated transport and land use planning.

A4.06 Cooperative and automated vehicles

Undertake scenario modelling and work with partners to plan and prepare for the transport implications and opportunities associated with the emergence of cooperative automated vehicles.



Waterfalls lookout Paronella Park, Mena Creek



5. Implementation

5.1 Taking action

Delivering the *Far North Queensland Regional Transport Plan* will require:

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

This Plan will be used to inform transport planning priorities and investment decision-making for the region. The plan will ensure that future spending addresses priorities that matter to customers, stakeholders and the community.

Figure 13 shows the importance of the Regional Transport Plans in the Transport and Main Roads investment lifecycle.

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

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

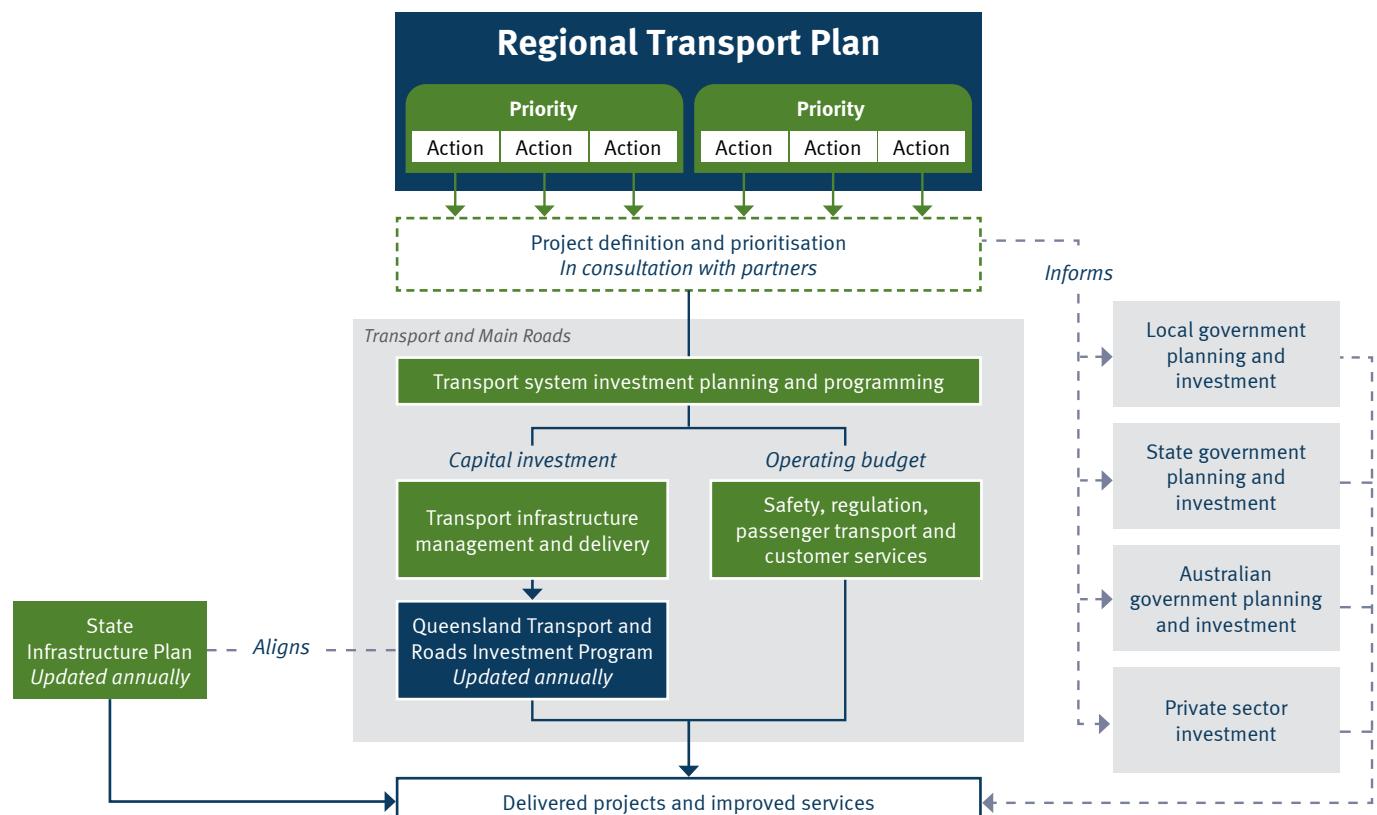


Figure 13: Regional Transport Plans are a critical step in Transport and Main Roads investment lifecycle

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 *Far North Queensland Regional Transport Plan*, Transport and Main Roads has built relationships with stakeholders from all levels of government, business and industry. These relationships will be maintained and built on to deliver 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 the implementation of an initiative or action
- supporting and encouraging private sector investment through project facilitation to accelerate action delivery and realise economic or commercial benefits, for example, through investment facilitation or public-private partnerships
- providing resource support such as human resources, equipment or material.

Cooperative transport planning is the foundation for delivery of Regional Transport Plans. Each plan will be delivered with a focus on cooperation, coordination and collaboration. This approach builds on the framework for inter-agency cooperation established within the Roads

and Transport Alliance (RTA). The RTA is a partnership between Transport and Main Roads and the Local Government Association of Queensland, on behalf of local governments, for the stewardship of Queensland's regional road and transport network.

Local governments together with Transport and Main Roads form Regional Roads and Transport Groups (RRTGs). Moving forward RRTGs will work collaboratively to prioritise investment on road and transport infrastructure and should evolve further to influence the strategic planning and management of regional transport networks. This includes reviewing and identifying specific economic drivers, opportunities and challenges as they change over time to inform project identification and prioritisation.

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

It is acknowledged that not all local governments in the Far North Queensland region are part of a RRTG. In such cases it will be necessary for partnership arrangements to be developed between Transport and Main Roads and other regional alliances such as the Torres Cape Indigenous Council's Alliance, or directly with the respective local government.



Cairns marina

5.3 Measuring success

Overall, the effectiveness of this Plan within the region will be measured against the measures of success outlined for each priority (Figure 14). 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: A SAFER, MORE RESILIENT TRANSPORT NETWORK

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 or hospitalisation casualties) per 100 million vehicles kilometres travelled on state-controlled roads.	Transport and Main Roads
	Road crashes (resulting in fatalities or hospitalisation casualties) per kilometre on state-controlled roads.	Transport and Main Roads
	Number of people killed or seriously injured in marine incidents per 10,000 registered vehicles.	Transport and Main Roads
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

PRIORITY 2: TRANSPORT THAT SUPPORTS THE ECONOMY

MEASURE OF SUCCESS	PROPOSED INDICATOR	SOURCE
Maintain or improve road network reliability	Frequency and duration of unplanned closures on the state-controlled transport network due to flooding and other types of incidents.	Transport and Main Roads
Freight productivity improves	Heavy vehicle operating costs.	Transport and Main Roads
Transport supports the region's tourism economy	Percentage variation from posted speed limit on state-controlled roads. [^]	Transport and Main Roads
	Average travel time to key tourist destinations from major accommodation precincts.	Transport and Main Roads

PRIORITY 3: CONNECTED, LIVEABLE AND SUSTAINABLE COMMUNITIES

MEASURE OF SUCCESS	PROPOSED INDICATOR	SOURCE
Greater access and connectivity to places by sustainable transport modes.	Proportion of people taking environmentally sustainable travel options (walk, cycle and take public transport to work). ^{^^}	Australian Bureau of Statistics
	Proportion of population with good accessibility (within 45 minutes journey time) to a range of essential services in urban areas (by walking, cycling or public transport).*	Transport and Main Roads
Level of transport disadvantage decreases	Proportion of population in areas of unmet transport need (high mobility disadvantage and not served by public transport).*	Transport and Main Roads

PRIORITY 4: BETTER COORDINATION OF TRANSPORT INFRASTRUCTURE AND SERVICES

MEASURE OF SUCCESS	PROPOSED INDICATOR	SOURCE
Build and maintain strong partnerships to deliver successful transport projects.	Proportion of transport planning and delivery projects attracting joint funding.	Transport and Main Roads

Figure 14: Measures of success and proposed indicators

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

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

* Cairns urban (Palm Cove to Gordonvale) using the Land Use and Public Transport Accessibility Index (LUPTAI) model to estimate levels of access to destinations by various modes.



Marine facilities, Ugar (Stephen) Island

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 that 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 intended objectives and measures of success (Figure 15).

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.

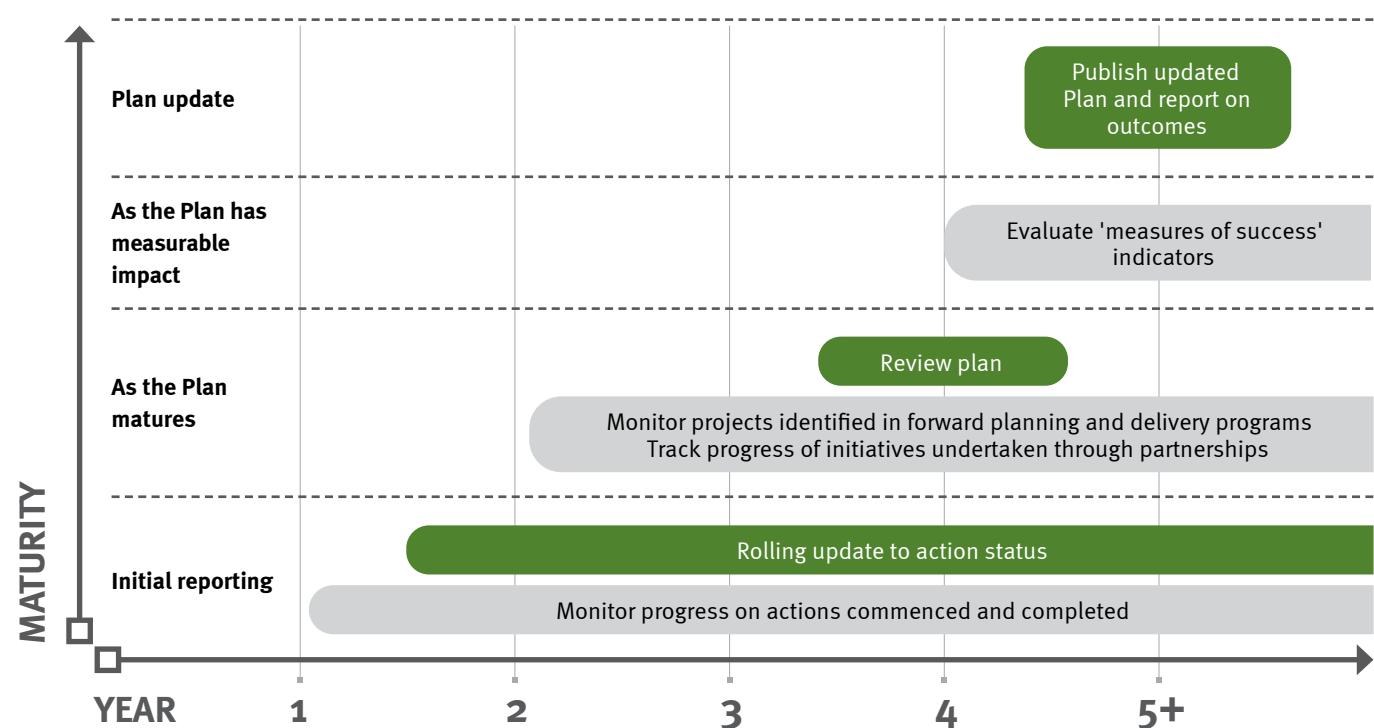
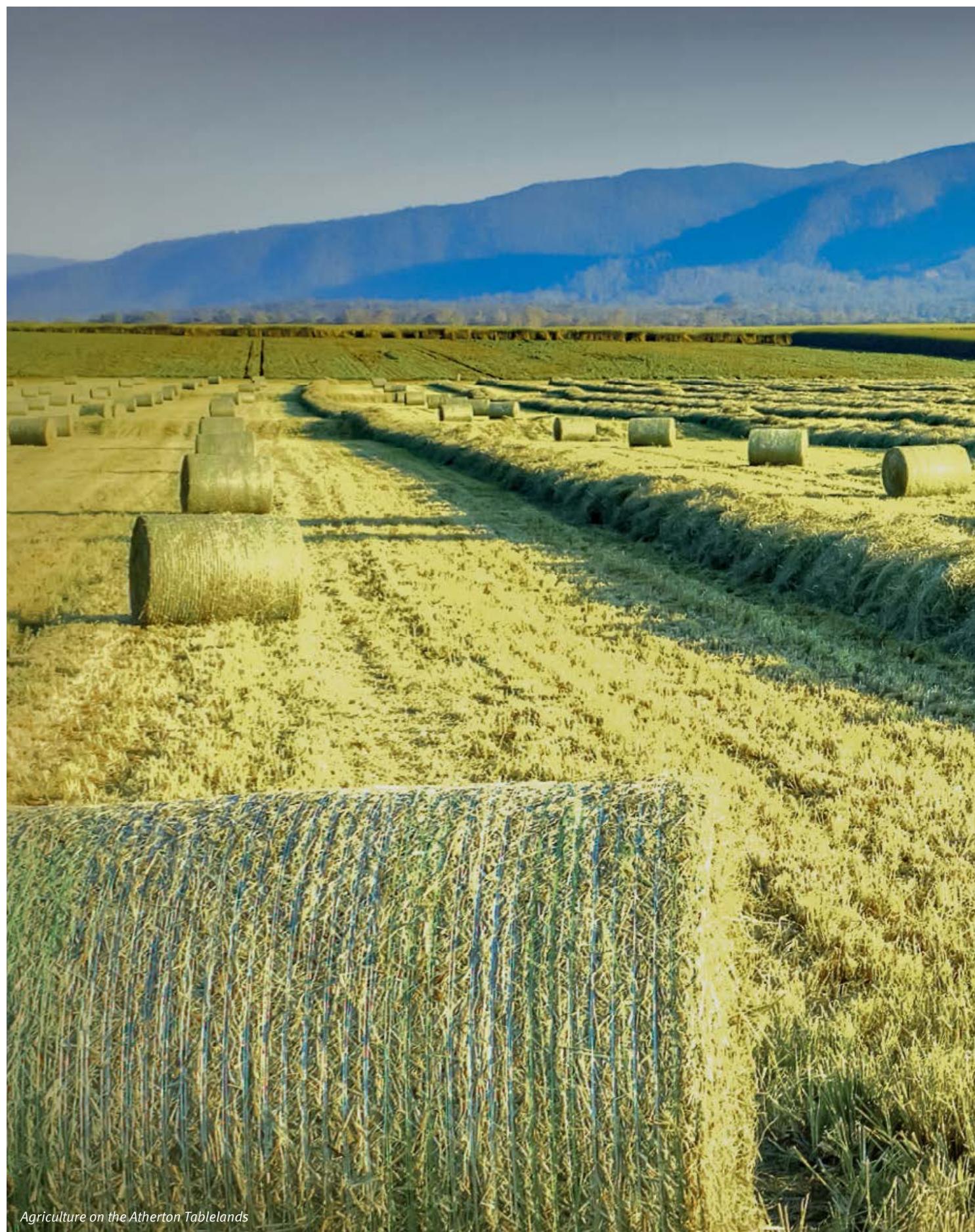


Figure 15: Monitoring, reporting and review as the Plan matures

Further information

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



Agriculture on the Atherton Tablelands



