SOUTH EAST QUEENSLAND

NORTH COAST · METROPOLITAN · SOUTH COAST

REGIONAL TRANSPORT PLANS

2021

Queensland Government

Travelling by Gilimbaa

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:

- Brisbane City Council
- City of Gold Coast
- Ipswich City Council
- Logan City Council
- Moreton Bay Regional Council
- Noosa Shire Council
- Redland City Council
- Scenic Rim Regional Council
- Somerset Regional Council
- Sunshine Coast Council.

Cover images: Busway, South Brisbane; Noosa Beach; Brisbane River; Bicycle riders on the Gold Coast.

CONTENTS

Gold Coast light rail

1. Introduction

1.1 A shared direction

This suite of Regional Transport Plans (the Plans) for South East Queensland (SEQ) includes the North Coast, Metropolitan and South Coast regions. Together, these Plans outline a shared direction for the transport system within these three regions and the wider SEQ area over the next 15 years.

The Plans were developed in consultation with local government and SEQ 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 Plans and achieve the shared goals for each region and SEQ.

The Plans cover all modes of transport, with a focus on the networks and services in the region and acknowledgement of the inter-regional, interstate and international connections that are vital to social and economic prosperity within these regions and the wider SEQ.

SEQ is home to more than 3.5 million people and includes 12 local government areas: Brisbane, Gold Coast, Ipswich, Lockyer Valley, Logan, Moreton Bay, Noosa, Redland, Scenic Rim, Somerset, Sunshine Coast and Toowoomba (urban extent).

1.2 What is a Regional Transport Plan

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

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

Regional Transport Plans have a clearly defined role in Transport and Main Roads' 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).

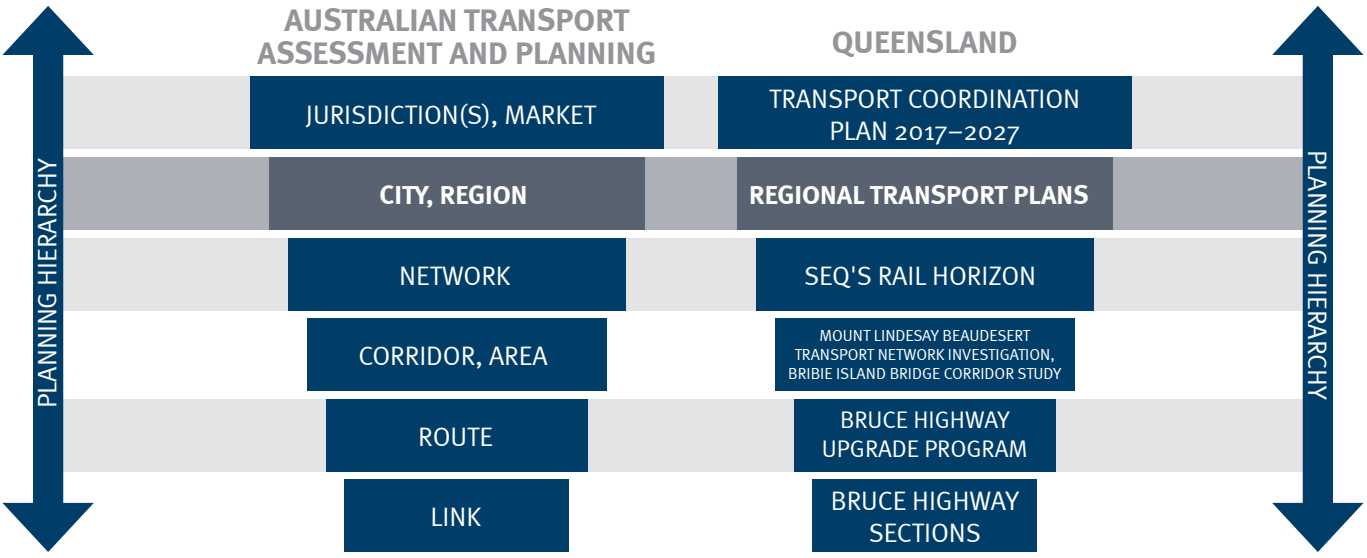


Figure 1: Examples of how Queensland responds to the Australian Transport Assessment and Planning hierarchy

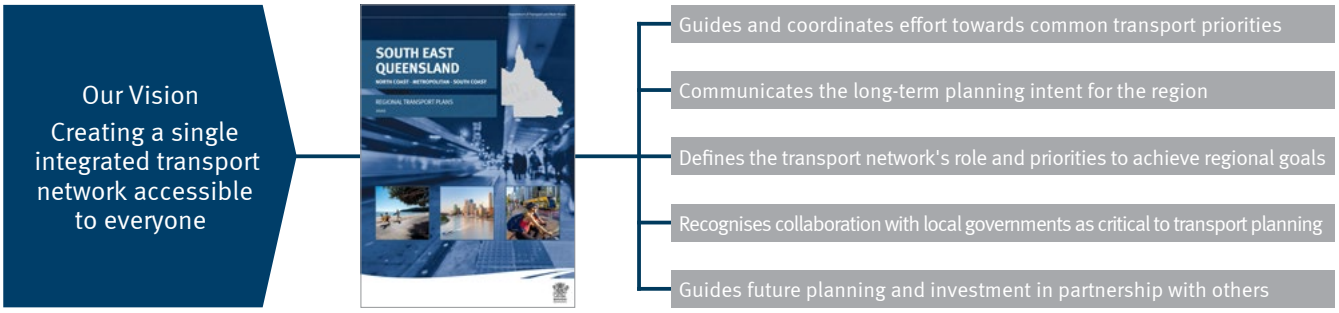
The regional policy choices and system strategies expressed are used to:

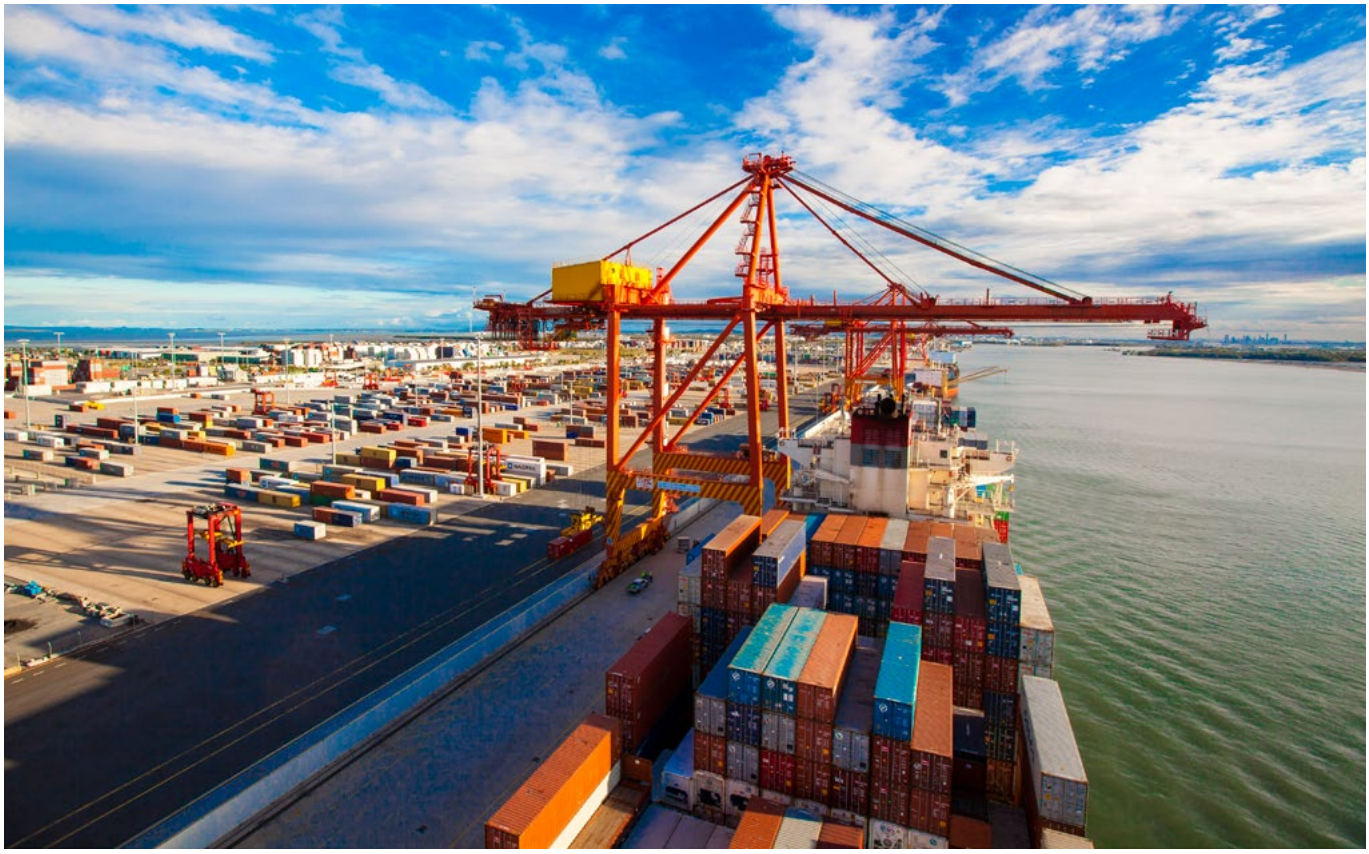
- inform more detailed planning or investigations at a network, area, corridor, route or link level
- guide development, assessment and selection of specific investment solutions.

These Plans support 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 regions and SEQ
- defining the transport system's role and priorities to achieve regional goals
- recognising collaboration with local governments as critical to 'one network' transport planning
- guiding future planning and investment in partnership with others.

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





Port of Brisbane

1.3 Strategic alignment

These Plans have 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 Plans.

The Regional Transport Plans align with:

- *State Infrastructure Plan*
- *State Planning Policy*
- *ShapingSEQ – South East Queensland Regional Plan 2017*
- *Connecting Brisbane*
- local government land use and transport plans and strategies
- economic development strategies
- the Australian Government's City Deals program and *Australian Infrastructure Plan* (prepared by Infrastructure Australia).

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

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

Key transport planning documents include:

- *Transport Coordination Plan 2017–2027*
- *Queensland Transport Strategy*
- *Transport and Main Roads Strategic Plan 2019–2023*
- *Safer Roads, Safer Queensland: Queensland's Road Safety Strategy 2015–2021*
- *Queensland Cycling Strategy 2017–2027*
- *SEQ Principal Cycle Network Plan*
- *Bruce Highway Action Plan*
- *Queensland Freight Strategy*
- *Queensland Walking Strategy 2019–2029*
- *Queensland Tourism and Transport Strategy*
- *Creating Better Connections for Queenslanders:* a 10-year plan for Queensland passenger transport (draft).

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

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. These Regional Transport Plans apply the transport investment 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 the Plans 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, p52)

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.	Seek public transport solutions including demand management to address the strong growth of SEQ.	Digitally connected smart infrastructure to improve capacity, safety and security.	Connect regional communities with access to essential services and opportunities.

The future of transport

Queensland Transport Strategy

The *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 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 QTS sets a high-level policy platform for Transport and Main Roads 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 Transport and Main Roads which are directly aligned to the short-term priorities in the *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 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 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.

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 the future. Building a more resilient transport system is a priority in all Regional Transport Plans for Queensland.

The transport sector is Queensland's second largest source of greenhouse gas emissions growing 26 per cent between 2005 and 2018, accounting for 13 per cent of Queensland's carbon emissions.[1] Transitioning to cleaner energy is critical if we are to act on climate change. 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 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
- enabling freight to be moved using the most efficient mode across the transport network.

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

1 Australian Government. (2018). *State and Territory Greenhouse Gas Inventory,* Australian Government National Accounts, https://ageis.climatechange.gov.au/NGGITrend.aspx and confidential data from NGERs

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 plan 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 plan 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 Plans' priorities and corresponding transport objectives, actions and measures of success. The TCP transport KPIs provide a means to measure the impact that the Regional Transport Plans have 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.

Within the North Coast, Metropolitan and South Coast regions, the *State Planning Policy* identifies the following:

- State transport infrastructure – these include state-controlled roads, railways and other public transport infrastructure
- Strategic airports – Archerfield, Brisbane, Gold Coast (Coolangatta), RAAF Base Amberley and Sunshine Coast
- Strategic ports – Port of Brisbane.

Brisbane Airport

1.7 Alignment with regional planning

The Queensland Government produces statutory regional plans throughout the state to provide strategic direction and policies to deliver regional outcomes which align with the state's interests in land use planning and development. Regional planning enables government, industry and the community to capture opportunities arising from population change and economic growth, and plays a critical role in informing the forward planning, prioritisation and delivery of infrastructure and services.

1.7.1 *ShapingSEQ – South East Queensland Regional Plan 2017*

In August 2017, the then Department of Infrastructure, Local Government and Planning (DILGP) released *ShapingSEQ – South East Queensland Regional Plan 2017* which was developed with extensive community, industry and local government collaboration. *ShapingSEQ* sets a 50-year vision and 25-year statutory planning framework for SEQ.

Regional planning and regional transport planning in SEQ are comparatively mature. *ShapingSEQ* is the third statutory regional plan developed for SEQ. These Regional Transport Plans for SEQ (also in their third iteration) replace the previous regional transport plan, *Connecting SEQ 2031*.

The alignment between *ShapingSEQ* and the Regional Transport Plans for SEQ is shown in Figure 2.

The North Coast, Metropolitan and South Coast Regional Transport Plans provide a SEQ transport planning response to support the *ShapingSEQ* goals of grow, prosper, connect, sustain and live. Connect—moving people and products efficiently—has been adopted as the overarching mandate for the *SEQ Regional Transport Plans*.

The Transport and Main Roads regions in SEQ differ from the sub-regions identified within *ShapingSEQ* as outlined in Figure 3 (on page 12). The Regional Transport Plans (Chapters 4 to 6) are structured in line with Transport and Main Roads regions to facilitate effective delivery of actions.

While the strategic context (Chapters 2 and 3) of this document considers the whole of SEQ as defined in *ShapingSEQ,* the western extent (Toowoomba and Lockyer Valley) within the *ShapingSEQ* western sub-region is dealt with in detail as part of the *Darling Downs Regional Transport Plan*.

These Regional Transport Plans align and integrate with *ShapingSEQ* by:

- leveraging the same community engagement inputs
- reflecting the same themes and goals and regional intents
- using the same activity centres, regional economic clusters, major enterprise and industrial areas and knowledge and technology precincts to inform connectivity in the trunk passenger transport network
- aligning the planned strategic passenger transport system with the connect goal
- aligning the strategic road and freight system
- favouring active transport for a range of trips
- considering the sub-regional outcomes as part of actions and opportunities.

Figure 2: Alignment of ShapingSEQ and Regional Transport Plans

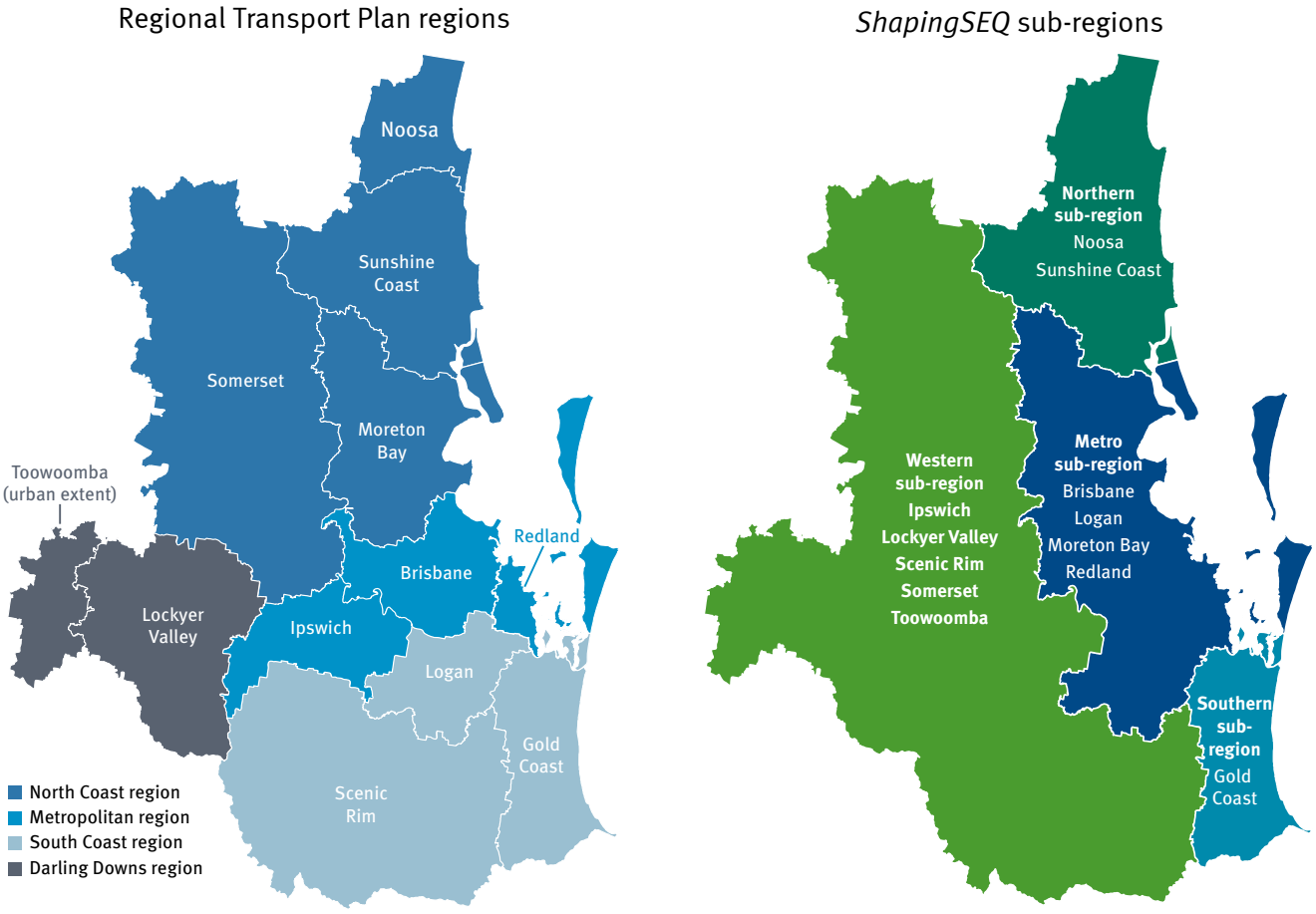


Figure 3: Relationship of local government areas – Regional Transport Plan region boundaries and ShapingSEQ sub-region boundaries

1.8 SEQ City Deal

City Deals are a key mechanism of the Commonwealth Government's Smart Cities Plan (2016) to provide a new approach for all levels of government to work together to plan and deliver transformative outcomes for Australian cities.

TransformingSEQ: The SEQ City Deal Proposition, released in February 2019, sets out the shared vision of the Queensland Government and the South East Queensland Council of Mayors to fully realise SEQ's potential to contribute to Australia's economic success – focussed on delivering one region that is connected locally and competing globally.

In March 2019, the Commonwealth Government, Queensland Government and South East Queensland Council of Mayors signed the Statement of Intent for the SEQ City Deal. The Statement of Intent identified six priority areas for action:

1. Connecting infrastructure
2. Jobs and skills
3. Liveability and sustainability
4. Housing and planning
5. Digital
6. Governance and leadership

The strategic direction and objectives of the SEQ Regional Transport Plan will shape SEQ City Deal negotiations. The connecting infrastructure priority includes a number of elements that are relevant to the delivery of this Plan, including:

- A focus on transforming regional connectivity to support a 45 minute region and 30 minute cities, with better mobility for people, goods and services.
- Supercharging an SEQ Trade and Enterprise Spine between the Toowoomba Trade Gateway and the Australia TradeCoast.
- Leveraging existing and proposed investments in the region including Cross River Rail, Brisbane Metro and Inland Rail, to identify and prioritise the next wave of region-shaping transport investment.

1.9 2032 Olympic and Paralympic Games Bid

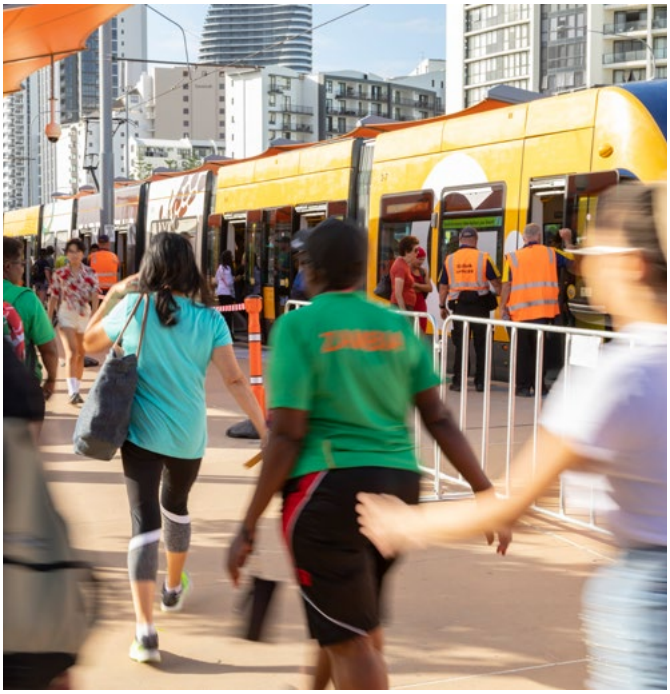
In 2019 the Queensland Government announced it would investigate the feasibility of Queensland hosting the 2032 Olympic and Paralympic Games. The Games are proposed to have a regional focus with events to be staged in North Queensland, the Sunshine Coast and Gold Coast with Brisbane hosting the main cluster of venues and the athletes' village.

The 2018 Gold Coast Commonwealth Games generated significant tourism activity, sporting infrastructure investments and accelerated major transport projects including Gold Coast Light Rail Stage 2, Helensvale to Coomera rail duplication and over $160 million in road upgrades.

The scale of the Olympic and Paralympic Games will be around five times larger than the Commonwealth Games and many transport initiatives identified in the Regional Transport Plans, and included in the SEQ City Deal, will be critical to support Olympic operations. Transport and Main Roads will continue to work closely with the 2032 planning team, the Australian Government and SEQ councils to accelerate key legacy projects and ensure completion prior to the games.

Public transport and active transport will be the focus for moving spectators and workforce during the Games. Major public transport projects identified in Connecting Brisbane such as Cross River Rail would form the backbone of the Olympic and Paralympic Games transport effort in Brisbane. This would be supported by significantly enhanced public transport services as well as event shuttle bus systems to provide high-quality access to all venues by public transport. Walking, bike riding and mobility-as-a-service transport solutions will also play key supporting roles in venue access.

Event signage, Gold Coast 2018 Commonwealth Games



Gold Coast Light Rail, Gold Coast 2018 Commonwealth Games

Carrara Stadium, Gold Coast 2018 Commonwealth Games

1.10 Achievements to date

Transport and Main Roads has reflected on the transport principles outlined in previous SEQ Regional Transport Plans, along with other strategic direction setting documents and delivered the following key transport network improvements and initiatives in the region.

Bike riding

- *SEQ Principal Cycle Network Plan*
- Eudlo Creek Bridge, Sunshine Coast
- V1 (Veloway Stages A to E), South Brisbane to Eight Mile Plains
- North Brisbane Bikeway (Stages 1 to 4)
- Lake Intrepid Cycleway, Gold Coast.

Safety

- School Transport Infrastructure Program: approved 12 projects in 2019-20 to deliver road safety projects benefiting 13 schools within SEQ
- Flashing School Zone Signs installed at over 600 school zones across SEQ
- Targeted Road Safety Program continues to deliver funding for infrastructure improvements to the road network, for example safety treatments including intersection upgrades, safety barriers and linemarking for the Mount Lindesay Highway, and intersection improvements for Strathpine-Samford Road, and Everton Park-Albany Creek Road.

Accessibility

- An Accessible Transport Network Office established to create a culture of accessibility and inclusion in Transport and Main Roads including co-designing the Accessibility and Inclusion Strategy for implementing meaningful social change within the transport sector, and establishing the National Accessible Transport Taskforce, in partnership with the Commonwealth Government, to modernise the *Disability Standards for Accessible Public Transport 2002*
- New Generation Rollingstock (NGR) Commission of Inquiry recommendations implemented including publishing the *Public Transport Conveyance Manual: designing accessible vehicles, vessels, aircraft and rollingstock*, and developing with the Queensland Human Rights Commission, mandatory training on Transport and Main Roads' obligations as a provider of goods and services
- Annual grant funding to local governments for upgrading bus stops to meet accessibility standards. In 2019-20, approximately 500 bus stops were upgraded by local governments
- New inclusive mapping platforms piloted to provide better information about route conditions and route suitability for people using wheelchairs and other mobility devices. This initiative provides critical information when navigating footpaths, crossings and accessing public transport.

Passenger transport

- *Connecting Brisbane*, a roadmap for the future of Brisbane's public transport system (delivered in partnership with Brisbane City Council)
- Extension of the South East Busway south of Eight Mile Plains
- Eastern Busway, connecting the South East Busway at Buranda to Main Avenue at Coorparoo
- Northern Busway extension at Royal Brisbane and Women's Hospital from Lutwyche to Kedron
- Springfield rail line, running 14 kilometres from Darra to Springfield including three new stations
- Redcliffe Peninsula rail line, including 12.6 kilometres of new rail line, six new stations and one upgraded station and a shared walking and bicycle path along the full extent of track
- Gold Coast light rail (G:Link), Stage 1—Griffith University, Southport to Broadbeach, and Stage 2—connecting existing light rail at Southport to heavy rail at Helensvale
- Duplication of the Gold Coast rail line, between Coomera and Helensvale.

V1 Veloway, Stage D, Tarragindi

Bruce Highway

- Cooroy to Curra, upgrade to four-lane divided
- Caloundra Road to Sunshine Motorway, upgrade to six-lane divided, interchange upgrades and new service road
- Interchange upgrades at Boundary, Pumicestone and Bribie Island Roads.

Pacific Motorway (M1)

- Coomera Interchange (Exit 54) and Oxenford Interchange (Exit 57) upgrades
- Springwood South to Daisy Hill, reconstruction of a 3.3 kilometre section, including the signalisation of the Loganlea Road intersection and development of the Slacks Creek park 'n' ride
- Mudgeeraba to Varsity Lakes, additional lanes and interchange upgrades
- M1/M3/Gateway merge upgrade at Eight Mile Plains.

Ipswich Motorway

- Eight kilometre upgrade, Dinmore to Goodna, including cycle track
- Wacol to Darra upgrade, including the Centenary Motorway and Ipswich Motorway Interchange
- Ipswich Motorway/Logan Motorway Interchange upgrade.

Other road links

- Gateway Motorway upgrades, including Pacific Motorway to Nudgee Road, the Sir Leo Hielscher Bridge duplication and Gateway Motorway North upgrade from Nudgee to Bracken Ridge
- Logan Motorway upgrades, including Ipswich Motorway to Pacific Motorway upgrades, and the Logan Enhancement Project
- Port of Brisbane Motorway, Lindum Street to Pritchard Street
- Centenary Highway duplication, Ipswich Motorway to Logan Motorway
- Centenary Highway duplication, Springfield to Logan Motorway
- Smith Street Motorway, Pacific Motorway to Olsen Avenue, additional lanes
- Airport Link
- East West Arterial upgrade from Sandgate Road to Airport Drive, including a new interchange at Southern Cross Way
- Legacy Way (delivered by Brisbane City Council)
- Toowoomba Bypass.

Bruce Highway, Cooroy to Curra

1.11 Developing Regional Transport Plans

1.11.1 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 identifying the region-centric planning required to inform 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 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.

Regional Transport Plans have been developed with the view that solutions to transport challenges and customer needs and requirements 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 the private sector positions the region to achieve more with available funding. Transport and Main Roads' approach to identifying, prioritising and investing in transport system solutions aligns to the *State Infrastructure Plan's* options assessment approach as shown in Figure 4.

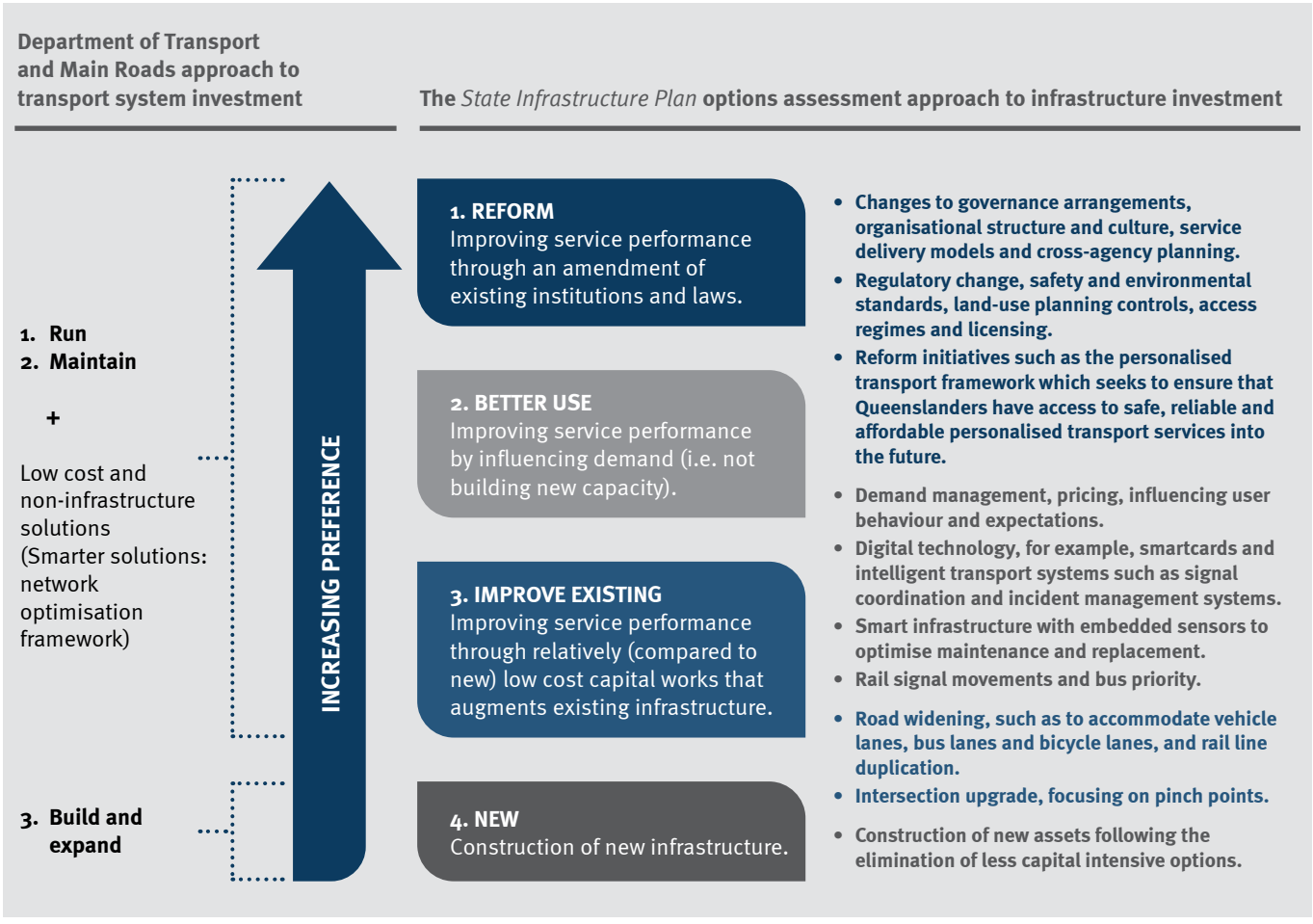


Figure 4: Alignment between government approaches to infrastructure investment

1.11.2 Process

The North Coast, Metropolitan and South Coast Regional Transport Plans have been 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 in Figure 5.

1.11.3 Customer-first approach

A 'customer-first' approach is about being conscious of how customers experience the transport system and being willing to change the way we do things to improve that experience. It also means viewing the transport system as customers do: as 'one network', with little perceivable difference between the various parts provided or managed by the different levels of government.

Transport and Main Roads’ customer-first 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.

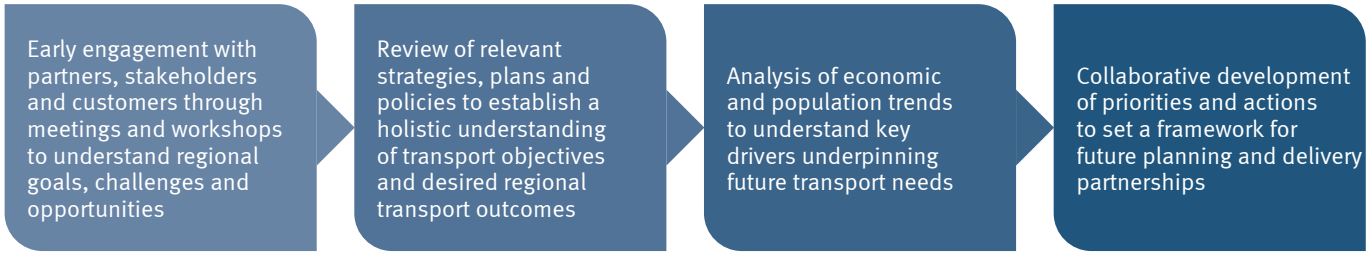
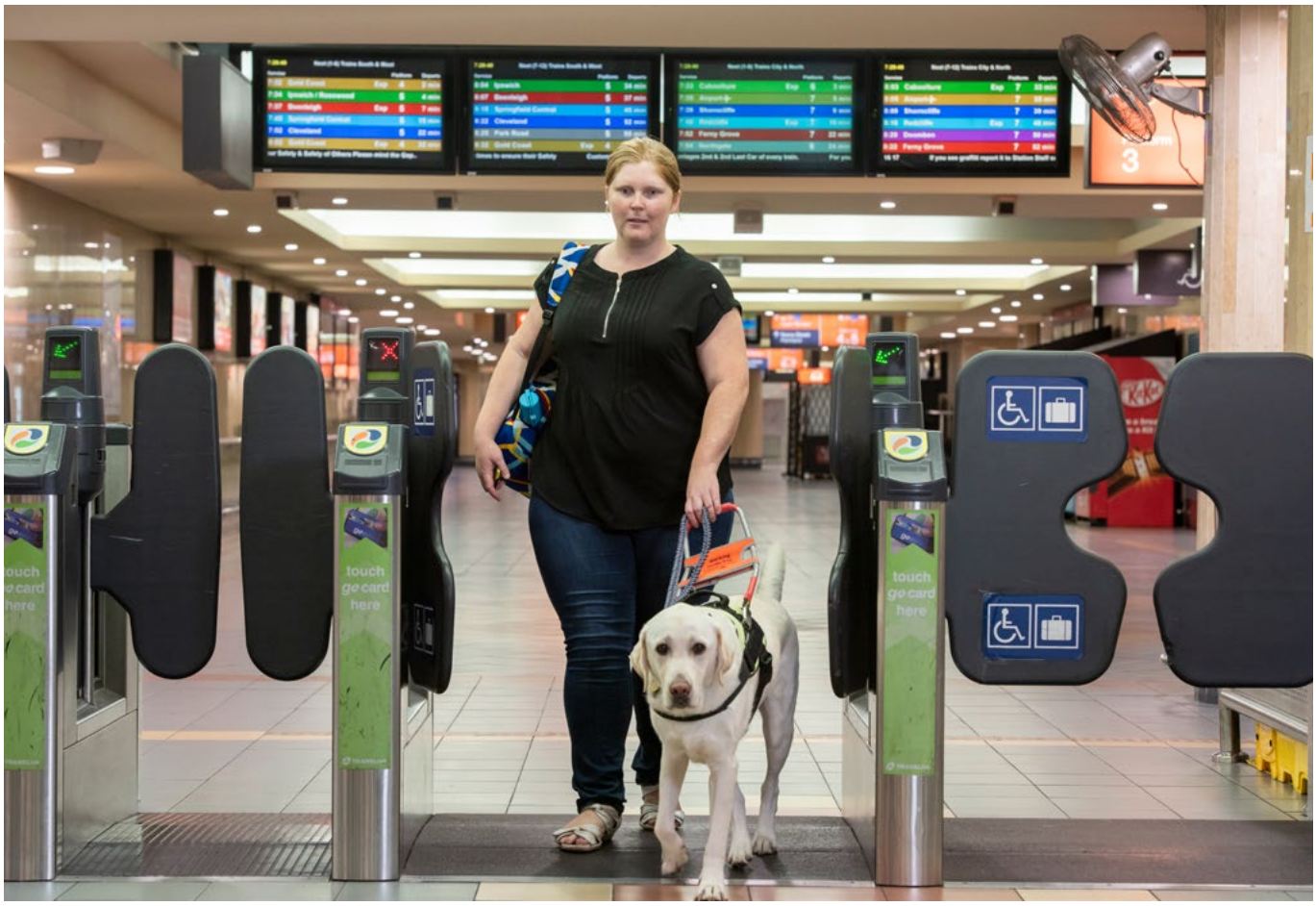


Figure 5: Key stages of Regional Transport Plan development



Passenger exiting Roma Street Station

1.11.4 One network

Regional Transport Plans are developed on the basis that the transport system operates as 'one network'.

Transport and Main Roads recognises that the transport system is planned, delivered and operated by a range of stakeholders, including local governments and transport operators. Working and collaborating with all relevant transport system stakeholders to develop this document 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 other relevant transport system stakeholders to continuously improve the transport system and the experiences of our customers.

1.11.5 Structure

The document comprises seven chapters, including:

- **Chapter 1** introduces the purpose, scope and strategic alignment of a Regional Transport Plan
- **Chapter 2** outlines the SEQ context, including the inter- and intra-regional connections. It also outlines projects with SEQ-wide significance, the SEQ transport network and the common transport challenges and opportunities facing SEQ
- **Chapter 3** details the alignment with *ShapingSEQ* and the goals, priorities, objectives and measures of transport in addressing challenges, supporting opportunities and meeting *ShapingSEQ* themes of grow, prosper, connect, sustain and live
- **Chapters 4–6** contain the Regional Transport Plan for each of the three regions within SEQ: North Coast (Chapter 4), Metropolitan (Chapter 5) and South Coast (Chapter 6). Each Plan outlines the respective region's actions and response to the priorities
- **Chapter 7** outlines the Plans' implementation and review process.

The structure of this document is outlined in Table 2.

Engaging with our customers

To achieve a 'one network' approach, Transport and Main Roads involved customer representatives early in the development of all Regional Transport Plans and engaged and developed content in partnership with local government.

To inform the development of the plans, representatives were selected from different locations in the region, covering a range of sectors and interests, including agriculture, health, tourism and small business.

To gain stakeholder input, Transport and Main Roads hosted workshops and facilitated a number of meetings and one-on-one discussions.

Some of the key issues that emerged from this engagement included:

- freight connections and conflicts with passenger transport
- public transport affordability, convenience and reliability
- public transport accessibility (particularly outer areas and for disadvantaged groups)
- congestion (including economic impacts particularly for freight)
- connectivity to and between modes and centres
- parking management
- safety (including people riding bikes and personal safety)
- coordination of development and infrastructure.

This input from customers has informed the priorities, actions and opportunities in this document.

Bicycle rider on the Sunshine Coast

Table 2: Structure of the SEQ Regional Transport Plans

STRATEGIC CONTEXT

SETTING THE SCENE
Chapter 2: South East Queensland

SEQ OVERVIEW | TRANSPORT NETWORK | CHALLENGES | OPPORTUNITIES

Chapter 2 outlines the SEQ context, including inter- and intra-regional connections. It also outlines the transport projects with an SEQ-wide significance, the SEQ transport network and the common transport challenges and opportunities facing SEQ.

PLANNING CONTEXT
Chapter 3: SEQ goals, priorities and objectives

Chapter 3 details the goals, priorities, and objectives in addressing challenges and supporting opportunities. It also outlines alignment with *ShapingSEQ* and how it advances the goals of grow, prosper, connect, sustain and live.

Transport priorities express the regional goals with a transport system focus. Priorities set the high-level direction, framing objectives, measures of success and actions.

Transport objectives describe the desired future state for transport in meeting the priorities.

GOALS | PRIORITIES | OBJECTIVES

TRANSPORT RESPONSE

Chapter 4	Chapter 5	Chapter 6
North Coast Regional Transport Plan	Metropolitan Regional Transport Plan	South Coast Regional Transport Plan
Region overview	Region overview	Region overview
Response to priorities and objectives	Response to priorities and objectives	Response to priorities and objectives
Actions (short-term) and actions (medium/long-term)	Actions (short-term) and actions (medium/long-term)	Actions (short-term) and actions (medium/long-term)

Chapters 4–6 present each Regional Transport Plan and outlines each region's response to the objectives and actions.

Actions identify the Queensland Government's strategic intent for taking the critical steps in the short-term. Medium/long-term actions identify possible responses to emerging or potential future transport planning needs.

Actions are mostly led by the Queensland Government alongside local government, however many will involve partnerships and collaboration with industry and community.

TAKING ACTION
Chapter 7: Implementation

DELIVERING IN PARTNERSHIP | MONITORING AND REVIEW

Chapter 7 outlines our approach to implementing the Plans. The delivery of actions associated with each objective will result in real and measurable outcomes that can be tracked to measure achievements and demonstrate progress over time. This chapter also sets out the framework for monitoring and review.

Passengers at ferry terminal, Brisbane

2.

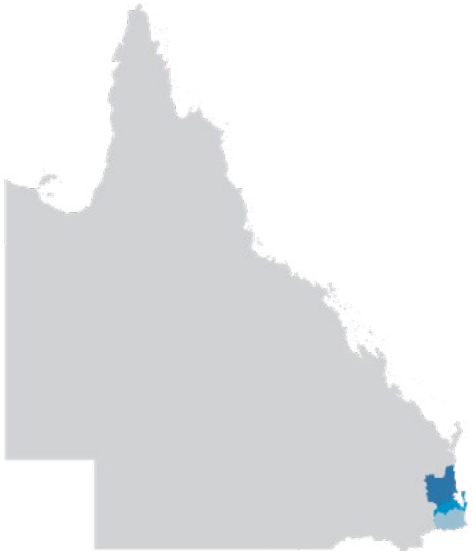
South East Queensland

2.1 South East Queensland overview

In Chapters 2 and 3 of this document, descriptions of SEQ are based on the *ShapingSEQ* boundaries comprising 12 local government areas as shown in Figure 6.

In Chapters 4–6, descriptions of SEQ are based on the Transport and Main Roads' boundaries for the North Coast, Metropolitan and South Coast regions (Figure 6).

Figure 6 also shows the Lockyer Valley local government area and the urban extent of Toowoomba, which are detailed in the *Darling Downs Regional Transport Plan*.



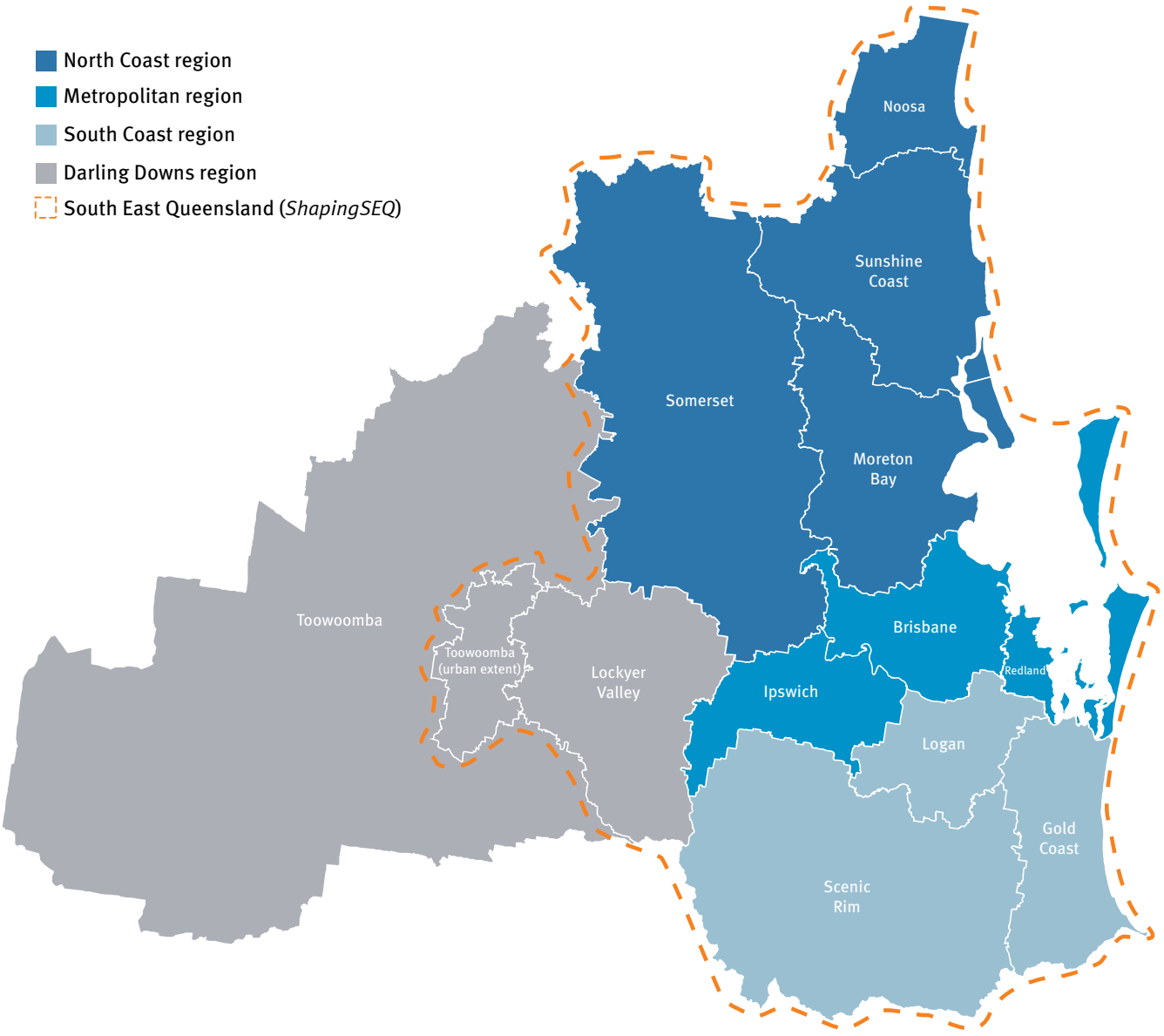


Figure 6: The regions and local government areas within SEQ

SEQ COVERS APPROXIMATELY
22,900 KM²

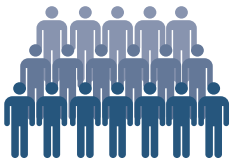
POPULATION GROWTH
2016–2041

2016 **3.5 MILLION** PEOPLE

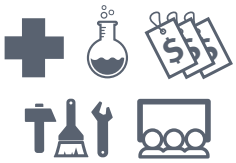
2041 **5.4 MILLION** PEOPLE

SEQ CONTRIBUTES
$208.9B OR **67%**
TO GROSS STATE PRODUCT

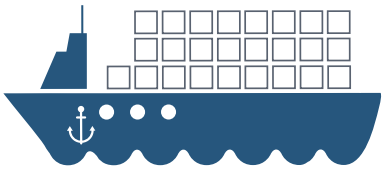
71%
OF QUEENSLAND'S POPULATION LIVES IN SEQ



1.65
MILLION JOBS IN SEQ



PORT OF BRISBANE HANDLES OVER
$50B OF FREIGHT



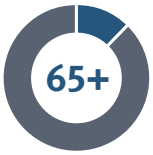
GATEWAY TO QUEENSLAND:
MORE THAN
31 MILLION
AIR PASSENGER MOVEMENTS

$14B
TOURISM INDUSTRY APPROXIMATELY PER ANNUM

AROUND
6000
FLORA SPECIES AND
2400
NATIVE FAUNA SPECIES

SEQ HAS
NINE
UNIVERSITIES WITH MULTIPLE CAMPUSES

SEQ POPULATION
AGED 65 YEARS AND OVER
IN **2016** 14.4%
BY **2041** 20.3%



1 MILLION
PEOPLE LIVE WITHIN 800 m OF A HIGH FREQUENCY PUBLIC TRANSPORT SYSTEM

TOP EMPLOYMENT INDUSTRIES

HEALTH CARE AND SOCIAL ASSISTANCE

CONSTRUCTION

RETAIL TRADE

MANUFACTURING

EDUCATION AND TRAINING

Sources:
Department of Infrastructure, Local Government and Planning. (2017). *ShapingSEQ – South East Queensland Regional Plan 2017.*
Queensland Government Statistician's Office. (2018). *Projected population (medium series), by five–year age group and sex, by statistical area level 2 (SA2), SA3 and SA4, Queensland, 2016 to 2041.*
National Institute of Economic and Industry Research. (2018). *National Economic Indicators for Local Government Areas, 2017/2018.*
The Bureau of Infrastructure, Transport and Regional Economics (BITRE). (2020). *Airport Traffic Data.*

2.1.1 SEQ context

Covering almost 23,000 km², SEQ represents only 1 per cent of the state's land area, but is currently home to around 71 per cent of the state's population.

The Queensland Government is committed to delivering integrated land use and infrastructure planning, which is a key principle of the *State Infrastructure Plan* and is evident in the key land use outcomes in *ShapingSEQ*.

With 1.65 million jobs, SEQ contributes more than $208.9 billion to the Gross State Product per annum (2015–2016), representing 67 per cent of the state's economic activity. It has a diverse economic profile. Key industries include health and social assistance, manufacturing and education and training, while the professional, scientific and technical services sectors will continue to grow. By 2041, SEQ is expected to have 2.6 million jobs,[2] which will be 74 per cent of all employment in Queensland.

2.1.2 Inter-regional connections

SEQ has good road, rail and maritime connections, critical to maintaining economic links with neighbouring regions and national and international markets as illustrated in Figure 7.

The Port of Brisbane is one of Australia's fastest growing ports. It handles $50 billion in trade annually and provides access to the international markets of Asia, the Pacific and beyond.

SEQ is also well-connected to the global aviation route network. Brisbane, Gold Coast and Sunshine Coast airports are important for connecting the region with domestic and international markets.

Maintaining and enhancing inter-regional and international connections will be essential to achieving the goals for SEQ.

Figure 7: Inter-regional connections
Source: *ShapingSEQ*

Cruise ship, Brisbane River

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

2.1.3 SEQ shaping projects

The following projects will shape the future of SEQ and provide inter-regional connectivity benefits over the life of this Plan. Projects specific to the North Coast, Metropolitan and South Coast regions are detailed in Chapters 4–6.

Cross River Rail

Cross River Rail is the Queensland Government's highest priority public transport infrastructure project, linking southern and northern rail networks via Dutton Park to Bowen Hills, as illustrated in Figure 8.

Cross River Rail will unlock a bottleneck at the core of SEQ's passenger rail network, allowing more trains to run more often. There will be four new underground stations, two upgraded stations along with upgrades to six stations on Brisbane's southside. The Queensland Government has committed to fully fund Cross River Rail.

The project will have broader economic and social benefits for SEQ. It will increase network capacity and reliability, improve congestion and increase access to jobs and opportunities. By 2036, Cross River Rail is forecast to take up to 18,500 car journeys off major arterial roads every day and transport an additional 23,000 people to work in morning peak hours each day.[3]

European Train Control System for Brisbane suburban network

The Queensland Government is investing $634 million from 2018–19 to 2023–24 to fund the introduction of the European Train Control System (ETCS),[4] providing a new technology signalling system for Cross River Rail and improving capacity and safety for the Brisbane inner city rail network between Milton and Northgate. ETCS will support increased capacity and safety on the inner city rail network, allowing for more trains, more often.

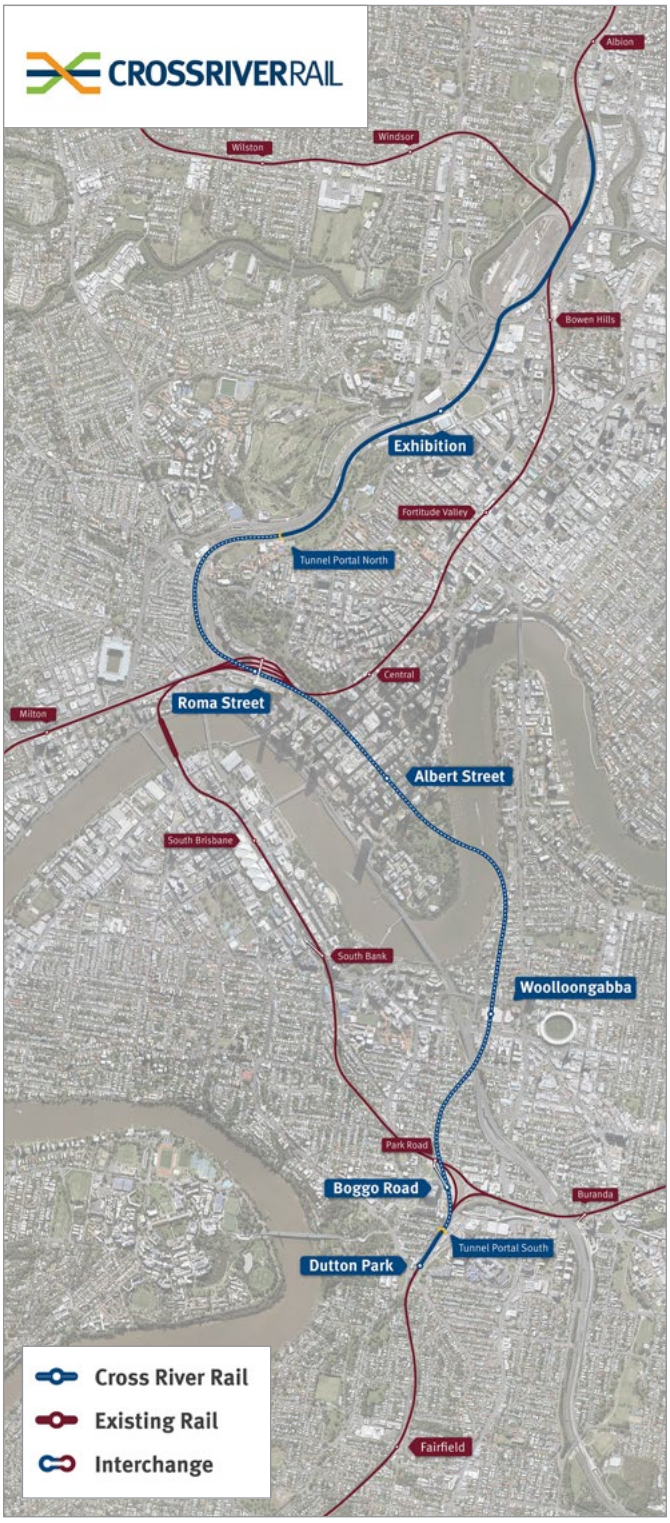


Figure 8: Cross River Rail alignment
Source: Cross River Rail Delivery Authority

3 Building Queensland. (2017). *Cross River Rail Business Case.*
4 Department of Transport and Main Roads. (2019). *Queensland Transport and Roads Investment Program 2019-20 to 2022-23.*

Beerburrum to Nambour (B2N) rail upgrade

The Beerburrum to Nambour Rail Upgrade (B2N) project will duplicate a section of track and deliver a range of other improvements which will improve the safety, efficiency and reliability of the North Coast Line. Stage 1 of the project will be delivered using $390 million of Australian Government funding and $160.8 million of Queensland Government funding.

The Beerburrum to Nambour Rail Upgrade project will:

- allow for more peak hour passenger services and improved timetable reliability to support the future growth of the Sunshine Coast
- expand park 'n' ride facilities at Beerburrum, Landsborough, Palmwoods and Nambour stations
- provide additional freight capacity, reducing pressure on the Bruce Highway
- replace two level crossings to improve safety and efficiency.

The business case identified the project's benefits, the issues to be addressed and the most appropriate way to achieve the desired outcomes. Stage 1 early works are programmed to commence in early 2021 with major construction commencing in mid-2022. Stage 1 major construction is expected to be complete in late 2024.

Inland Rail

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

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

The Australian and Queensland governments signed a Constitutional Consent Deed and a Bi-Lateral Agreement for Inland Rail on 29 November 2019. These documents provide Queensland Government consent to build the railway, noting that there is considerable work to be done before the corridor can be gazetted and construction can commence.

While the specific alignment is still being developed, environmental impact statement processes for four coordinated projects in Queensland have now commenced: Border to Gowrie, Gowrie to Helidon, Helidon to Calvert and Calvert to Kagaru.[5]

Rail Network Strategy

To succeed as a city and as a sustainable region, South East Queensland (SEQ) needs to have a clear vision for the evolution of the rail network, including faster rail.

Cross River Rail and new high capacity signalling will be a game changer on our journey towards a transformed SEQ rail network, unlocking the bottleneck at the heart of our region.

Development of faster rail services and infrastructure needs to follow a logical evolution that balances servicing existing and new areas of population growth. Rail will be the preferred mode for interregional trips in peak periods.

Transport and Main Roads is leading development of a Rail Network Strategy (RNS) with Stage 1 aimed at implementing a 10-year vision for the SEQ rail network and articulating triggers for the delivery of key network enhancements and interventions, intended to maximise the benefits of Cross River Rail and prepare the network for expected future demand.

M1

The M1 is one of Australia's busiest motorways and is a national freight route. Ongoing planning has resulted in a number of upgrades to be delivered in strategic priority stages as funding becomes available. Upgrades are complete for the M1/M3 Gateway Merge southbound from Eight Mile Plains and Mudgeeraba to Varsity Lakes. Upgrades are currently being delivered between Eight Mile Plains and Daisy Hill including busway extension to Springwood, and extension of the V1 cycleway, interchange upgrades at Yatala South (Exit 41), Ormeau (Exit 45), at Pimpama (Exit 49) and between Varsity Lakes and Tugun.

Planning and design is continuing for future upgrades such as from Daisy Hill to Loganholme, and interchange and Smart Motorways improvements between Loganholme and Nerang.

Smart ticketing

The Queensland Government is modernising public transport ticketing systems across the state and has committed $371 million to roll out a new solution that will include contactless debit or credit cards, smart phones and wearable devices as payment options, in addition to *go* card and paper tickets.

The roll out over four years will cover all SEQ and regional urban public transport networks and include new readers, fare gates and system equipment, an updated mobile app, and improved real-time network information.

5 Australian Government. (2017). *Budget 2014–15, Infrastructure, Cross-jurisdictional, Inland Rail.*

Brisbane Metro

Brisbane Metro is a Brisbane City Council project to upgrade the existing busway with upgraded stations and a new fleet of metro vehicles. Brisbane Metro will be a turn-up-and-go service with two dedicated lines from Eight Mile Plains to Roma Street and the Royal Brisbane and Women's Hospital to the University of Queensland.

Gold Coast Rail Line capacity improvement (Kuraby to Beenleigh)

The Gold Coast and Beenleigh rail lines form a crucial part of the Brisbane to Gold Coast transport corridor, playing a vital role in supporting the economic viability of the wider SEQ region. The Kuraby to Beenleigh capacity improvement project is developing options for upgrades on the Beenleigh and Gold Coast rail lines to increase rail capacity and service reliability to support forecast passenger growth.

Key benefits of the project include improved station accessibility and amenity, new bicycle facilities, removed level crossings and improved passenger safety. Transport and Main Roads considers the Kuraby to Beenleigh capacity improvement project to be the highest priority unfunded rail project for unlocking rail capacity on the SEQ network. Further, this project is listed in Building Queensland's 2019 Infrastructure Pipeline Report as a priority proposal, and Infrastructure Australia's November 2019 Infrastructure Priority List as a near-term priority initiative that will support the progression towards faster rail travel on the Beenleigh and Gold Coast rail lines.

Major developments

Several Priority Development Areas (PDAs) and State Development Areas (SDAs) will influence the location of development in SEQ. These areas have been designated by the Department of State Development, Infrastructure, Local Government and Planning for economic and community development. There are currently 21 PDAs and two SDAs in SEQ. These PDAs and SDAs are detailed for each region in Chapters 4–6.

There are a number of other major expansion areas, regional economic clusters and knowledge and technology precincts identified in *ShapingSEQ*. Master planning offers a comprehensive approach to planning for land use and infrastructure needs.

Gold Coast Light Rail

The Queensland Government, in partnership with the Australian Government and City of Gold Coast, is delivering the Stage 3 extension of the Gold Coast Light Rail from Broadbeach South to Burleigh Heads. Stage 3 of the light rail builds on the success of the current G:Link light rail by extending the route a further 6.7 kilometres to Burleigh Heads and including eight new stations.

Planning for a further Stage 4 light rail extension to Coolangatta has commenced in response to *ShapingSEQ* regional directions. This includes joint working with the NSW Government investigating potential light rail extension to Tweed Heads.

Loganlea Station relocation, artist impression

2.2 South East Queensland transport network

SEQ is supported by a comprehensive multi-modal transport network, including rail, roads, ferries and air services, to move both people and goods.

2.2.1 Active transport

The South East Queensland Principal *Cycle Network Plan* identifies the main routes that will form the basis of a connected and cohesive bicycle network across SEQ. Councils are eligible to apply for 50–50 funding of cycle infrastructure planning and delivery on principal cycle routes through Transport and Main Roads' Cycle Network Local Government Grants program.

Transport and Main Road's *Cycling Infrastructure Policy* also ensures the provision of bike riding infrastructure and facilities are considered as part of all Transport and Main Road's funded projects.

While investment has increased, further walking and bike riding enhancements by all levels of government will encourage more people to walk and ride.

Queensland Cycling Strategy

The *Queensland Cycling Strategy 2017–2027* sets the state-wide direction to achieve the vision of 'more cycling, more often'. Transport and Main Roads works with local governments to achieve this vision by delivering and improving principal cycle networks across Queensland.

The strategy is accompanied by a two-year action plan which focuses on the actions required to encourage more people to bike ride more often. Every two years, the action plan will be updated and published alongside a new report on the state of bike riding in Queensland.

2.2.2 Public transport

Within SEQ, scheduled public transport services are managed by TransLink, a division of Transport and Main Roads. TransLink services can be accessed using the *go* card, which is part of a single integrated smart card ticketing system. The public transport network consists of heavy rail, buses, light rail and ferries.

Queensland Walking Strategy

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

The strategy sets out the vision for the next 10 years and directly contributes to the vision of 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.

Passenger rail

SEQ is served by a rail network comprised of both heavy and light rail.

Heavy rail is best suited to moving large volumes of people over longer distances and providing reliable links within congested inner city areas.

Light rail provides highly visible, moderate capacity links along highly developed urban corridors.

There are approximately 650 kilometres of heavy rail and 20 kilometres of light rail in SEQ. Together these modes provide nearly 58.8 million passenger trips per year. The heavy rail network is a radial network made up of 12 lines which converge in the Brisbane city centre. These lines serve both interurban and suburban destinations. The heavy rail network services both passenger and freight movements throughout SEQ.

On the Gold Coast, light rail provides a frequent north-south connection between Helensvale and Broadbeach, via Southport and Surfers Paradise.

Bus

Buses provide shorter local trips and longer inter-suburban trips, as well as feeder connections to mass transit hubs along rail or busway corridors. There are approximately 450 bus routes in SEQ. Where supported by infrastructure such as busways, bus lanes or other priority transit forms, buses can also provide longer haul, higher capacity services from the urban edges.

Long-distance coach

Transport and Main Roads subsidises a number of long-distance commercial coach services connecting SEQ to other parts of Queensland. These services operate on higher demand routes providing vital connections often where there are no links to other public transport such as rail and where it is not economical to fly.

Passenger ferry

Passenger ferry services in SEQ are predominantly along the Brisbane River and within Moreton Bay. Overall, ferry services in SEQ accounted for nearly seven million trips in 2019–20.[6]

Brisbane is also a port of call for passenger cruise ships. A new cruise ship terminal at the Port of Brisbane, is anticipated to open in 2021. The new terminal will allow increased passenger arrivals to SEQ by sea.

On-demand services

Most urban parts of SEQ are serviced by on-demand services which are common in large metropolitan areas, such as taxis, ride-sourcing services and booked hire services.

2.2.3 Freight

The movement of goods through and outside of SEQ is vital to the Queensland economy. Freight is moved in, out and through SEQ by an extensive network of roads, rail, marine and air services. Maintaining, expanding and connecting these networks and regional economic clusters (RECs) will be vital to SEQ's continued economic growth.

Road freight

The main road freight corridors in SEQ are primarily the motorway network. The Bruce Highway provides road freight connections to northern Queensland while the Pacific Motorway provides southbound connections to the NSW border. In the western direction, the Warrego and Cunningham highways connect to Darling Downs and the South West.

Marine freight

A number of marine freight routes converge in SEQ at the Port of Brisbane, which has 29 operating berths.

The Port of Brisbane, is one of Australia's fastest growing container ports and Queensland's largest multi-cargo port.

Air freight

The majority of air freight travelling to and from the region is via Brisbane Airport. The Gold Coast and Sunshine Coast airports also import and export some goods. The Gold Coast Airport's role in servicing freight is anticipated to grow.

The Toowoomba Wellcamp Airport continues to grow as a key resource export hub, particularly for agricultural product grown in south-western Queensland.

Rail freight

The main rail freight network in SEQ is shared with the passenger rail network. The North Coast line provides connections to the north via Nambour. Southern rail freight connections connect through Salisbury and on to Acacia Ridge and then the interstate rail line via the Scenic Rim. Some rail freight services also operate from Brisbane to Beenleigh (Holmview). The Western Rail line connects from Toowoomba through to Brisbane, with a significant amount of rail freight transported to the Port of Brisbane. Rail freight also connects with road freight at intermodal terminals at Acacia Ridge and Moolabin.

Public Transport Accessibility

Transport and Main Roads has a responsibility to the community to provide a transport network that is accessible and inclusive of everyone and has several programs to create a more connected, integrated and accessible public transport network including:

- The **Passenger Transport Accessible Infrastructure Program** which provides assistance to local government's to upgrade their existing public transport infrastructure to meet the *Disability Standards for Accessible Public Transport 2002*
- The **Bus Stop Shelter Program** which provides new bus shelters at bus stops across Queensland to improve customer experience on the transport network, particularly where environmental conditions such as sun exposure, rain and wind may impact on customer decisions
- The **Rail Station Upgrade Program** will improve South East Queensland railway stations and facilities in order to meet Commonwealth disability access requirements, including under the *Disability Discrimination Act 1992* and the *Disability Standards for Accessible Public Transport 2002*. Upgrades will significantly improve access for all customers including those with disability, the elderly, parents with prams, people with injuries or even simply those carrying luggage.

6 Department of Transport and Main Roads. (2020). *Annual Report, 2019-2020.*

2.2.4 Roads

Roads are an important asset for facilitating the mobility of people and goods. They enable public transport and freight networks to operate and provide private vehicle access.

There are many different classifications of roads, each performing a range of functions. Both state and local governments operate and maintain the road network, with support from the Commonwealth Government for national highways and other targeted investments.

The major inter-regional road corridors within SEQ are the Pacific Motorway and the Bruce, Warrego and Cunningham highways.

From a customer perspective, ownership of roads is irrelevant; they experience all as one integrated network. A 'one network' approach is essential to road network planning and investment.

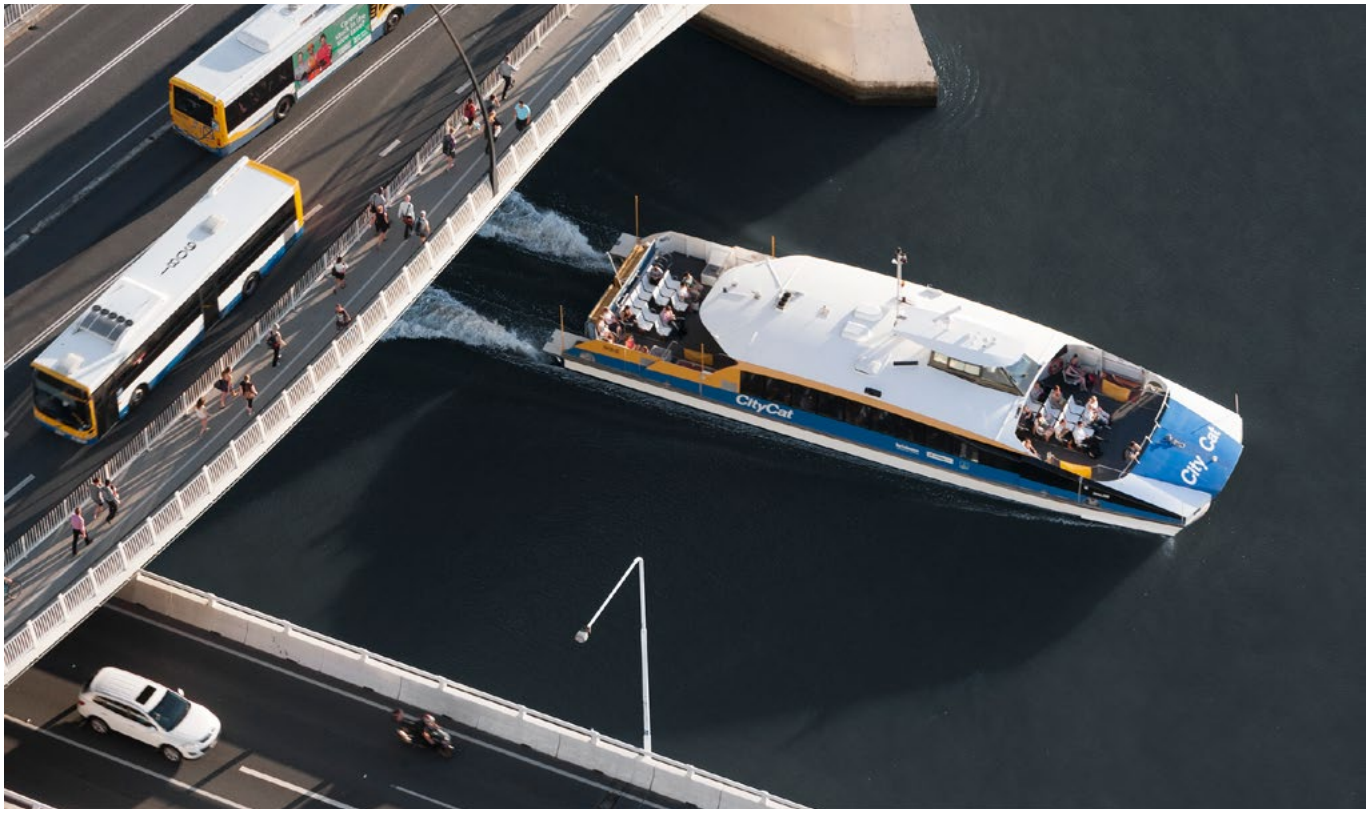
2.2.5 Air

Brisbane, Gold Coast and Sunshine Coast airports service more than 31 million passenger movements per year.[7] These airports provide connections to both domestic and international visitors. The addition of a second runway at Brisbane Airport and planned expansion of the Sunshine Coast Airport will significantly enhance the role of air travel in SEQ now and into the future.

Cooperative project delivery

Leveraging resources from across all levels of government is key to delivering transport improvements throughout SEQ. Transport and Main Roads accomplishes this through strategic partnerships with the Australian and local governments, including:

- **the Roads and Transport Alliance**
  A cooperative governance arrangement between Transport and Main Roads, the Local Government Association of Queensland and local governments to invest in and regionally manage the state's transport network. The aim of this alliance is to address challenges and to deliver improved value from all available resources.
- **Regional Roads and Transport Groups (RRTG)**
  These groups are a component of the Roads and Transport Alliance and work collaboratively to regionally plan for and prioritise transport investments.
- **Transport Infrastructure Development Scheme**
  This provides a funding mechanism for Transport and Main Roads to deliver RRTG investment priorities. Investments funded through this scheme are local projects which support Queensland Government objectives.



Brisbane transport network

7 The Bureau of Infrastructure, Transport and Regional Economics (BITRE). (2020). *Airport Traffic Data.*

Electric vehicles

2.3 Challenges and opportunities for SEQ's transport network

2.3.1 Challenges

The following are some of the key challenges facing SEQ. While the list is not exhaustive, these represent a summary of the challenges raised by customers and stakeholders. They impact the region's transport system and equally, the transport system has a role to play in helping to address them.

Population growth

Approximately 75,000 new residents are projected to call SEQ home each year over the next 25 years as the population grows from 3.5 million to 5.3 million.[8]

Meeting this additional demand will present a challenge as many transport corridors and facilities are already reaching capacity, especially during peak periods of travel. Expanding capacity to meet demand is costly, usually only provides a short-term solution and is not sustainable. Providing additional capacity on public transport networks can more efficiently respond to growth, however this also requires costly investments.

A broad and strategically selected range of travel behaviour changes and infrastructure investments will be required to support ongoing mobility for all customers throughout SEQ.

Congestion

Excessive congestion on all modes has negative impacts, ranging from lost productivity to increased emissions.

Congestion occurs when demand for transport corridor capacity is greater than the supply. Balancing supply and demand presents a significant challenge, as new capacity is expensive and often does not provide a long-term solution. Identifying ways to get greater benefit out of the existing system can help address congestion and ensure transport tasks are addressed in the most efficient manner.

Coordinating land use change and transport

SEQ has historically been characterised by a dispersed, low-density settlement pattern to separate residential and industrial land.[9]

This growth pattern has increased the distance between residential communities, places of employment and key services. It has increased the cost of connecting communities with essential services and infrastructure, increased reliance on private vehicles and provided fewer opportunities for walking, bicycle riding and public transport.

Land use and transport planning needs to be well integrated to maintain and improve liveability. This includes improving transport services and infrastructure in central areas, extending the reach of the transport network to new growth areas, focussing new growth in areas well supported by existing transport infrastructure, along with ensuring passenger and active transport connectivity is at the centre of all major land use planning and development decisions.

Fiscal constraints impacting the delivery of infrastructure and services

The delivery of new infrastructure and services in a constrained fiscal environment is a key challenge for all governments. Continued growth in SEQ and across Queensland, will require ongoing infrastructure investment and services.

Maintaining, operating and servicing transport infrastructure is a significant cost for government. Costs such as labour and land costs increase over time and often increase faster than the funding base. As a result, a larger portion of the budget must be allocated to cover these costs, leaving fewer resources for new infrastructure and limiting opportunities to improve services.

Transport investments compete with other priorities for public funding which can lead to delays in project delivery. These delays can result in higher project costs over time. New ways to streamline project delivery and identify innovative funding solutions, through partnerships for example, will help advance transport improvements.

COVID-19 Response

COVID-19 is significantly changing travel behaviours. In early 2020, many Queenslanders did the right thing and stayed at home. As a result, we saw a reduction in public transport patronage and a significant uptake in active transport (as much as doubling in some locations).

With restrictions changing, we're seeing more customers returning to the network. Work is already underway to analyse emerging demographic and travel patterns to better understand our future challenges and opportunities.

8 Department of Infrastructure, Local Government and Planning. (2017). *ShapingSEQ – South East Queensland Regional Plan 2017.*
9 Ibid.
10 Simmons E., Kay M., Ingles A., Khurana M., Sulmont M., Lyons W. (2015). *Evaluating the Economic Benefits of Nonmotorized Transportation.* Washington, DC: Federal Highway Administration.

Attracting skilled workers and supporting sustainable growth

Evidence suggests skilled migrants and innovative businesses are attracted to quality urban environments supported by multi-modal transport systems.[10]

Integrated land use and transport planning should enable business and industry to be located in accessible and well-connected areas. It should also enable business-to-business transport connectivity, to encourage economic growth and reduce demand on the existing network.

Without this integration there will be further pressure on the transport network. In parts of SEQ, there are not enough local jobs for the population base. Therefore, many people leave their local area to access jobs: for example, in Logan 43 per cent of people travel to Brisbane for work.[11]

This creates significant travel demand on both the road and rail networks. Commuter traffic reduces the capacity for freight and business vehicles on these networks. Additionally, there are significant environmental impacts from emissions.

Supporting equitable access

Low-income earners, the unemployed, the elderly and people with disability tend to have fewer transport options. Limited mobility, accessibility and flexibility can have detrimental outcomes for these vulnerable people.

An equitable and accessible network requires integrated services which consider a range of abilities across all locations including outlying areas. This may require investment or modification of services, vehicles and infrastructure to meet the needs of all users.

Improving transport access and options for people in disadvantaged communities is necessary to facilitate participation in, and contribution to society, achieve social equity and to provide access to employment, education, health and community services.

Providing for an ageing population while having an under representation of working age residents

SEQ has a greater proportion of people aged over 65 years and a lower proportion of people aged between 15 and 64 years, compared with the Queensland average.[12] These demographics present challenges in tailoring infrastructure and services.

While an ageing population is a nationwide trend,[13] its pronounced effect in SEQ will require a focus on how the area grows to meet the needs of residents and deliver customised services. This must be balanced with meeting the economic and social needs of younger people to enhance productivity and grow the economy by attracting and retaining skilled workers.

Mitigating impacts and adapting to climate change

Queensland has long experienced the impacts of extreme weather including tropical cyclones, floods, droughts and bushfires. Around the world, ecosystems are under pressure from the effects of climate change and these pressures are expected to increase.[14] Extreme weather events can damage infrastructure and interrupt transport networks. It is vital that our transport networks are resilient to these impacts.

The transport sector is a major contributor to the rise in greenhouse gas emissions. Mitigation strategies as outlined in the *Queensland Climate Transition Strategy* must be considered in future planning.

Remaining resilient to these impacts is vital to the liveability and continuing economic competitiveness of SEQ.

Bushfire aftermath, Binna Burra Road, 2019

Improving safety and amenity for all modes

The Queensland Government has committed to a vision of zero road deaths and serious injuries in its *Safer Roads, Safer Queensland: Queensland's Road Safety Strategy 2015–2021*. This strategy aims to reduce the annual fatalities and hospitalisations outcomes for such vulnerable groups.

The safety of passengers utilising the public transport network is essential. Principles such as Crime Prevention through Environmental Design should be adopted to ensure people can safely utilise facilities.

New development and upgrades should incorporate design principles such as 'complete streets', where the needs of all users are considered, improving accessibility, amenity and interaction with existing land uses. Priority will be given to people walking in key centres to enable economic prosperity and reduce conflicts with vehicles.

11 Queensland Treasury. (2016). *Journey to Work - South East Queensland, 2010-11 to 2040-41.*
12 Queensland Government Statistician's Office. (2018). *Queensland Regional Profiles: Resident Profile for South East Queensland.*
13 Australian Government Productivity Commission. (2013). *An Ageing Australia: Preparing for the Future, Productivity Commission Research Paper.*
14 Department of Infrastructure, Local Government and Planning. (2017). *ShapingSEQ – South East Queensland Regional Plan 2017.*

2.3.2 Opportunities

In response to the key challenges, some of the key opportunities within SEQ are outlined below. While the list is also not exhaustive, these represent a summary of the opportunities raised by customers and stakeholders. Each of them directly relates to one or more of the challenges and can be supported as a means to address them. Further, each opportunity can be both harnessed by the region's transport system and the transport system has a role to play in supporting them.

Harnessing new technology

The development of technologies such as low and zero emission vehicles and cooperative and automated vehicles, affordable renewable energy and complete digital connectivity will change how people live and present significant opportunities to better manage travel requirements, including reducing the need to travel.

By supporting and investing in the digital economy, SEQ will be well placed to take advantage of these changes.

As an example, the delivery of real-time transport information has resulted in more informed decision-making for operators and commuters. Integration with connected vehicle and infrastructure technologies will improve travel and safety throughout SEQ.

Leading the way for growth in sustainability and a healthy urban environment

It is planned for SEQ to become carbon neutral and have zero net waste while providing flexible, reliable and secure sources of food, water and energy.[15] Delivering programs that balance economic development, environmental protection and provide essential social services for the community are key to achieving this desired outcome.

Effective transport planning has the capacity to improve urban air quality and reduce pollution-related health impacts on our community. Commitment to increasing active and public transport mode-share, and support for cleaner transport technologies will enhance the liveability of our cities and the health and prosperity of our communities.

Through commitment to sustainable transport, Transport and Main Roads is well placed to lead the way in protecting and enhancing the natural environment and responding and adapting to climate change.

Enabling active and healthy lifestyles to reduce obesity and chronic disease

Empowering people to use active transport modes can increase physical activity, have a positive impact on people's health and contribute to a reduction in health care costs.

Lack of physical activity is a key contributor to obesity and associated chronic diseases. Obesity is the second-highest burden of disease in Australia. Queensland has one of the highest rates of adult obesity in Australia at 32.4 per cent, compared with 31.3 per cent nationally.[16]

Physical inactivity can cause diseases such as cardiovascular disease and type 2 diabetes, which are two of the biggest burdens on the state's health system. The overall impact on productivity in Queensland can amount to $1.1 billion per year.[17]

Leveraging opportunities to deliver transit oriented development outcomes

Identifying opportunities to deliver transit oriented development outcomes on surplus state owned land around transport hubs and nodes can support consolidation targets as outlined in *ShapingSEQ,* the SEQ Regional Plan.

Transit oriented developments can achieve integrated development outcomes with land use mix and densities to promote increased patronage of public transport, high levels of activation and passive surveillance of stations, and vibrant and accessible public realm which prioritises safe walking and bicycle movements.

Leveraging the region's access to the global marketplace

Major land, air and marine freight routes converge in SEQ and allow for high capacity movement of goods through Brisbane Airport and the Port of Brisbane. These facilities support the Australia TradeCoast, one of the country's fastest-growing trade regions.

SEQ's proximity to international trade partners provides opportunities for exports of local produce, manufactured goods and other commodities. Further growth of export-orientated industries will support a globalised economy.

The areas surrounding key freight routes form corridors and clusters of economic activity that support SEQ's economy. These can be further leveraged through integrated transport planning and coordination.

Supporting economic growth opportunities

Efficient connections between major enterprise areas and supply chains can support growth in national and global trade. The SEQ City Deal Proposition document, *TransformingSEQ,* identifies an opportunity for an SEQ Trade and Enterprise Spine between the Toowoomba Trade Gateway and the Australia TradeCoast by connecting Inland Rail to the Port of Brisbane and unlocking jobs in the south-west and western growth areas.

15 Department of Infrastructure, Local Government and Planning. (2017). *ShapingSEQ – South East Queensland Regional Plan 2017.*
16 Australian Bureau of Statistics. (2018). *National Health Survey: First Results, 2017-2018, Australia.*
17 Queensland Government. (2019, September 26). *Palaszczuk Government cements commitment to help 10,000 Queenslanders tackle chronic disease.* [Media Release].

The protection of connections to strategic road and freight networks will allow these areas to intensify and expand and improve their capacity and functionality. Connecting these areas to services, amenities and facilities will support construction job growth and stimulate economic recovery.

If appropriately planned, growth in industrial sectors and trade can increase SEQ's prosperity without compromising its urban amenity.

Leveraging major developments

SEQ has many major developments with the potential to shape the area's future at various stages of assessment, procurement or delivery.

These developments include improved freight and passenger connections, employment generating opportunities and attractors of tourism growth. They will further position SEQ as a world-renowned location, attracting growth that can finance infrastructure.

These projects can be leveraged to improve sustainable SEQ-wide accessibility, expand the economy and directly enhance amenity and liveability.

Enabling a globally competitive tourism industry

SEQ is a key tourism destination and the gateway to Queensland. Transport is an integral part of the visitor experience. In the 2017-18 financial year, close to 70 million visitors visited Queensland, comprised of 63 per cent of domestic day trips, 33 per cent of domestic overnight trips and 4 per cent of international visitors. In total, 144 million visitor nights were spent in Queensland and 63 per cent of the visitor nights were made by domestic visitors.[18]

COVID-19 is having a significant impact on the tourism sector. The SEQ tourism industry contributes $12.3 billion to the state economy per year and employs 151,000 people.[19] In the immediate term, it is critical that transport planning and investment supports the tourism industry and the Queensland economy to grow domestic tourism and jobs. Longer term, the focus will be on attracting new and returning international visitors.

Leveraging SEQ's renowned education sector

SEQ has a strong education sector and is home to some of Australia's top universities. Areas around these educational institutions have evolved into knowledge and technology precincts. These locations attract a large number of people and are ideal for sustainable transport options such as walking, bicycle riding and public transport. Travel choices adopted during university can become life-long behaviours. This can lead the way for a shift to more sustainable transport.

Exploring policy and efficiency solutions to address infrastructure challenges

There are many cost-effective and innovative solutions that can deliver infrastructure to keep pace with growth. It is Queensland Government policy to first seek reform or better use of existing infrastructure before upgrading or constructing new infrastructure.[20] This can be achieved through policy reform and efficiency solutions.

These solutions can also provide innovative funding and financing options such as value sharing, market-led proposals and public-private partnerships to procure new infrastructure and deliver greater value for money.

Through more consolidated urban growth there is an opportunity to address infrastructure challenges that result from dispersed settlement. For example, increasing density close to high-frequency public transport allows more people to easily connect to services and employment via existing infrastructure corridors.

Global trends impacting transport

The transport system is shaped by broader global trends. Disruption to business models and the networks that enable economic prosperity and community connections, are challenging how customers will use today's infrastructure to meet tomorrow's needs. Key forces driving disruption include technology, globalisation and changing demographics.

Some major trends driving change within the transport system include:

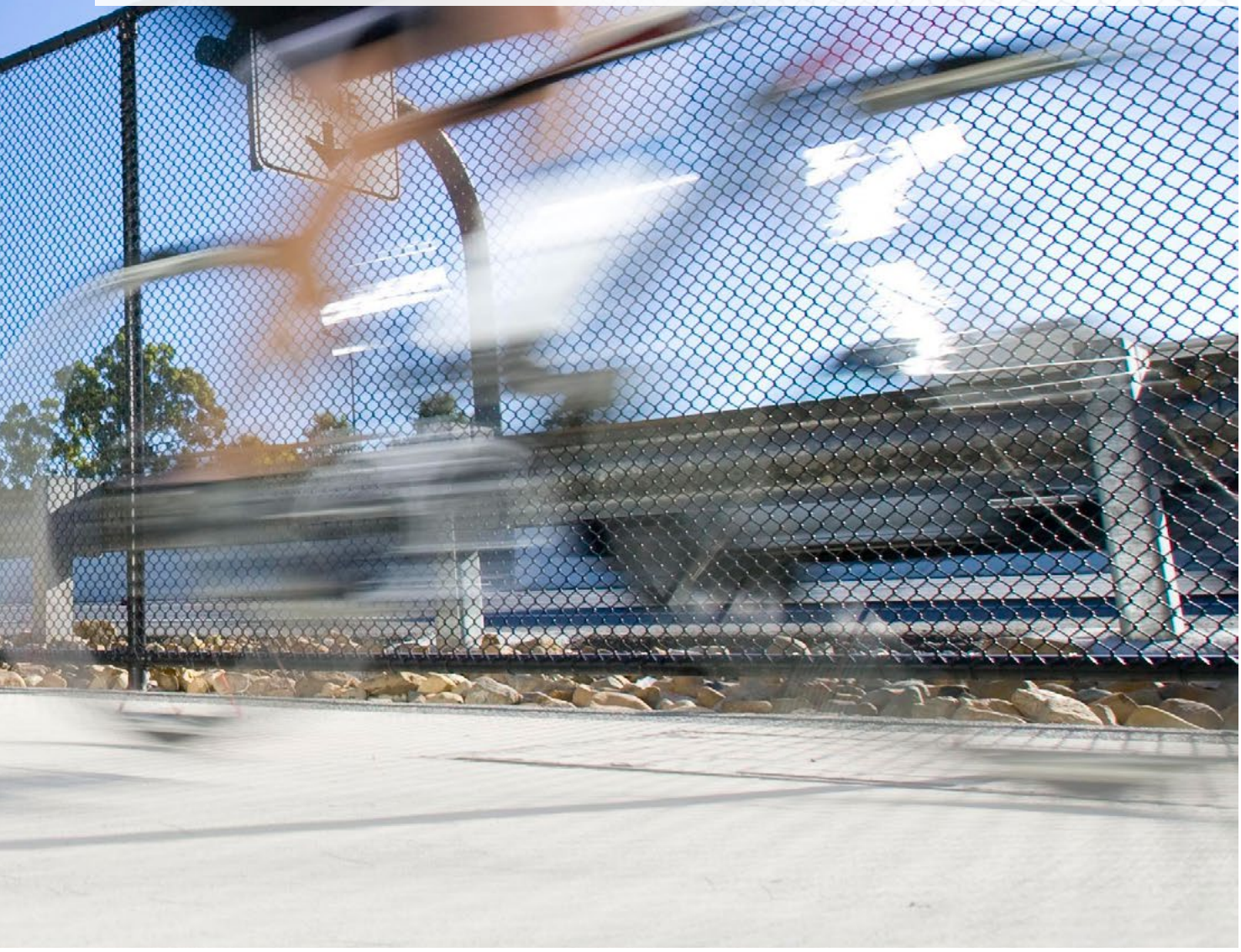
- customers expecting tailored and more personalised services
- digitally enabled infrastructure
- digital connectivity between service providers, customers and infrastructure
- changing working patterns and behaviours
- climate change impacting on transport system resilience
- the sharing economy and a shift to access over ownership
- energy efficiency and renewables are constantly advancing.

18 Tourism Research Australia (2019). *State of the industry 2017-18.*
19 Tourism Research Australia. (2019). *State Tourism Satellite Accounts 2017-18.*
20 Department of Infrastructure, Local Government and Planning. (2016). *State Infrastructure Plan.*

Bike rider on the Veloway 1

3.

South East Queensland's goals, priorities and objectives



3.1 South East Queensland goals, priorities and objectives

To integrate SEQ's transport planning with SEQ's land use planning, the goals, priorities and objectives within the *SEQ Regional Transport Plans* have been drawn from *ShapingSEQ*.

ShapingSEQ includes a 'connect' goal, which focuses on moving people, products and information efficiently. The Regional Transport Plans provide the specific detail for how this will be achieved and articulate the key roles the region's transport system will play in support of *ShapingSEQ*'s other four goals. The relationship between the *ShapingSEQ* goals and the *SEQ Regional Transport Plans*' priorities is shown in Figure 9.

For the *SEQ Regional Transport Plans*, 'connect' is the enabler to achieving the remaining goals of grow, prosper, sustain and live.

As part of this, the *SEQ Regional Transport Plans* embrace integrated land use and transport planning, deliberately prioritise active and public transport for the movement of people and support supply chain optimisation for freight.

To support the vision and sustainable growth for the region, best practice transport planning principles have been adopted. The future system will seek to:

- help facilitate and reinforce the critical role land use planning plays in transport planning
- achieve the best utilisation of space in support of a growing population and highly urbanised region
- maximise value for money where possible, particularly in support of productivity
- support and create high-quality living environments
- provide personalised customer travel experiences that balance the needs of a growing population
- enable economic, social and environmental sustainability
- minimise fatal and serious injuries by prioritising road safety.

The priorities, objectives and actions outlined in the *SEQ Regional Transport Plans* have been developed to achieve the vision and desired future transport network outlined in *ShapingSEQ*.

> *"The best transport plan needs a great land use plan"*
> *– ShapingSEQ*

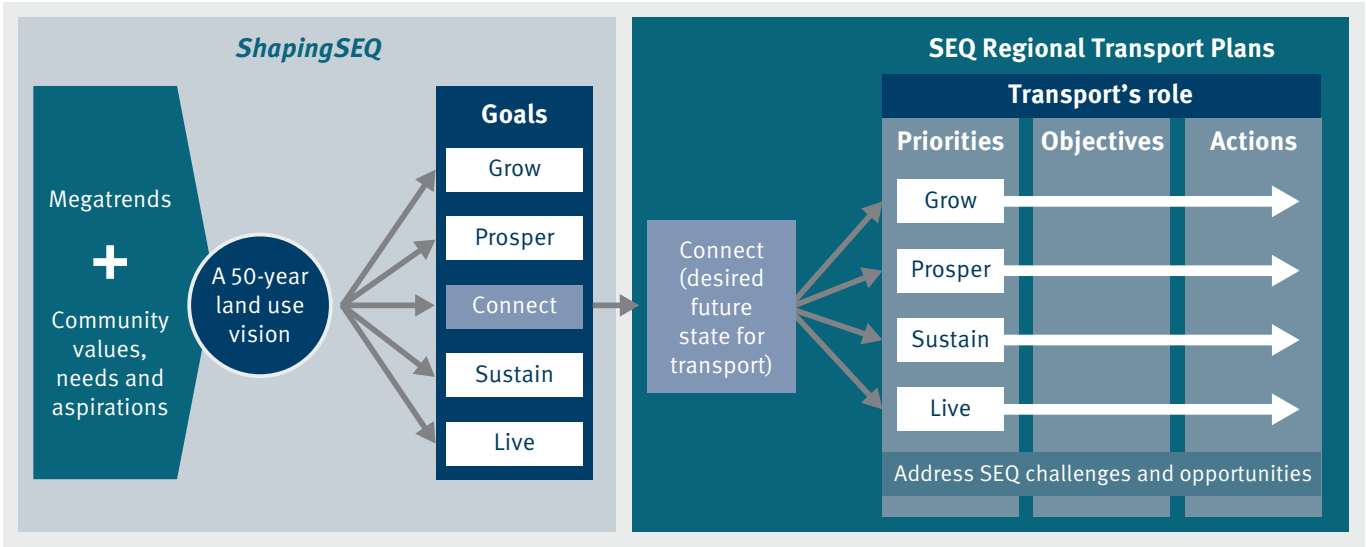


Figure 9: The relationship between ShapingSEQ goals and the priorities in the SEQ Regional Transport Plans

3.1.1 Goals

The *SEQ Regional Transport Plans* adopt the goals of *ShapingSEQ*, which are:

Grow	SEQ has a consolidated urban structure of well-planned and more complete communities. There is housing choice and sufficient land to accommodate the projected population and employment growth in an affordable and sustainable way to meet the community's changing lifestyle needs.
Prosper	SEQ has a globally competitive economy focused on high-value economic activities supported by population-serving jobs. Regional economic clusters will leverage traditional strengths and competitive advantages to advance the economy, strengthen our global and national relationships and embrace emerging technology and new opportunities.
Connect	SEQ is a region of more complete and interconnected communities supported by a multi-modal and integrated regional transport system. This system is frequent and reliable and prioritises public and active transport for people and freight networks for goods. Infrastructure networks and services enable efficient and sustainable development, economic growth and social benefits throughout the region.
Sustain	SEQ's biodiversity, natural assets and regional landscapes are protected and nurtured to sustain our region's strong and diverse communities. These communities are safe, fair, sustainable, resilient and prepared for climate change. Together, our environment and communities will ensure future generations enjoy a high-quality of life and affordable living options.
Live	SEQ is a region of great places that respond to our outstanding climate based on good design that creates an urban form delivering year-round outdoor and energy-efficient living in a leafy, subtropical landscape.

3.1.2 Transport priorities and objectives

The *SEQ Regional Transport Plans'* priorities seek to direct the region's strategic transport planning to achieve the 'connect' goal by facilitating transport's role in support of growth, prosperity, sustainability and liveability. The priorities for the *SEQ Regional Transport Plans* are outlined in Figure 10.

These priorities inform both SEQ-wide actions and the locally-specific actions reflected in the North Coast, Metropolitan and South Coast Regional Transport Plans.

Table 3 provides a summary of the priorities, objectives and the role of transport for SEQ. The priorities and objectives are further detailed in this section.

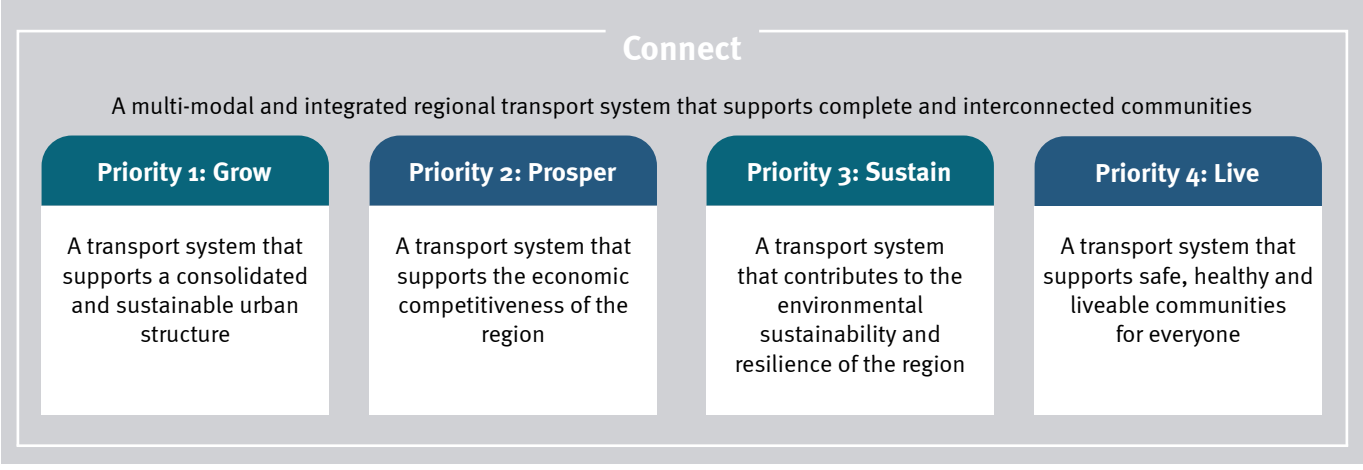


Figure 10: SEQ Regional Transport Plans' priorities

Table 3: SEQ Regional Transport Plans' priorities, objectives and measures of success

TRANSPORT SYSTEM

The safety of all transport system customers is our primary priority as we create a single integrated transport network accessible to everyone.

	Priority 1: Grow	Priority 2: Prosper	Priority 3: Sustain	Priority 4: Live
PLANNING CONTEXT	**Challenges and opportunities**			
	Responding to the region-wide challenges of: ■ population growth ■ coordinating land use and transport. **Leveraging region-wide opportunities for:** ■ development in consolidation and expansion areas ■ policy and efficiency solutions.	**Responding to the region-wide challenges of:** ■ fiscal and spatial constraints ■ congested networks ■ attracting skilled workers. **Leveraging region-wide opportunities for:** ■ economic prosperity ■ access to global markets ■ trade and industrial expansion ■ tourism and education.	**Responding to the region-wide challenges of:** ■ climate change ■ protecting natural assets ■ impact of weather events. **Leveraging region-wide opportunities for:** ■ new technology ■ sustainable modes.	**Responding to the region-wide challenges of:** ■ safety and amenity ■ equitable access ■ ageing population. **Leveraging region-wide opportunities for:** ■ active transport ■ good design ■ affordable and accessible modes.
ROLE OF TRANSPORT	**Transport objectives**			
	1.1 Current and future transport networks shape sustainable growth and development of communities. 1.2 Communities in growth (expansion) areas have access to reliable, efficient and sustainable travel options. 1.3 People and goods move safely and efficiently in rural communities.	2.1 Goods and services move efficiently and reliably along supply chains to and between key economic areas and markets. 2.2 Activity centres are connected by a reliable and high-frequency public transport network. 2.3 Transport planning and investment is informed by current and accurate information.	3.1 The transport system is safe, resilient and connected during and after extreme weather, events and incidents. 3.2 Walking, bicyle riding and other sustainable travel options are accessible, convenient and safe. 3.3 The transport system is sustainable and supports the region's environmental and lifestyle values.	4.1 Communities and public places are walkable and well-connected by integrated and sustainable transport options. 4.2 The transport system provides safe, fair and equitable travel options.
	Achieved through			
	■ Integration of transport and land use planning. ■ Long-term focused multi-modal transport planning. ■ Prioritising public transport for people movement.	■ Freight network improvements. ■ A planned, reliable and frequent public transport network. ■ Data and digital supply chain optimisation. ■ Adapting to disruptive technologies.	■ Flood and weather immunity improvements. ■ Prioritised active transport for people movement. ■ Low and zero emission vehicles and renewable energy. ■ Limiting the impact of transport on habitat and regional landscapes.	■ Improved customer experience at stops, stations and interchanges. ■ Integration of personalised mobility service delivery models. ■ Improved wayfinding. ■ Supporting transit oriented developments along public transport corridors.
MEASURES OF SUCCESS	**Measured by**			
	■ Commute time. ■ Commute distance. ■ Road network reliability.	■ Road network productivity. ■ Road network congestion. ■ Public transport accessibility.	■ Road closures. ■ Public and active transport mode share. ■ Transport greenhouse gas emissions.	■ Active transport accessibility. ■ Public transport disadvantage. ■ Public transport patronage. ■ Road safety.

Priority 1: Grow

A transport system that supports a consolidated and sustainable urban structure.

Population growth will increase demand on the transport network. It will become increasingly important to efficiently use existing infrastructure, provide more and varied mobility options and minimise reliance on private vehicles.

A key outcome of *ShapingSEQ* is the development of more compact communities through consolidation, which offers benefits of living closer to work, essential services and social, educational and recreational opportunities.

Compact communities can also help protect green space and rural areas by reducing the impact of urban sprawl. More compact urban form can support a more integrated, multi-modal transport system with a wider mix of transport options including public and active transport. Access to such a system will be critical and will be improved through the provision of appropriate transport options connecting compact and lower density communities.

Objective 1.1: Current and future transport networks shape sustainable growth and development of communities.

Development along existing and future transport corridors will be encouraged to provide improved connectivity through sustainable multi-modal travel options, but also to support high levels of urban amenity. New transport infrastructure or improvements to existing infrastructure will incorporate high-quality urban design principles that promote desirable streetscapes, healthy communities and promote interaction between streets and their adjoining land uses.

Active transport infrastructure will continue to improve and the network will continue to grow to encourage end-to-end journeys and integration with convenient and competitive public transport. This will include public and private transport options that are affordable, reliable and frequent, in terms of travel times and convenience, comparable to other options.

Well coordinated and timed development will be linked to a transport network and travel options that support a consolidated urban form.

The *Moving Australia 2030* plan states that 'the most important factor in maximising the benefit of a denser population is ensuring that new residential and commercial precincts are developed around major transport hubs and nodes. To accommodate the projected population growth, development of public and active transport accessible land must be made comparatively more attractive'.

Bureau of Infrastructure, Transport and Regional Economics. (2013). *Moving Australia 2030.*

Priority 1 aligns with:

- The Transport Coordination Plan's objective of community connectivity
- The *State Infrastructure Plan's* focus on public transport solutions including demand management to address the strong growth of SEQ
- *ShapingSEQ* goal to sustainably accommodate a growing population.

Objective 1.2: Communities in growth (expansion) areas have access to reliable, efficient and sustainable travel options.

By providing a range of travel options, people can make a choice to use more sustainable travel modes. To be competitive these modes must be reliable and efficient. Passengers value journey travel-time reliability almost as much as travel-time itself.

Reliability includes consistency in service level, wait times and travel times. This can be improved by physically separating public and active transport modes from vehicle traffic, but importantly, in areas of expansion or existing low-density areas, it can be improved by providing customers with convenient options for how they move, other than their own private vehicles. This means considering all options, including active and public transport, ride-sourcing, demand-responsive transit and car-sharing. It also means providing suitable options that allow customers living in these areas to connect easily to the trunk public transport network.

Objective 1.3: People and goods move safely and efficiently in rural communities.

People living in rural and semi-rural areas rely heavily on private vehicles which are often the only available option. Options that allow safe access to employment and services, as well as the transport of goods to market, is paramount. Sealing of dirt roads, improving flood immunity, safety barriers, wide centrelines, passing lanes, road shoulders, better delineation, more frequent rest areas and educational campaigns can achieve notable safety improvements on rural roads.

In rural areas, appropriate transport alternatives to private vehicles will be supported for customers where there is unequal access, for example, school and community transport options.

Technology can also support rural customers with the provision of information. With fewer routes and travel options available, prior knowledge of delays or blockages, road works or accidents can allow customers to make informed travel choices.

SEQ-wide actions for Priority 1 are detailed below. These are actions that cross regional boundaries or are significant throughout SEQ.

Table 4: Priority 1 actions for SEQ

PRIORITY 1: GROW A transport system that supports a consolidated and sustainable urban structure.	**OBJECTIVES**
Objective 1.1: Current and future transport networks shape sustainable growth and development of communities.	
Objective 1.2: Communities in growth (expansion) areas have access to reliable, efficient and sustainable travel options.	
Objective 1.3: People and goods move safely and efficiently in rural communities.	

Actions – short-term	1.1	1.2	1.3
A1.01 Public transport network and interchange strategy Develop a SEQ public transport network and interchange strategy, supporting delivery of a connected, frequent and high capacity public transport network as detailed in Figures 11–14.	✓	✓	
A1.02 SEQ-wide multi-modal network planning Undertake SEQ-wide multi-modal network planning to further develop the preferred multi-modal strategic transport networks identified in the *SEQ Regional Transport Plans* and *ShapingSEQ*. This planning will be a critical input for the next review of the *SEQ Regional Plan* and Regional Transport Plans.	✓	✓	✓

Passengers travelling to sporting event

Priority 2: Prosper

A transport system that supports the economic competitiveness of the region.

Efficient and reliable movement of people and goods is critical to economic growth and prosperity. Supporting this includes:

- facilitating fast and reliable movement of goods along supply chains
- enabling connectivity between customers and goods and services (market connectivity)
- connecting people and employment.

ShapingSEQ's vision is for SEQ to be Australia's eastern gateway to international markets and to attract trade, investment and high-value economic activities, thereby improving the region's economic competitive advantage. The role of transport in delivering this advantage includes integrated and reliable connections between, and to, major economic areas, shipping ports, airports and freight networks. These connections will need to provide efficiency and reliability in the movement of both people and goods.

The efficient movement of people can be greatly improved by prioritising a fast, reliable and frequent public transport network supported by safe and convenient active transport options. An attractive and efficient public transport network is critical to support the economic capacity of the region by providing appropriate access to jobs. Likewise, the efficient movement of goods can be provided via a number of mechanisms that focus on end-to-end supply chain optimisation.

Objective 2.1: Goods and services move efficiently and reliably along supply chains to and between key economic areas and markets.

Supply chains can be optimised through:

- infrastructure strategies such as freight lanes and new freight routes
- operational strategies such as prioritising freight movement in off-peak periods
- innovative delivery models such as carrier sharing, flexible container locations, warehouse sharing and variable access rights to reduce time and costs
- technology and data integration such as real-time information provision and automated routing.

Efficiency gains can be realised through the optimisation of vehicles moving goods along freight routes and encouraging a multi-modal approach to planning for freight movement. Locating key freight generators with good access to freight corridors can provide efficient access for freight movement. Removal of rail level crossings on priority freight routes can also improve freight efficiency and safety.

Priority 2 aligns with:

- The Transport Coordination Plan's objective of efficiency and productivity
- The *State Infrastructure Plan's* focus on transport infrastructure that unlocks the potential of critical supply chains by identifying and improving the freight network
- *ShapingSEQ* goal to become a globally competitive economic powerhouse.

Using appropriate types of vehicles, maximising capacities and using accurate and real-time data are equally important to realising efficiencies and reliability.

Objective 2.2: Activity centres are connected by a reliable and high-frequency public transport network.

Efficient connections to and between activity centres is key to economic productivity and can be realised through a reliable and frequent public transport network. This allows people to reach employment, education and essential services as efficiently as possible, but it also supports the sustainable growth of the region by encouraging urban consolidation, reducing emissions and reducing the amount of space required to provide transport. This will be realised through a high-frequency public transport network that connects all of the region's activity centres – a minimum 15-minute frequency 7am to 7pm, 7 days a week – with lower frequency services operating outside these times.

A reliable public transport service must ensure customers can confidently expect a consistent level of service throughout the day and across the week. High capacity transit stations will connect with local walking, bike and street networks and be located as close as possible to the most active areas of commercial or residential land use.

Objective 2.3: Transport planning and investment is informed by current and accurate information.

Advancements in technology and the increasing availability of high-quality data will revolutionise how transport improvements are planned for and implemented. Innovative approaches to data generation and analysis, performance tracking and review, will result in better planning and outcomes for SEQ. New ways of generating, collecting, sharing and analysing data can help determine where investments are most required and how to better utilise existing infrastructure assets.

A commitment to analysis, evidence-based planning, embracing appropriate technologies and business models and continuous performance monitoring and review will ensure that we make the best-informed decisions possible.

SEQ-wide actions for Priority 2 are detailed below. These are actions that cross regional boundaries or are significant throughout SEQ. These are identified as both short-term and medium/long-term actions.

Table 5: Priority 2 actions for SEQ

PRIORITY 2: PROSPER
A transport system that supports the economic competitiveness of the region.

OBJECTIVES
Objective 2.1: Goods and services move efficiently and reliably along supply chains to and between key economic areas and markets.
Objective 2.2: Activity centres are connected by a reliable and high-frequency public transport network.
Objective 2.3: Transport planning and investment is informed by current and accurate information.

Actions – short-term	2.1	2.2	2.3
A1.03 Commercial goods and services urban travel survey and model development Undertake surveys to gather data regarding the movement of commercial goods and business services in urban areas of SEQ and develop a model to allow forecasts of future commercial demands.	✓		✓
A1.04 Data collection Investigate potential for customer data collection approaches that leverage digital channels such as mobile phone, third party data opportunities, web surveys and connected infrastructure within a digitally dense SEQ.			✓
A1.05 Disruptive technologies planning Assess the implications of emerging disruptive and transformative technologies for the management and provision of transport infrastructure and services within SEQ. These technologies and issues may include: ■ cooperative and automated vehicles ■ drones ■ shared mobility and changing business models ■ big data analytics.	✓		✓
A1.06 European Train Control System Undertake planning to develop options and inform investment decisions associated with broader deployment of the European Train Control System on the SEQ rail network.	✓	✓	
A1.07 Freight data collection and demand modelling Explore new technologies and services to support the Queensland Freight Model, and use it to identify, forecast, and analyse multi-modal freight flows across the state and South East Queensland.	✓		✓
A1.08 Inland Rail Collaborate with the Australian Government and Australian Rail Track Corporation in planning for the Australian Government's Inland Rail connection between Melbourne and Brisbane.	✓		
A1.09 Journey reliability and congestion management Coordinate a strategic, multi-modal approach to improving journey reliability and addressing excessive congestion in SEQ, and apply it across Transport and Main Road's relevant policy, land use planning, investment and operational programs.	✓	✓	
A1.10 Level crossing strategic review Undertake a strategic review of level crossings on the SEQ Citytrain network to identify relative priorities for further investigation. Current priorities include progress of a precinct investigation at Lindum and removal of level crossings at Beams Road, Carseldine and Boundary Road, Coopers Plains.	✓		

PRIORITY 2: PROSPER
A transport system that supports the economic competitiveness of the region.

OBJECTIVES

Objective 2.1: Goods and services move efficiently and reliably along supply chains to and between key economic areas and markets.

Objective 2.2: Activity centres are connected by a reliable and high-frequency public transport network.

Objective 2.3: Transport planning and investment is informed by current and accurate information.

Actions – short-term (cont.)	2.1	2.2	2.3
A1.11 Olympic and Paralympic Games planning Prioritise and coordinate planning, inter-governmental and inter-agency engagement to support a Queensland Government bid for the 2032 Olympic and Paralympic Games.		✓	
A1.12 Rail freight axle loads and height clearances Develop strategies to increase allowable axle loads and height clearances on the rail freight system within SEQ. This planning will extend to informing investment decisions for specific upgrade projects.	✓		
A1.13 Rail network strategy Develop the Rail Network Strategy to assess the current and future demand, future timetables, operational requirements and network growth projects. The strategy will plan for the delivery of new and upgraded high quality passenger rail connections between growth corridors and economic clusters in SEQ.	✓	✓	
A1.14 Real-time data Facilitate improved and more integrated communication of real-time travel data to empower customers to make the best decisions in using the transport system. This might include development of new data feeds and alternative channels, for example, congestion/excessive congestion and parking information.	✓	✓	✓
A1.15 Regional freight plan Develop an integrated multi-modal freight plan to identify and prioritise freight network improvements to support supply chain efficiency across the region. The plan will consider current and emerging freight demands including freight links for the agricultural industry and future freight requirements for the SEQ region; access and movement requirements for oversize over-mass and high productivity vehicles; first and last mile links; supply chain coordination models, and the role of the of the region's airports, rail terminals, and key freight routes.	✓		
A1.16 SEQ strategic transport models Improve predictive capacity to better inform future transport decisions through development of transport models for the Greater Brisbane area and SEQ. Models will also be made available for use by relevant local governments to improve accuracy and consistency between agencies.			✓
A1.17 SEQ travel survey Undertake an SEQ household travel survey to gather travel behaviour and demographic information as the basis for transport model development and other transport analysis.			✓
A1.18 Tourism and transport strategy Implement the *Queensland Tourism and Transport Strategy* actions within SEQ. Undertake analysis and engagement to inform consideration of tourism in transport planning within SEQ. This may include improving accessibility to key tourism destinations, including stadiums and airports.		✓	
A1.19 Train stabling and passing loops Identify locations and confirm footprints for future infrastructure such as train stabling, passing loops and broader rail infrastructure to improve rail service efficiency on SEQ's passenger rail network.	✓	✓	

(continued next page)

PRIORITY 2: PROSPER
A transport system that supports the economic competitiveness of the region.

OBJECTIVES

Objective 2.1: Goods and services move efficiently and reliably along supply chains to and between key economic areas and markets.

Objective 2.2: Activity centres are connected by a reliable and high-frequency public transport network.

Objective 2.3: Transport planning and investment is informed by current and accurate information.

Actions – short-term (cont.)	2.1	2.2	2.3
A1.20 Transport coordination centre Investigate the potential to improve coordination of transport operations in SEQ through the development of a fully connected, multi-modal transport coordination centre. Such a centre may operate across Queensland and coordinate multi-agency, multi-modal operational management of the transport system around the state.	✓		
A1.21 Urban freight distribution hub planning Investigate and quantify the impact of online retailing on the SEQ urban freight task, and in particular, the role of freight distribution centres for online retail.	✓		✓
A1.22 Warrego Highway (Dinmore to Helidon Spa) upgrade planning Continue to progress planning for the Warrego Highway Upgrade Strategy and the Warrego Highway East Masterplan.	✓		
Actions – medium/long-term	**2.1**	**2.2**	**2.3**
A1.23 Multi-modal freight terminal strategy Collaborate with industry and stakeholders to develop an agreed multi-modal freight terminal and supporting infrastructure strategy for SEQ and Toowoomba.	✓		
A1.24 Multi-modal network planning Develop a functional multi-modal hierarchy for SEQ that balances the movement of people and goods while contributing to successful placemaking and vibrant communities.	✓	✓	

Freight travelling through Crestmead Industrial Estate, Logan

Priority 3: Sustain

A transport system that contributes to the environmental sustainability and resilience of the region.

A sustainable transport system involves the provision of infrastructure and services that:

- minimise environmental impacts
- are resilient to external events or incidents
- improve safety.

Transport activity is the second largest contributor of greenhouse gas emissions in Queensland and in 2018 accounted for 13 per cent of all emissions.[21] To support the decarbonisation of the transport sector, the Government is developing a Net Zero Transport Emission Roadmap. A decarbonised transport system will enable more sustainable travel options, such as active and public transport, zero emission vehicles and reduced dependency on private vehicle travel. Freight will move using the most efficient modes and by zero emission technologies. To enable this shift, sustainable options will be easily accessible, convenient and safe.

Transport infrastructure must be built to be resilient to weather events and traffic incidents to ensure the safety and efficiency of the network and efficient movement of people and goods. Travel demand management will be improved by utilising current information including real-time data and through new technologies. This will have benefits for rapid emergency management response.

Objective 3.1: The transport system is safe, resilient and connected during and after extreme weather, events and incidents.

A multi-faceted approach to managing and mitigating potential disruptions and incidents will be adopted.

Sustainability assessments

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

Priority 3 aligns with:

- The Transport Coordination Plan's objective of environment and sustainability
- The *State Infrastructure Plan's* focus on creating a better performing and lower emissions transport system and on maintenance and rehabilitation of existing infrastructure to reduce the long-term cost of repair and improve network resilience
- *ShapingSEQ* goals for promoting ecological and social sustainability.

Improving the resilience of the transport system during and after extreme weather, events and incidents will require infrastructure upgrades where appropriate, along with management of the incidents themselves. This includes dynamic alerts and response to disruptions. Technology will be deployed to enhance communications with customers, both about incidents as they occur and about which routes or services to use.

Objective 3.2: Walking, bicycle riding and other sustainable travel options are accessible, convenient and safe.

Safe, sustainable and healthy communities have balanced transport systems, with a mix of cleaner and more energy efficient vehicle use, public transport, walking and bicycle riding. Increasing the mode share of active and public transport services, particularly in major urban centres, will not only reduce the negative impacts of congestion but improve community health through reduced air pollution, and may also cut carbon emissions.

Walking and bicycle riding can improve health and lead to a reduction in health costs. The uptake of bike riding, walking and other sustainable travel options are influenced by their availability, accessibility and safety.

Objective 3.3: The transport system is sustainable and supports the region's environmental and lifestyle values.

The transport system impacts the environment in a variety of ways. This can include through greenhouse gas and air pollutant emissions as well as habitat and biodiversity loss.

These environmental pressures can be minimised through efficient resource use and development that is both sustainable and sensitive to the natural environment. New technologies will help, including reducing greenhouse gas emissions and the use of non-renewable energy sources. Adoption of these technologies, combined with greater use of walking, bike riding and public transport will assist in minimising transport's impacts on the region's environment and liveability.

21 Australian Government. (2018). *State and Territory Greenhouse Gas Inventory,* Australian Government National Accounts, https://ageis.climatechange.gov.au/NGGITrend.aspx and confidential data from NGERs .

SEQ-wide actions for Priority 3 are detailed below. These are actions that cross regional boundaries or are significant throughout SEQ. These are identified as both short-term and medium/long-term actions.

Table 6: Priority 3 actions for SEQ

PRIORITY 3: SUSTAIN

A transport system that contributes to the environmental sustainability and resilience of the region.

OBJECTIVES

Objective 3.1: The transport system is safe, resilient and connected during and after extreme weather, events and incidents.

Objective 3.2: Walking, bicycle riding and other sustainable travel options are accessible, convenient and safe.

Objective 3.3: The transport system is sustainable and supports the region's environmental and lifestyle values.

Actions – short-term	3.1	3.2	3.3
A1.25 Cooperative and automated vehicles planning Assess the implications of cooperative and automated vehicles for the management and provision of transport infrastructure and services within SEQ by undertaking scenario modelling to better understand the potential impacts of cooperative and automated vehicles on the transport network and travel behaviour.	✓	✓	✓
A1.26 Cooperative intelligent transport systems (C-ITS) As part of the Cooperative and Automated Vehicle Initiative, undertake a C-ITS pilot on roads in and around Ipswich. The on-road pilot will validate the impacts and safety benefits of C-ITS and user perceptions, demonstrate technologies and build public awareness and uptake, grow government's technical and organisational readiness, and encourage partnerships and build capacity in private and public sectors.	✓	✓	✓
A1.27 Low and zero emission vehicles Support the decarbonisation of transport activities through the uptake of low and zero emission vehicles in SEQ, including identifying and prioritising investments required to deliver *The Future is Electric: Queensland's Electric Vehicle Strategy* and exploring the potential for hydrogen fuel cell vehicles.		✓	✓
A1.28 Greenhouse gas emissions reduction Undertake investigations to inform the development of policy and strategies including a zero net emissions transport roadmap to significantly reduce greenhouse gas emissions from the transport sector in SEQ.		✓	✓
A1.29 Priority principal cycle route maps In collaboration with local government, review and update priority route maps, an addendum to the *South East Queensland Principal Cycle Network Plan,* every two years.		✓	✓
A1.30 Public transport modal access analysis Identify barriers to access at key public transport interchanges and destinations within SEQ and develop options to encourage more people to walk, bike ride and use feeder public transport services to access areas of high trip generation and attraction. Key locations include principal regional activity centres and major universities and hospitals.		✓	✓
A1.31 Walkability and amenity improvements Provide advice and guidance to local governments to investigate and prioritise opportunities to improve the environment for people walking in town centres throughout the region to strengthen walkability and local amenity.		✓	✓

PRIORITY 3: SUSTAIN

A transport system that contributes to the environmental sustainability and resilience of the region.

OBJECTIVES

Objective 3.1: The transport system is safe, resilient and connected during and after extreme weather, events and incidents.

Objective 3.2: Walking, bicycle riding and other sustainable travel options are accessible, convenient and safe.

Objective 3.3: The transport system is sustainable and supports the region's environmental and lifestyle values.

Actions – medium/long-term	3.1	3.2	3.3
A1.32 Accessibility to public transport Investigate opportunities to improve walk and bicycle access to public transport hubs to increase accessibility and promote patronage growth.		✓	✓
A1.33 Principal cycle network plan Review and update the *South East Queensland Principal Cycle Network Plan* every five years in collaboration with local government.		✓	✓
A1.34 Travel demand management Investigate opportunities for progressing travel demand management strategies. This is likely to involve integrated strategies focused on particular locations, time periods or user groups aimed at increasing the proportion of travel undertaken on more efficient/sustainable modes, reducing the number of trips or changing the timing of trips to reduce peak demands.			✓

Bicycle infrastructure at Kippa-Ring station

Priority 4: Live

A transport system that supports safe, healthy and liveable communities for everyone.

ShapingSEQ's vision is for a highly liveable region for people to live, work and enjoy which will be achieved through great design and quality streets, buildings and spaces.

Fair and equitable access to a range of travel options can enhance quality-of-life and connect communities. This can increase people's employment, education and recreational opportunities and provide access to essential services.

A well-designed transport system enables place-making by creating opportunities for people to co-locate and access a range of places, events and activities. The availability of quality public and active transport to access places and facilities is key to creating improved liveability. The physical design of the transport system also contributes to vibrancy and amenity through the attractive and functional design of stations, streets and corridors.

Safety is a key aspect of liveability. All customers expect a safe network, regardless of the mode. The transport network does this through transport and land use integration that places people at the centre. Consideration of high-quality design that focuses on walkability and safety for people walking is central to this integration. Designing the system for the most vulnerable – children, elderly and people with disability – ensures safety for all customers across all modes.

Health is also a key aspect of liveability. The impacts of transport systems should enhance rather than detract from community liveability. This can be achieved through insightful design to provide convenient access to transport as well as protection from noise and air pollution impacts.

Objective 4.1: Communities and public places are walkable and well-connected by integrated and sustainable transport options.

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

The physical design of the transport system contributes positively to the region's amenity and vibrancy. Transport planning will focus on people, not modes, with a deliberate consideration of walkability in accessing all new stations, stops and public places to provide a truly integrated network.

Priority 4 aligns with:

- The Transport Coordination Plan's objective of safety and security
- The *State Infrastructure Plan's* focus on improving transport safety and security and on connecting regional communities with access to essential services and opportunities
- *ShapingSEQ* goal for SEQ's residents to live in better designed communities.

Objective 4.2: The transport system provides safe, fair and equitable travel options.

Customers have a right to be safe, regardless of their mode of transport. Addressing safety requires a multi-layered approach including the vehicles and modes used, infrastructure upgrades, education, technology and system design.

Road incidents are a significant challenge across SEQ with a number of locations identified as high risk crash points. The proportion of serious bicycle injuries and fatalities is also an issue.

A fair and equitable transport system is one which provides all customers with convenient and affordable options for how they choose to move. Age, health, income and location should not be a barrier to mobility. Improving access to passenger transport for disadvantaged groups will facilitate participation in society and access to services and provide significant economic and social benefits through providing greater employment and social participation. Matching options to need will be assisted by government and industry working in partnership to provide the right types of services for diverse customers. Options including active transport, community transport, personalised mobility, demand-responsive transport and public transport will all be explored to determine suitable solutions.

Targeted Road Safety Program

The Targeted Road Safety Program (TRSP) provides funding for infrastructure improvements on the road network to treat locations with significant crash history.

The TRSP uses several sub-programs and initiatives to effectively target specific issues including:

- Safer Roads Sooner Program
- Black Spot Program (funded by the Australian Government)
- High Risk Roads
- Flashing School Zone Signs
- Various mass action programs such as:
  - Township Entry Treatments
  - School Transport Infrastructure Program
  - Hold the Red

SEQ-wide actions for Priority 4 are detailed below. These are actions that cross regional boundaries or are significant throughout SEQ. These are identified as both short-term and medium/long-term actions.

Table 7: Priority 4 actions for SEQ

PRIORITY 4: LIVE A transport system that supports safe, healthy and liveable communities for everyone.	**OBJECTIVES**
Objective 4.1: Communities and public places are walkable and well-connected by integrated and sustainable transport options.	
Objective 4.2: The transport system provides safe, fair and equitable travel options.	

Actions – short-term	4.1	4.2
A1.35 Park 'n' ride demand management Develop options for managing park 'n' ride demand across SEQ. This will include identification and management of strategic park 'n' ride sites.	✓	✓
A1.36 Personalised journey planning Investigate opportunities to support efforts to develop customer interfaces that integrate all transport modes and combine planning, booking and payment to offer a personalised, seamless transport experience.	✓	✓
A1.37 Personalised transport planning Apply the learnings from the Demand Responsive Transport (DRT) trial in Logan to identify appropriate locations and service design options to deliver DRT services that integrate with and complement the high-frequency public transport network to support local mobility.		✓
A1.38 Real-time data (public transport) Investigate the feasibility and merits of enhancing the existing real-time information produced to provide a broader range of data to service providers and the general public, including providing capacity information and service disruptions.	✓	✓
A1.39 Smart ticketing (public transport) Develop and implement a smart ticketing solution for Queensland that enhances the customer experience, is cost-effective and able to adapt to future growth and technology.		✓

Park ‘n’ Ride Strategy

Park ‘n’ ride facilities play an important role in South East Queensland’s public transport system. They connect a diverse range of customers to public transport, can help reduce traffic congestion and improve access for those with mobility difficulties.

The Queensland Government‘s Park ‘n’ Ride Strategy sets out planning principles to guide the selection of locations and inform the design of commuter parking facilities.

Key considerations in establishing or upgrading park ‘n’ ride facilities include:

- growing public transport patronage
- affordable to build and maintain
- supporting strategic transport and land-use outcomes
- inclusive and integrated design
- potential to reduce traffic congestion.

3.2 Future network

The planned future network for SEQ seeks to support a region of more complete and interconnected communities through a multi-modal and integrated regional transport system. It will prioritise frequent and reliable public and active transport for people and efficient freight networks for goods.

Figures 11, 12, 13 and 14 present the indicative future frequent public transport network for SEQ, and the Inner Brisbane, Gold Coast and Sunshine Coast. Where existing 2019 frequent network links are to be upgraded and improved, the figures present the indicative highest-order network link at 2041. Stops and stations (not all shown) are included for mapping and orientation purposes. This indicative frequent network, subject to further detailed planning, builds on the network and region shaping projects presented in *ShapingSEQ,* the draft *Creating Better Connections for Queenslanders*, and the *Connecting Brisbane* strategy.

By identifying the core, high-frequency parts of the future public transport network, we can provide a consistent longer term template for public transport planning and how it will be integrated with other types of services, modes and land uses. This planned future public transport network will support the efficient movement of people and high-quality, sustainable and liveable communities. The network will be key to achieving the desired outcomes within *ShapingSEQ* and Transport and Main Roads' vision of a single integrated network accessible to everyone.

It builds on a maturing transport system and seeks to support sustainable growth in SEQ. It also provides the framework for identification and delivery of region shaping infrastructure as high-frequency public transport corridors develop and intensify.

The indicative network shown in Figures 11–14 will be supported by a robust and safe active transport network that will connect to activity centres and transit stations across the region. In particular, this will be facilitated through a well-connected bike network as outlined in the Principal Cycle Network Plans that have been prepared for the regions.

Figure 15 (on page 56) outlines the planned future road and freight network within SEQ. It highlights the existing key freight routes as well as planned road and rail corridors to also be delivered over the longer term timeframe to 2041. These parts of the future network support regional connectivity, productivity and prosperity. They are key to supporting the efficient movement of goods across SEQ and the freight system's role in contributing to SEQ's globally competitive economy.

Creating Better Connections for Queenslanders

The Queensland Government is developing a 10-year plan to set out the priorities and key initiatives for passenger transport in Queensland. *Creating Better Connections for Queenslanders* will contribute to realising Transport and Main Roads' purpose of creating a single, integrated transport system accessible to everyone and the 30-year vision for transport set by the Queensland Transport Strategy. *Creating Better Connections for Queenslanders* will plan for providing reliable and frequent services to move large numbers of people quickly and easily on the busiest corridors in our towns and cities. While at the same time, expanding our use of on-demand public transport, rideshare, taxi, feeder buses, and active travel to conveniently connect people from their door to these high-frequency services.

Connecting Brisbane

Connecting Brisbane presents a shared vision and an integrated strategy of the Queensland Government and Brisbane City Council for the future of Brisbane's public transport system and connections to neighbouring local government areas.

Connecting Brisbane brings together strategic infrastructure, land use and transport planning at all three levels of government and focuses on the public transport component of passenger transport, including heavy rail, bus, metro and ferry.

The Regional Transport Plans directly respond to the challenges and opportunities presented in *Connecting Brisbane*, through identifying priorities and actions across the South Coast, Metropolitan and North Coast regions.

Buses in Brisbane City

Figure 11: SEQ Indicative Frequent Public Transport Network 2041

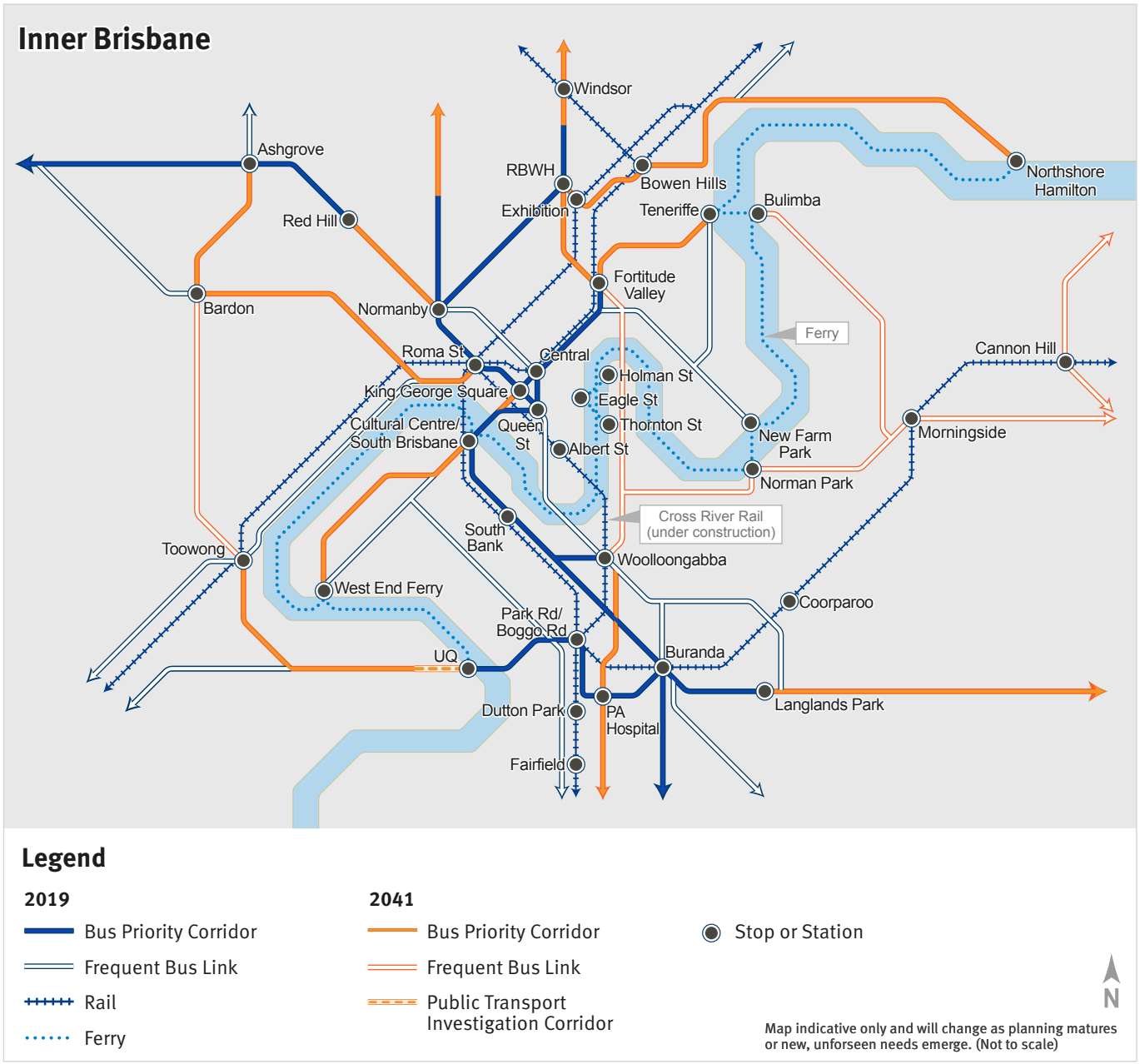


Figure 12: Inner Brisbane Indicative Frequent Public Transport Network 2041

Definitions

Frequent

Services typically every 15 minutes, from 7am to 7pm, 7 days a week.

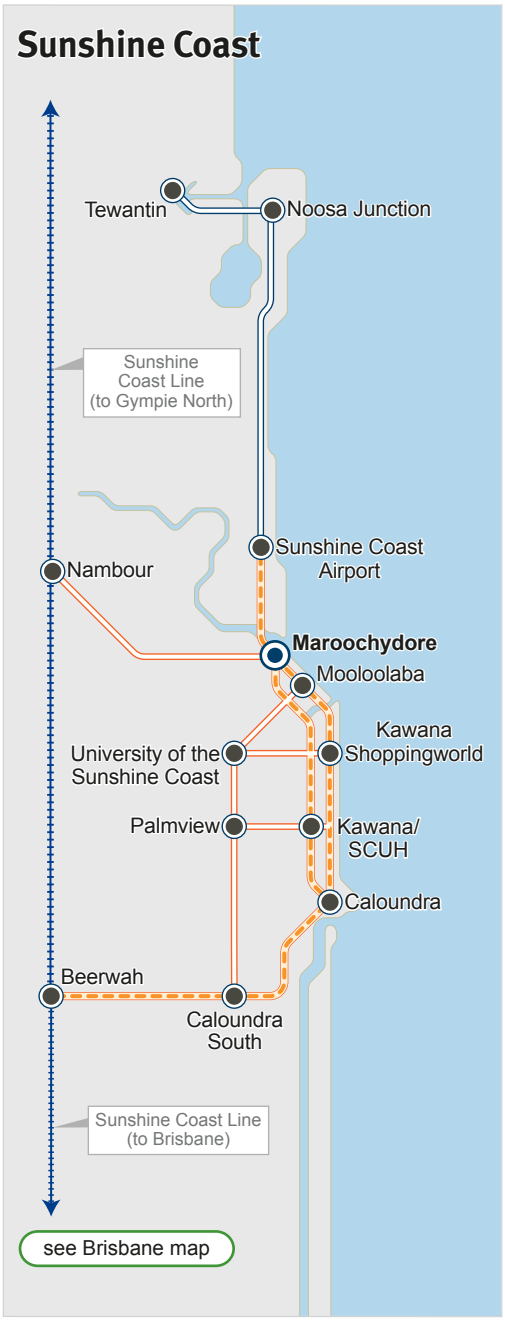
Bus Priority Corridor

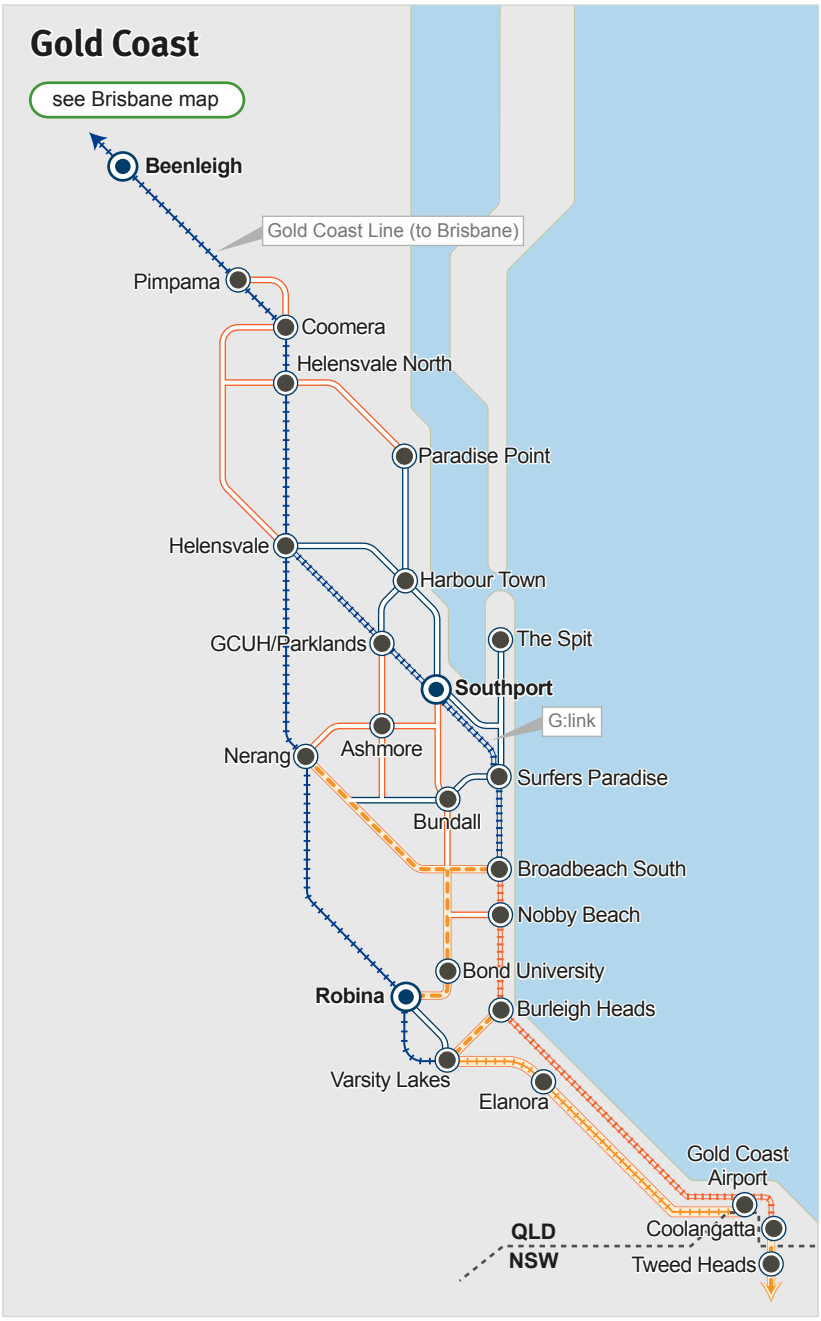
Corridors that provide frequent bus links with bus priority measures to deliver bus passengers with priority and travel time reliability. Priority measures may include T2 lanes, intersection right-of-way, bus lanes or dedicated busways.

Investigation Corridors

Corridors being investigated or preserved for future high-quality public transport links using dedicated infrastructure such as heavy rail, light rail or dedicated busway. Planning for these corridors may have identified a preferred mode (such as heavy rail), while other corridors require further investigation and consideration.

Planning to determine time-frames for delivery, corridor requirements, confirmation of mode, and interim network arrangements is ongoing.





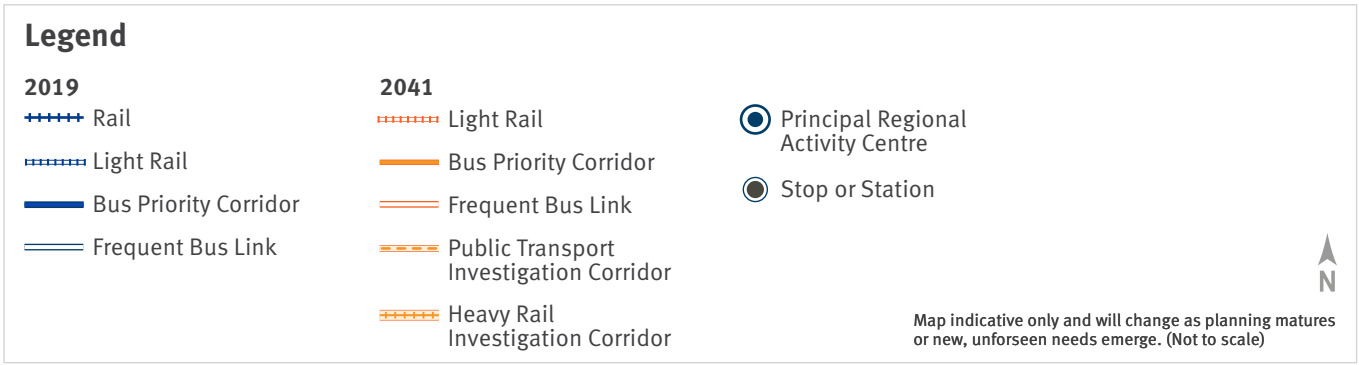


Figure 13: Sunshine Coast Indicative Frequent Public Transport Network 2041

Figure 14: Gold Coast Indicative Frequent Public Transport Network 2041

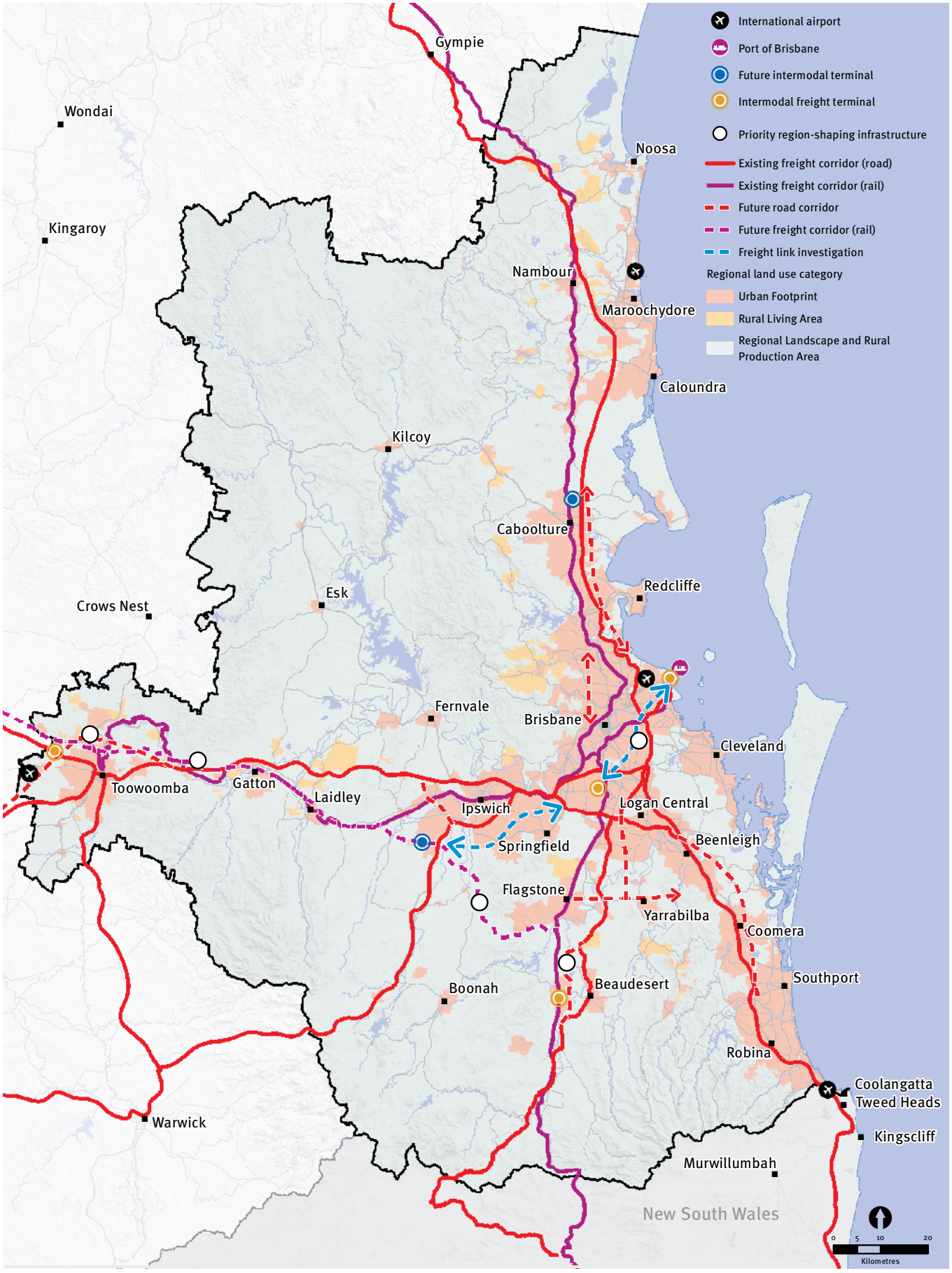


Figure 15: Planned Future Strategic Road and Freight System 2041

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

Redland Bay Marina

Redcliffe Peninsula, Moreton Bay; Brisbane Valley Rail Trail, Somerset; Hastings Street, Noosa; Kings Beach, Sunshine Coast

4.

North Coast Regional Transport Plan

Moreton Bay · Noosa · Somerset · Sunshine Coast

4.1 Region overview

The North Coast region (Figure 16) is the northernmost part of South East Queensland (SEQ) and includes Moreton Bay, Noosa, Somerset and Sunshine Coast local government areas.

THE NORTH COAST REGION COVERS AN AREA OF **10,539 KM²**

POPULATION GROWTH 2016–2041

820,900 PEOPLE

1,312,600 PEOPLE

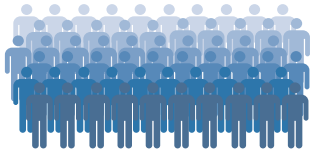
GROSS REGIONAL PRODUCT IN 2017–18 **$35 B** OR **10%** OF GROSS STATE PRODUCT

IN 2016 **25%** OF THE SEQ POPULATION LIVED IN THE NORTH COAST REGION

BY 2041 **25%** OF THE SEQ POPULATION IS PROJECTED TO LIVE IN THE NORTH COAST REGION

THERE IS **2429 KM²** OF NATURAL PARK AND ENVIRONMENTAL LAND

THE AVERAGE REGIONAL POPULATION DENSITY IS **78 PEOPLE PER KM²**



THE AVERAGE DAILY TEMPERATURE RANGE IS **13.8°c – 25°c**

THE AVERAGE RAINFALL IS **1195 MM** PER ANNUM

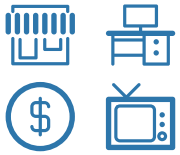
SUNSHINE COAST AIRPORT EXPANSION WILL CONTRIBUTE **$4.1 B** TO THE SUNSHINE COAST ECONOMY BETWEEN **2020 AND 2040**

IN 2019 SUNSHINE COAST AIRPORT HAD OVER **1.28 MILLION** PASSENGERS MOVEMENTS

$$$

REGIONAL MEDIAN PERSONAL INCOME PER ANNUM **$32,705**

THE REGION HAS MORE THAN **317,700 JOBS**



EMPLOYMENT WITHIN THE REGION

15.3% HEALTH CARE AND SOCIAL ASSISTANCE

13% RETAIL TRADE

10.1% EDUCATION AND TRAINING

9.5% CONSTRUCTION

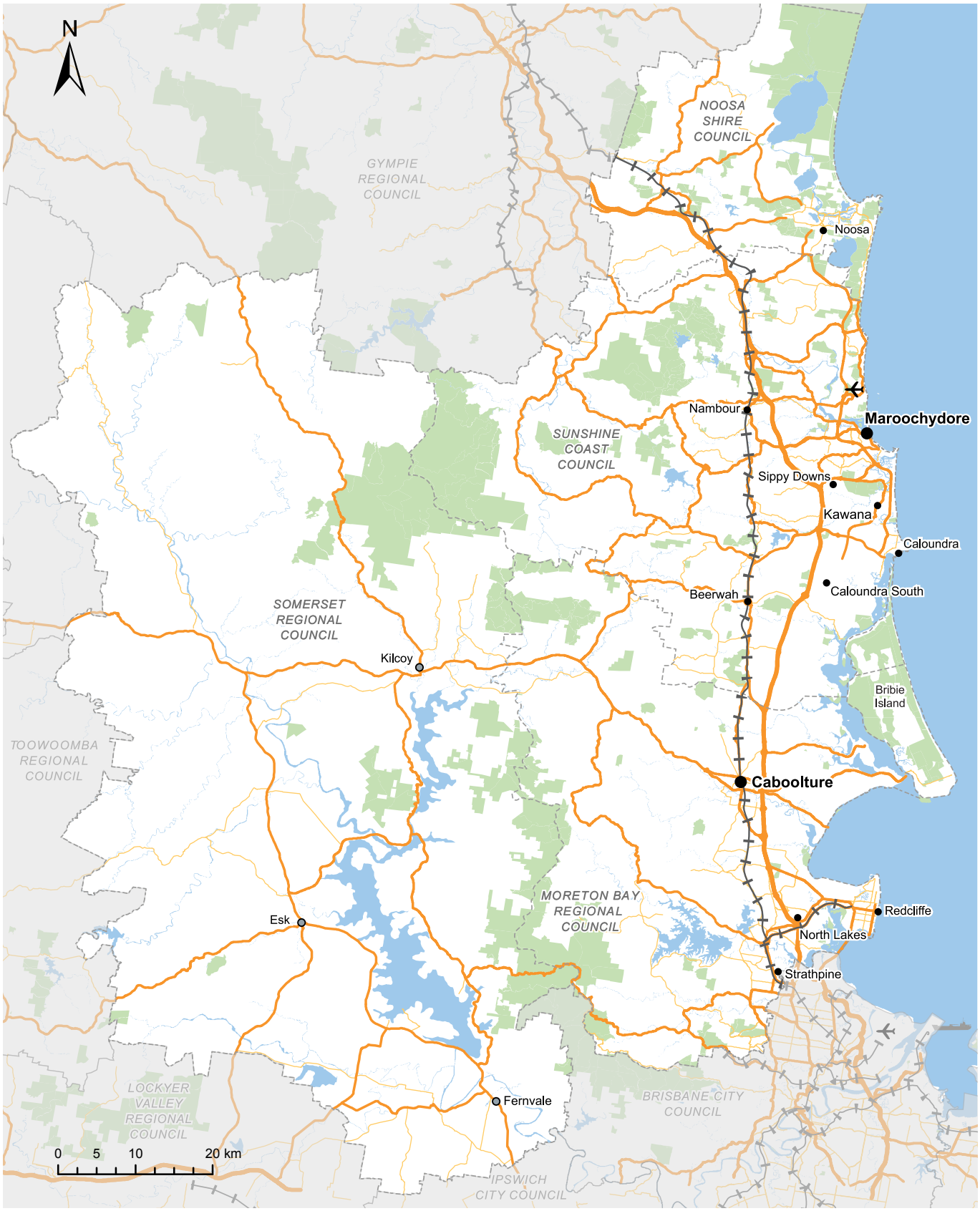
SHAPINGSEQ IDENTIFIES GROWTH IN

HEALTH CARE AND SOCIAL ASSISTANCE

CONSTRUCTION

17.3% OF THE POPULATION IS AGED 65 YEARS AND OVER

Sources:
Queensland Government Statistician's Office. (2018). *Queensland Regional Profiles: Resident Profile for North Coast Region.*
National Institute of Economic and Industry Research. (2018). *National Economic Indicators for Local Government Areas, 2017/2018.*
Bureau of Infrastructure, Transport and Regional Economics. (2020). *Airport traffic data.*
Department of Infrastructure, Local Government and Planning. (2017). *ShapingSEQ – South East Queensland Regional Plan 2017.*
Sunshine Coast Regional Council. (2019, September 26). *Sunshine Coast Airport expansion project receives Federal Government loan.* [Media release].
Queensland Government Statistician's Office. (2018). *Projected population (medium series), by five–year age group and sex, by local government area, Queensland, 2016 to 2041.*
Australian Bureau of Statistics. (2018). *Regional Population by Age and Sex, Australia, 2018 (Catalogue No. 3235.0).*
Australian Bureau of Statistics. (2016). *2016 Census of Population and Housing, Working Population Profile.*



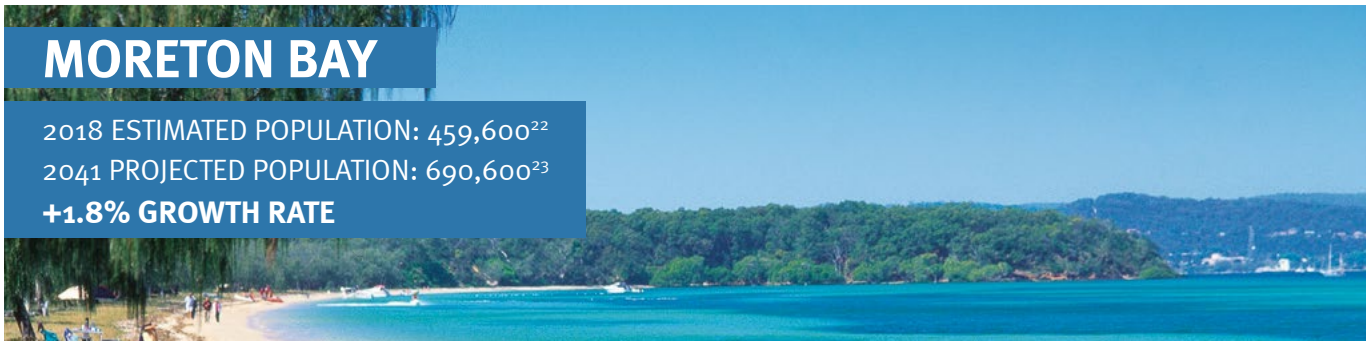
Legend

- National roads
- State-controlled roads
- Local roads of regional significance
- Strategic airport
- Rail line
- Local government boundary

Regional activity centres

- Principal
- Major
- Major rural

Figure 16: The North Coast region



MORETON BAY

2018 ESTIMATED POPULATION: 459,600[22]
2041 PROJECTED POPULATION: 690,600[23]
+1.8% GROWTH RATE

Economy:

The Moreton Bay local government area produced $15.63 billion of Gross Regional Product and had 144,243 jobs and 27,026 businesses in 2017–18.[24] Manufacturing, retail and construction activity have been supported by robust population growth to deliver strong and sustained economic growth for the area.[25] Further growth is expected in the tertiary education, logistics, hi-tech manufacturing and IT, and professional services sectors.[26]

As of 2016, the health care and social assistance industry provided 14.9 per cent of all jobs within Moreton Bay, followed by retail trade (14.1 per cent), education and training (10.9 per cent) and construction (10.0 per cent).[27]

Employment:

In 2016, the main industries in which Moreton Bay residents were employed included health care and social assistance (13.4 per cent), retail trade (10.9 per cent), construction (10.8 per cent) and education and training (8.1 per cent).[28]

Growth:

Moreton Bay is expecting growth of 231,000 people by 2041.[29] *ShapingSEQ* indicates that an additional 88,300 dwellings[30] will be required to accommodate the population growth projected for Moreton Bay, with 55 per cent of those dwellings expected to be provided through consolidation.[31]

Education:

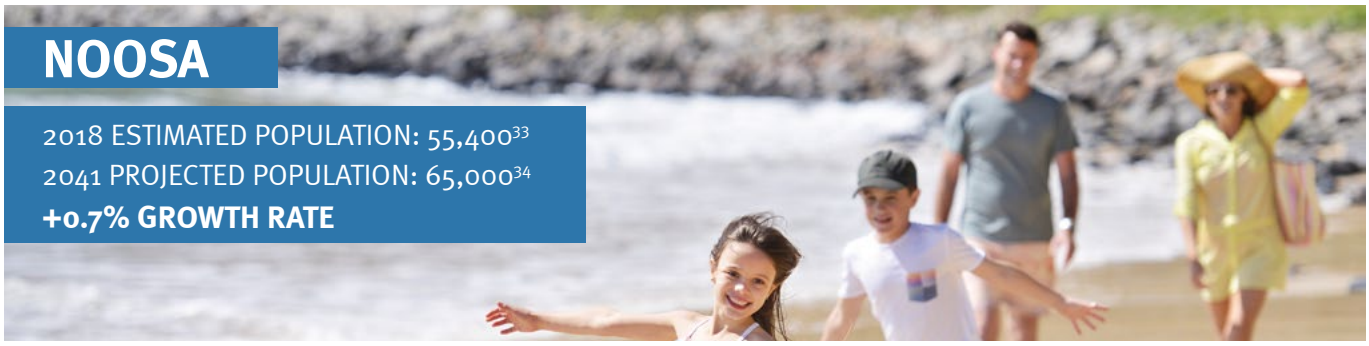
The University of the Sunshine Coast campus at the Mill in Moreton Bay will cater for up to 10,000 students by 2030. The campus is situated in a 460 hectare Priority Development Area within the suburbs of Petrie, Kallangur and Lawnton.[32]

Recreation:

Moreton Bay's coastal locality provides significant outdoor precincts and environments for recreational enjoyment including boating and fishing, camping, water sports, bushwalking and hiking. The area is also home to the Moreton Bay Marine Park and the Moreton Bay Ramsar site which protect a vast array of marine habitats, plants and animals. Bribie Island National Park, as well as the D'Aguilar National park on the Somerset local government area border are also located within the region. The area also benefits from the recreational opportunities in neighbouring regions of Sunshine Coast in the north and Brisbane in the south.

22 Australian Bureau of Statistics. (2019). *Regional Population Growth, Australia (cat. no. 3218.0).*
23 Queensland Government Statistician's Office. (2018). *Queensland Government population projections, 2018 edition.*
24 National Institute of Economic and Industry Research. (2018). *National economic indicators for local government areas, 2017/2018.*
25 Moreton Bay Region. (2015). *Industry and Tourism.*
26 Moreton Bay Regional Council. (2016). *Business section*
27 Queensland Government Statistician's Office. (2018). *Queensland Regional Profiles: Workforce Profile for Moreton Bay (R) Local Government Area.*
28 Queensland Government Statistician's Office. (2018). *Queensland Regional Profiles: Resident Profile for Moreton Bay (R) Local Government Area.*
29 Queensland Government Statistician's Office. (2018). *Queensland Government population projections, 2018 edition.*
30 Dwelling supply benchmarks based on ShapingSEQ policy for growth distribution by local government area.
31 Department of Infrastructure, Local Government and Planning. (2017). *ShapingSEQ – South East Queensland Regional Plan 2017.*
32 Moreton Bay Regional Council. (2019). *The Mill at Moreton Bay.*

NOOSA



2018 ESTIMATED POPULATION: 55,400[33]
2041 PROJECTED POPULATION: 65,000[34]
+0.7% GROWTH RATE

Economy:

The Noosa local government area produced $2.8 billion of Gross Regional Product and had 24,923 jobs and 6896 businesses in 2017-18.[35] Noosa's economy relies significantly on the tourism, retail and construction sectors and is positioned for growth in fields including health care, environmental industries, rural enterprise, creative industries and professional services.[36]

As of 2016, the accommodation and food services industry provided 15.1 per cent of all jobs within Noosa, followed by retail trade (14.4 per cent), health care and social assistance (13.2 per cent) and construction (8.4 per cent).[37]

Employment:

In 2016, the main industries in which Noosa residents were employed included health care and social assistance (13.1 per cent), accommodation and food services (12.2 per cent), retail trade (11.6 per cent) and construction (10.7 per cent).[38]

Growth:

Noosa is expecting growth of 9600 people by 2041.[39] *ShapingSEQ* indicates that an additional 6400 dwellings,[40] will be required to accommodate the population growth projected for Noosa with 75 per cent of those dwellings expected to be provided through consolidation.[41]

Education:

Central Queensland University has a satellite campus in Noosa. The campus has recently been expanded to accommodate 1200 students.[42]

Recreation:

The area features many pristine beaches that stretch along the coastline, the surrounding hinterland and national parkland, including Noosa National Park. Noosa is home to the Noosa Biosphere Reserve and Ramsar Wetlands. Noosa River offers numerous picnic spots, boat trips and other activities to explore the river. These tourism drawcards also provide residents with world-class spaces for recreation. This is coupled with natural and environmental areas and community spaces and facilities.

33 Australian Bureau of Statistics. (2019). *Regional Population Growth, Australia (cat. no. 3218.0).*
34 Queensland Government Statistician's Office. (2018). *Queensland Government population projections, 2018 edition.*
35 National Institute of Economic and Industry Research. (2018). *National Economic Indicators for Local Government Areas, 2017/18.*
36 Noosa Shire Council. (2016). *Local Economic Plan.*
37 Queensland Government Statistician's Office. (2018). *Queensland Regional Profiles: Workforce Profile for Noosa (S) Local Government Area.*
38 Queensland Government Statistician's Office. (2018). *Queensland Regional Profiles: Resident Profile for Noosa (S) Local Government Area.*
39 Queensland Government Statistician's Office. (2018). *Queensland Government population projections, 2018 edition.*
40 Dwelling supply benchmarks based on ShapingSEQ policy for growth distribution by local government area.
41 Department of Infrastructure, Local Government and Planning. (2017). *ShapingSEQ – South East Queensland Regional Plan 2017.*
42 Central Queensland University. (2019). *Noosa.* https://www.cqu.edu.au/about-us/locations/noosa.

SOMERSET

2018 ESTIMATED POPULATION: 25,900[43]
2041 PROJECTED POPULATION: 39,000[44]
+1.8% GROWTH RATE

Economy:

The Somerset local government area produced $923 million of Gross Regional Product and had 7458 jobs and 2013 businesses in 2017-18.[45] While manufacturing, agriculture and construction will remain strong contributors to Somerset's economy in the future, there will also be strong growth in transport, retail trade and education and training sectors.[46]

As of 2016, the manufacturing industry provided 17.8 per cent of all jobs within Somerset, followed by agriculture, forestry and fishing (13.2 per cent), education and training (11.0 per cent) and retail trade (9.3 per cent).[47]

Employment:

In 2016, the main industries in which Somerset residents were employed included manufacturing (12.4 per cent) and health care and social assistance (10.1 per cent), while both the agriculture, forestry and fishing sector and the construction industry accounted for 9.2 per cent each.[48]

Growth:

Somerset is expecting growth of 13,100 people by 2041.[49] *ShapingSEQ* indicates that an additional 6200 dwellings,[50] will be required to accommodate the population growth projected for Somerset with all dwellings expected to be provided through consolidation.[51]

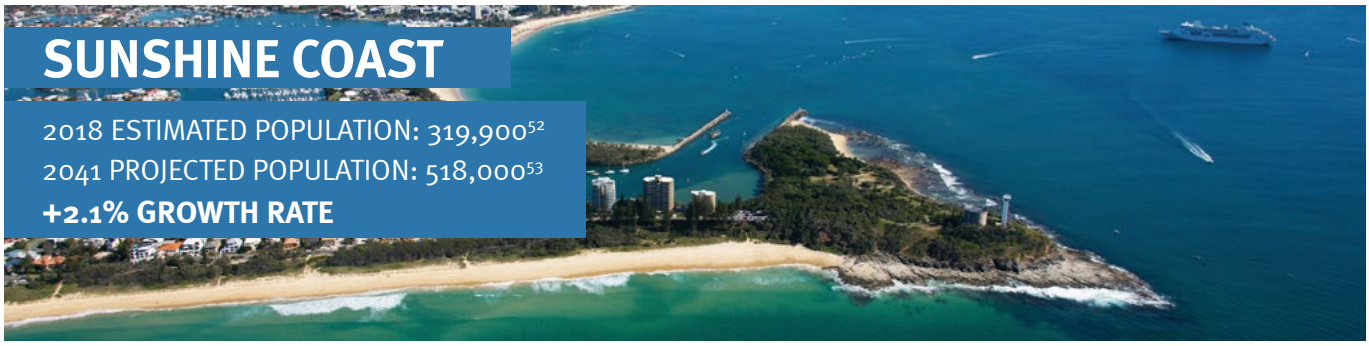
Education:

Universities in adjoining areas including Lockyer Valley, Toowoomba, Ipswich, Brisbane and Sunshine Coast provide educational opportunities for the Somerset area.

Recreation:

Somerset features rural and natural landscapes which provide recreational opportunities for both residents and visitors. Rural villages and towns are also a drawcard for the area. The Somerset and Wivenhoe dams provide a range of outdoor recreational options such as boating and fishing. The D'Aguilar National Park also runs along the border with the Moreton Bay local government area.

43 Australian Bureau of Statistics. (2019). *Regional Population Growth, Australia (cat. no. 3218.0).*
44 Queensland Government Statistician's Office. (2018). *Queensland Government population projections, 2018 edition.*
45 National Institute of Economic and Industry Research. (2018). *National Economic Indicators for Local Government Areas, 2017/2018.*
46 Somerset Regional Council. (2016). *Somerset Economic Development Plan 2015–2020.*
47 Queensland Government Statistician's Office. (2018). *Queensland Regional Profiles: Workforce Profile for Somerset (R) Local Government Area.*
48 Queensland Government Statistician's Office. (2018). *Queensland Regional Profiles: Resident Profile for Somerset (R) Local Government Area.*
49 Queensland Government Statistician's Office. (2018). *Queensland Government population projections, 2018 edition.*
50 Dwelling supply benchmarks based on ShapingSEQ policy for growth distribution by local government area.
51 Department of Infrastructure, Local Government and Planning. (2017). *ShapingSEQ – South East Queensland Regional Plan 2017.*



SUNSHINE COAST

2018 ESTIMATED POPULATION: 319,900[52]
2041 PROJECTED POPULATION: 518,000[53]
+2.1% GROWTH RATE

Economy:

The Sunshine Coast local government area produced $15.74 billion of Gross Regional Product and had 141,117 jobs and 30,748 businesses in 2017–18.[54] The construction, retail and tourism sectors and the health, education and professional services sectors are the primary industries in the region and are increasingly growing their contribution to the area's economic output.[55]

As of 2016, the health care and social assistance industry provided 16.4 per cent of all jobs within the Sunshine Coast, followed by retail trade (11.9 per cent), education and training (9.6 per cent) and construction (9.4 per cent).[56]

Employment:

In 2016, the main industries in which Sunshine Coast residents were employed included health care and social assistance (15.0 per cent), construction (12.2 per cent), retail trade (10.9 per cent) and education and training (9.0 per cent).[57]

Growth:

Sunshine Coast is expecting an additional 198,100 people to reside in the region by 2041.[58] *ShapingSEQ* indicates that an additional 87,000 dwellings[59] will be required to accommodate the population growth projected for the Sunshine Coast, with 62 per cent of those dwellings expected to be provided through consolidation.[60]

Education:

The University of the Sunshine Coast has more than 17,000 students. The university is a foundation partner of the Sunshine Coast University Hospital which opened in 2017. It is the first tertiary teaching hospital to open nationally in the last 20 years and will be a significant employment hub for the area.[61]

Recreation:

The Sunshine Coast is renowned for its world-class beaches. It also features a wide variety of community facilities and precincts, outdoor spaces, as well as natural and hinterland areas. The unique Glass House Mountains also attract visitors and are a defining landscape feature of the North Coast Region. Moreton Bay Marine Park also extends north from the waters of Moreton Bay at Caloundra and is a haven for wildlife and visitors.

52 Australian Bureau of Statistics. (2019). *Regional Population Growth, Australia (cat. no. 3218.0).*
53 Queensland Government Statistician's Office. (2018). *Queensland Government population projections, 2018 edition.*
54 National Institute of Economic and Industry Research. (2018). *National Economic Indicators for Local Government Areas, 2017/2018.*
55 Sunshine Coast Council. (2013). *Sunshine Coast The Natural Advantage Regional Economic Development Strategy 2013–2033.*
56 Queensland Government Statistician's Office. (2018). *Queensland Regional Profiles: Workforce Profile for Sunshine Coast (R) Local Government Area.*
57 Queensland Government Statistician's Office. (2018). *Queensland Regional Profiles: Resident Profile for Sunshine Coast (R) Local Government Area.*
58 Queensland Government Statistician's Office. (2018). *Queensland Government population projections, 2018 edition.*
59 Dwelling supply benchmarks based on ShapingSEQ policy for growth distribution by local government area.
60 Department of Infrastructure, Local Government and Planning. (2017). *ShapingSEQ – South East Queensland Regional Plan 2017.*
61 Queensland Health. (2019). *Sunshine Coast University Hospital.*

4.1.1 Projected population and employment growth

Between 2016 and 2041, Moreton Bay and Sunshine Coast both expect significant population growth. Figure 17 shows the projected total population change by mappable areas across the region from 2016 to 2041. Areas projected for high levels of growth include western and southern areas of Caloundra and Landsborough on the Sunshine Coast, and Narangba, Morayfield, Caboolture and the North Lakes – Mango Hill areas in the Moreton Bay local government area.

Some of this growth is anticipated to be consolidation, which provides opportunities for urban consolidation and trunk public transport services. Nevertheless, there will also be expansion development, for which appropriate servicing options need to be considered for lower density areas.

Figure 17 also depicts high population growth in northern areas of Noosa Shire Council and southern areas of Somerset, however this change is over the total land area and subsequently the intensity of change is anticipated to be lower. Noosa and Somerset will continue to be low growth areas.

Figure 18 shows where projected employment growth is expected in the North Coast region, with highest growth forecast in Maroochydore and western and southern areas of Caloundra on the Sunshine Coast, and at Caboolture and at Strathpine – Brendale in the Moreton Bay local government area.

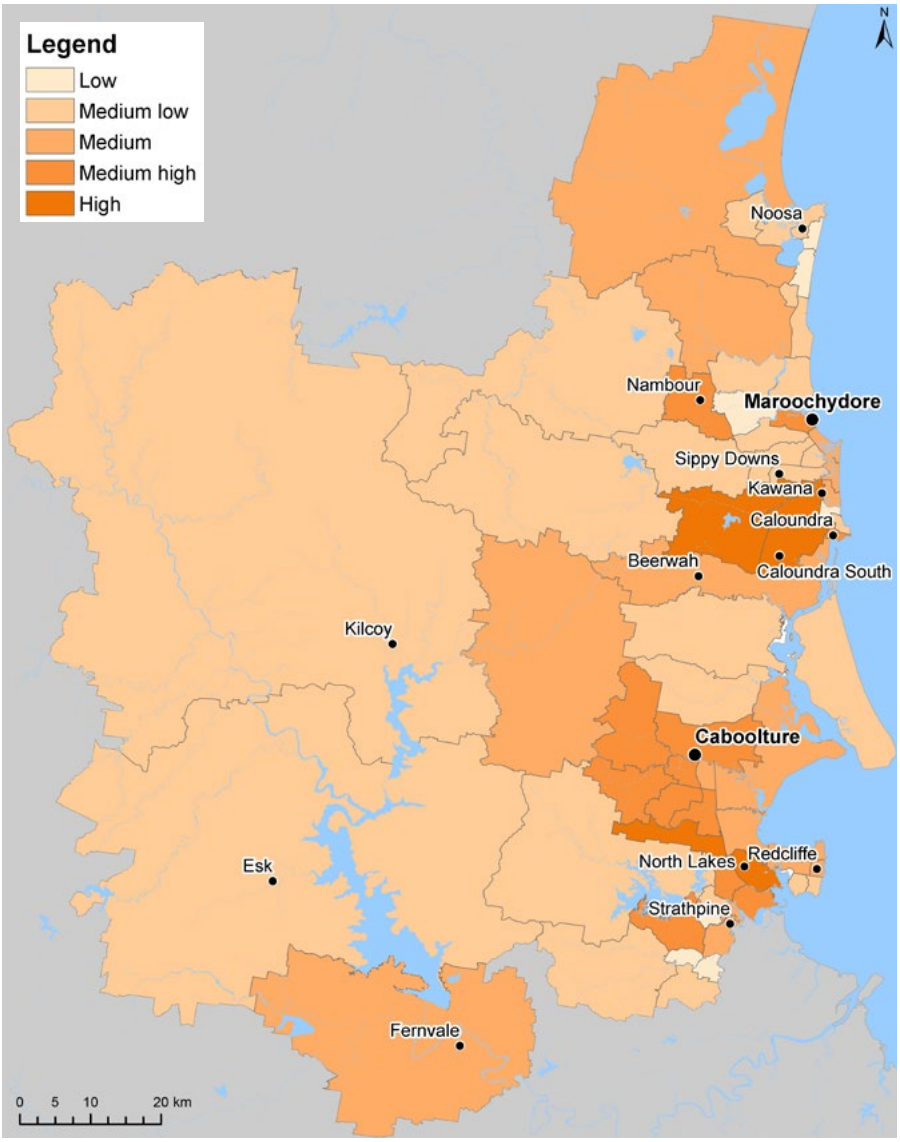


Figure 17: North Coast total projected population growth, 2016-2041

Source: Queensland Government Statistician's Office. (2018). *Queensland Government Population Projections:2018 edition (medium series).*

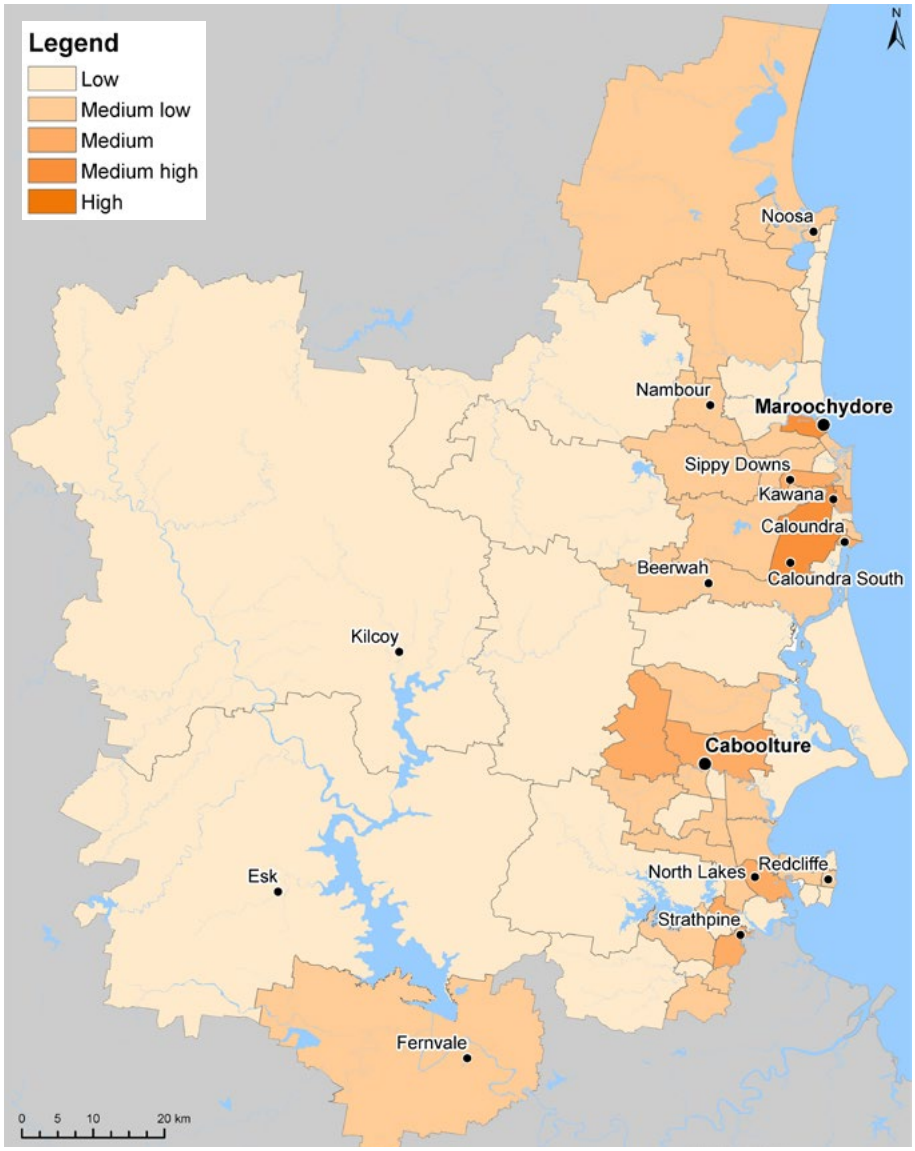


Figure 18: North Coast total projected employment growth, 2016-2041

Source: Queensland Treasury. (2016). Regional Employment Projections, 2010-11 to 2040-41. Department of Transport and Main Roads. (2019).

4.1.2 Regional economic and growth areas

A range of regional economic and growth areas will have an impact on the current and future regional transport network.

These areas include State Development Areas, Priority Development Areas, regional economic clusters, knowledge and technology precincts and major expansion areas. These areas are highlighted in Figure 19 and are detailed further in *ShapingSEQ*.

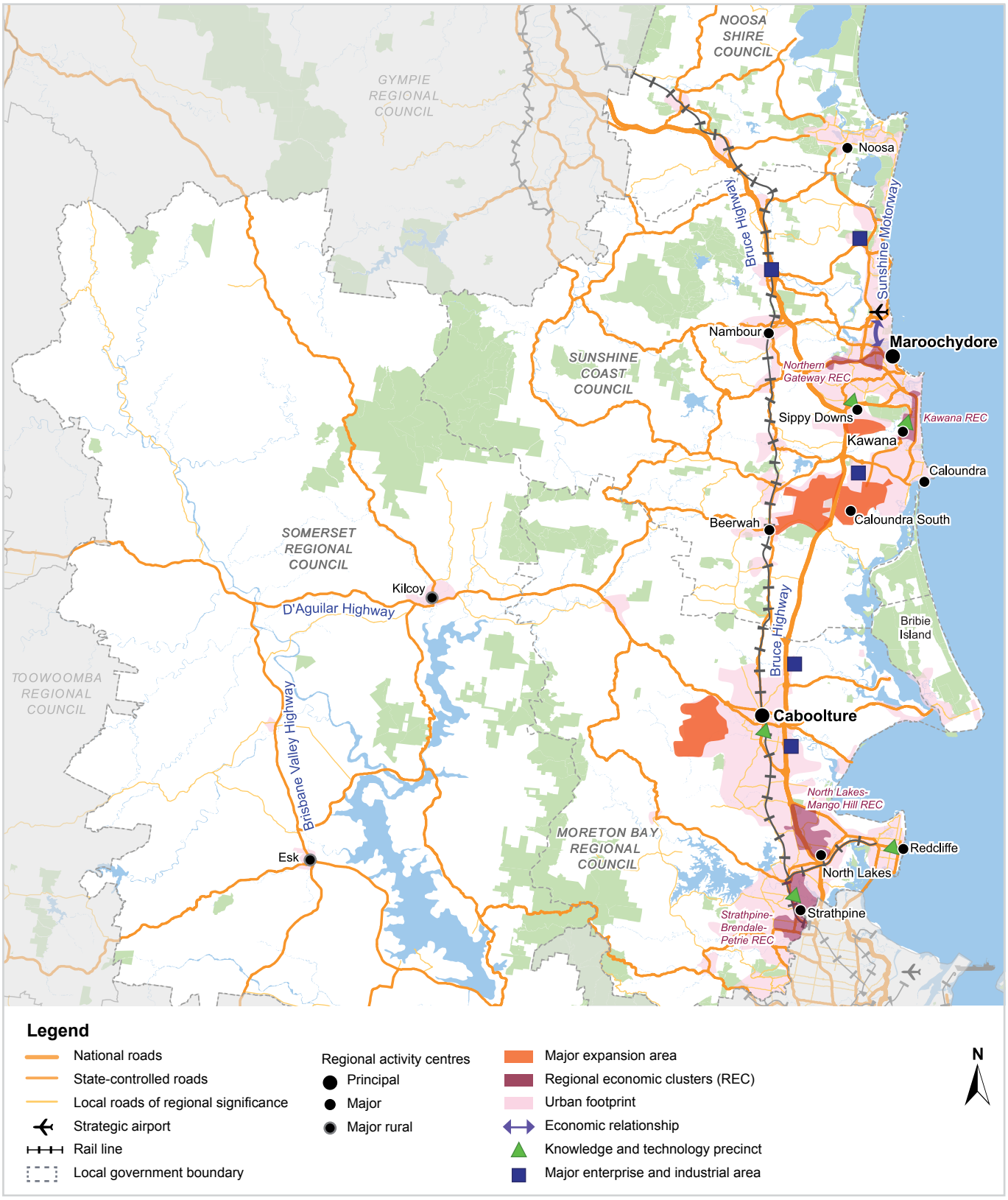


Figure 19: Regional economic and growth areas for the North Coast

4.1.3 Key regional projects

A number of major large-scale projects in public transport, road transport and urban development will help create significant social, economic or environmental opportunities and play a critical role in driving and shaping the North Coast region. These projects are detailed below.

Maroochydore City Centre

The development of the Maroochydore City Centre represents a once in a lifetime opportunity to establish a new capital city for the Sunshine Coast. The project will be instrumental in building and strengthening the region, providing a mix of residential, commercial, retail, civic and community uses to create a vibrant business and city centre. Key to its development will be the establishment of an efficient and effective public transport system and connections to the existing road network.

Beerburrum to Nambour (B2N) rail upgrade

Detailed design and delivery planning for the Beerburrum to Nambour Rail Upgrade project commenced in 2018. The project scope includes duplication of the rail track on an improved alignment between Beerburrum and Glasshouse Mountains, duplication of the rail track primarily on the existing alignment between Glasshouse Mountains and Landsborough, as well as station upgrades and passing loop extensions between Landsborough and Nambour. It will investigate a range of other upgrades including enabling road works. Construction is expected to take five years.

Sunshine Coast Airport expansion

The expansion undertaken by Sunshine Coast Council became operational in June 2020 and delivered a new runway and passenger facilities to cater for more international flights, a potential airfreight role, as well as a knowledge and technology precinct for the aviation and aerospace industry.

Kawana Town Centre

The Sunshine Coast Council is facilitating a master planned community at Kawana including an urban village and retail facility comprising of a mix of commercial, entertainment and residential uses. Sunshine Coast Council is seeking to achieve increased residential yields to support a transit oriented development and high quality public transport links. To support these land use planning objectives and grow economic opportunities, it is necessary to invest in state transport infrastructure and services. Transport and Main Roads will work with Sunshine Coast Council and proponents to support this objective (such as planning for upgrades to the Mooloolah River Interchange, Kawana Arterial and Sunshine Motorway).

Sunshine Coast University Hospital and health precinct

The precinct is located in Kawana and will create employment in a concentrated area and attract further business outside the region's traditional sectors of tourism, retail and construction. The precinct may present opportunities to target travel behaviour change programs.

The Mill at Moreton Bay

Located within the suburbs of Petrie, the Mill at Moreton Bay will create employment opportunities with a new campus for the University of the Sunshine Coast at its core. The onsite train station will connect local residents from both the Redcliffe Peninsula rail line and the Caboolture line to the new campus.

Beerwah to Maroochydore high-frequency public transport corridor

A passenger transport trunk corridor from Maroochydore to Caloundra and on to Beerwah has been identified in *ShapingSEQ*. Further investigation will be undertaken which will feed into the feasibility and business case for the high-frequency and high-capacity public transport project.

Bruce Highway upgrades

A number of key upgrades are planned across the Bruce Highway to help improve efficiencies. These upgrades will support both freight and passenger transport.

Rail station upgrades

A number of rail stations will be upgraded as part of the continuing Station Accessibility Upgrade program. These upgrades will significantly improve access for all customers including those with disability, the elderly, parents with prams, people with injuries or even simply those carrying luggage. Works have commenced at Dakabin Station with works also planned at Burpengary Station. Station upgrades vary depending on the requirements at each station, and may include lifts, walking footbridges, raised platforms, light and CCTV upgrades as well as bus stops, bicycle facilities, improved local walking connections as well as carpark upgrades.

Major development areas

Major development areas and Priority Development Areas (PDA) have been identified for specific accelerated development, with PDAs having a focus on economic growth. Locations within the North Coast region are:[62]

- Beerwah East
- Caloundra South PDA
- The Mill at Moreton Bay PDA
- Maroochydore City Centre PDA.

62 Department of State Development, Infrastructure Local Government and Planning. (2020). *Priority Development Areas.*

4.2 Regional transport network

4.2.1 Current regional transport network

The region's transport network is characterised by road and rail connections which also provide inter-regional connections to Gympie in the north and Brisbane in the south. The region includes a maturing road network and growing public and active transport networks.

Active transport

Transport and Main Roads and local governments recognise the important role active transport can play in the way people move. Currently less than 3 per cent of commuters across the region walk or bike ride to work.[63]

Well designed and connected streets and activity centres which encourage walking as the preferred method of travel present a range of social and economic benefits. This will be particularly important in activity centres where people walking and riding bicycles will be prioritised over vehicle movement.

Key cycle infrastructure projects underway or recently completed in the North Coast region include:

- planning for a bicycle route from Maroochydore to Alexandra Headland, parallel to Aerodrome Road and Alexandra Parade
- Mooloolaba to Minyama Separated Bikeway, the first separated bikeway within an urban/business area on the Sunshine Coast
- completion of missing links on the Eenie Creek Road Pathway, between Sunrise Beach and Tewantin
- completion of 9.2 kilometres of bicycle lane along Tanawha Tourist Drive, improving bicycle connections between Tanawha and Sippy Downs
- construction of bicycle facilities along David Low Way.

Public transport

The North Coast region is served by rail and bus services which are part of the integrated public transport system in SEQ managed by TransLink, with the exception of Somerset which currently lies outside the SEQ integrated ticketing boundaries.

The region's bus network connects with heavy rail to facilitate trips to wider destinations across SEQ. The rail network is connected to the overall SEQ passenger rail network. The region is served by the Sunshine Coast line and the Redcliffe Peninsula line.

The bus network in the region has different characteristics depending on the service area. In the Sunshine Coast and Noosa, the bus network is focussed on meeting customer demand in the coastal corridor from Tewantin and Noosa in the north and from Maroochydore to Caloundra in the south. Scheduled bus services also serve the two major inland activity centres of Nambour and the University of Sunshine Coast at Sippy Downs. These provide connections with the Queensland Rail Citytrain network to Brisbane and beyond and long distance Traveltrain passenger rail services.

The Moreton Bay local government area is within commuting distance of Brisbane City in the south. With major movements to northern Brisbane and Brisbane City, the bus network is focussed on meeting customer demand between Caboolture, Morayfield, Redcliffe, North Lakes and Strathpine. There is also commuter traffic which travels from the southern Sunshine Coast and southern Somerset areas to Brisbane.

In Somerset, an urban public transport bus service is provided from Kilcoy to Caboolture as part of the *qconnect* regional public transport service scheme.

Rail freight

Rail freight moves through the region on the North Coast line which shares track with passenger services. As with the rest of SEQ, passenger rail services are given priority and rail freight movements are restricted to off-peak commuter periods.

63 Australian Bureau of Statistics. (2019). *Method of Travel to Work (Employed Persons), Family and Community, Local Government Area, 2011-2018.*

Roads

The road network includes the Bruce Highway that runs through the region in a north-south direction. Within Moreton Bay local government area key east-west connections include Anzac Avenue, Deception Bay Road and King Street.

The main coastal activity and tourist centres of Maroochydore, Mooloolaba and Caloundra are connected by Nicklin Way, a major arterial road providing intra-regional access to these three communities. The Sunshine Motorway provides connections from Sippy Downs to Mooloolaba and along the coast providing access to Maroochydore, the airport and Noosa.

Caloundra Road and Kawana Way Link Road / Kawana Way provide a connection between the Bruce Highway and Kawana Town centre including access to the growth areas of Caloundra South and Bells Creek.

The Brisbane Valley Highway and D'Aguilar Highway are the major roads serving Somerset.

Several roads are approved to handle 'B-double' long multi-combination freight vehicles, including the Bruce Highway and D'Aguilar Highway. The road network is shown in Figure 19 (on page 68).

Air

Sunshine Coast Airport is a strategic airport offering services domestically to and from Sydney, Melbourne and Adelaide as well as seasonal services to Auckland. It is located to the north of the Sunshine Coast's major activity centre, Maroochydore. It is connected to the regional transport network via the Sunshine Motorway. An urban bus service is also provided for passenger and employee connectivity to the airport. In 2019, the airport served over 1,280,000 passengers.[64] Brisbane Airport in the south is also a key gateway for the region, in particular for southern areas such as Moreton Bay.

Marine

Private operators provide public timetabled ferry services for access to Tewantin, Noosaville and Noosa Heads. Across the region, Transport and Main Roads manages boating infrastructure in conjunction with local government, port authorities and private developers.

Maroochy River Bridge, Sunshine Motorway

64 Bureau of Infrastructure, Transport and Regional Economics. (2020). *Airport traffic data.*

4.2.2 Transport challenges in the North Coast region

In partnership with stakeholders the following challenges for the North Coast region have been identified.

Travel preferences and mode competitiveness

The North Coast region has high reliance on private vehicles. The proportion of public transport and active travel such as walking and bike riding have either declined or remained stable at small mode shares over time. Figure 20 provides a breakdown of method of travel to work in 2016.[65]

Employment travel patterns

In the North Coast region, many people travel both within and outside of their local government area for work each day. Figure 21 shows the extent of such movements. For example in 2016, approximately 50 per cent of employed people travelled within their respective local government areas in both Moreton Bay and Somerset. By 2041 there is projected to be little change in the number of people that travel for work in their respective local government areas.

Travelling longer commuting distances has tended to increase reliance on private vehicles across the North Coast region, with resulting congestion, potential environmental degradation and capacity constraints in peak periods. Current employment patterns also reinforce the importance of strong inter-regional passenger transport connections and enhancing capacity on the rail network during the peaks for people who travel into the Metropolitan region for work.

While there is a regional planning focus on future employment growth along key passenger transport corridors and in areas with better access to public transport, transport planning should also consider residents' choice to access employment opportunities across the wider SEQ region.

Road congestion

Customers and stakeholders highlighted road congestion as a key issue across the region, with many delays being experienced both during and outside the peak periods. Some of the key corridors include, but are not limited to, the Bruce Highway, Sunshine Motorway, Nicklin Way, Morayfield Road, Caloundra Road and Beckmans Road.

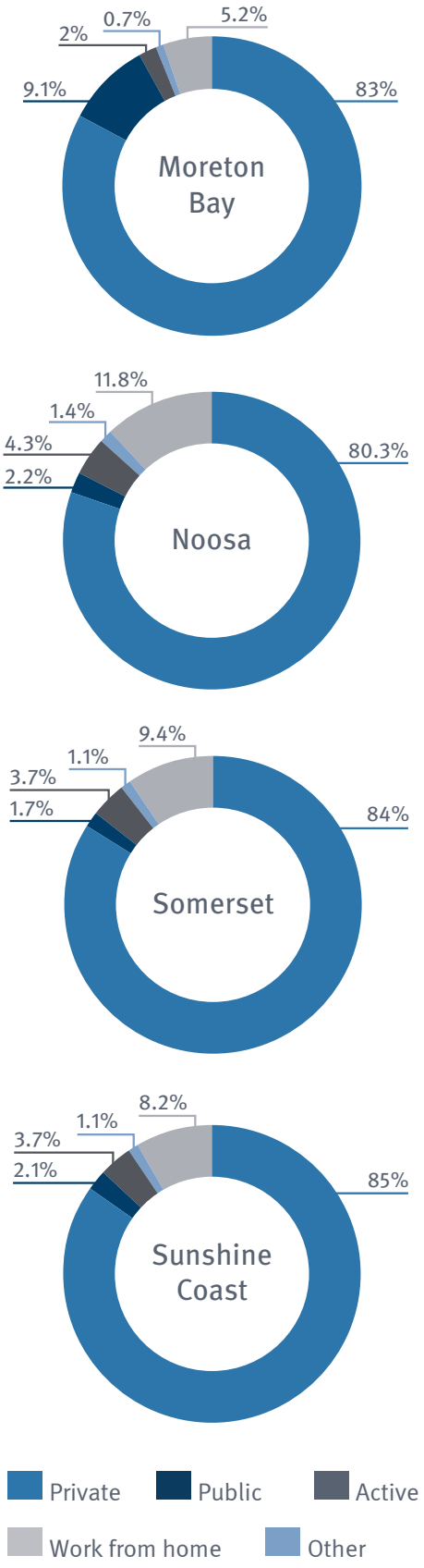
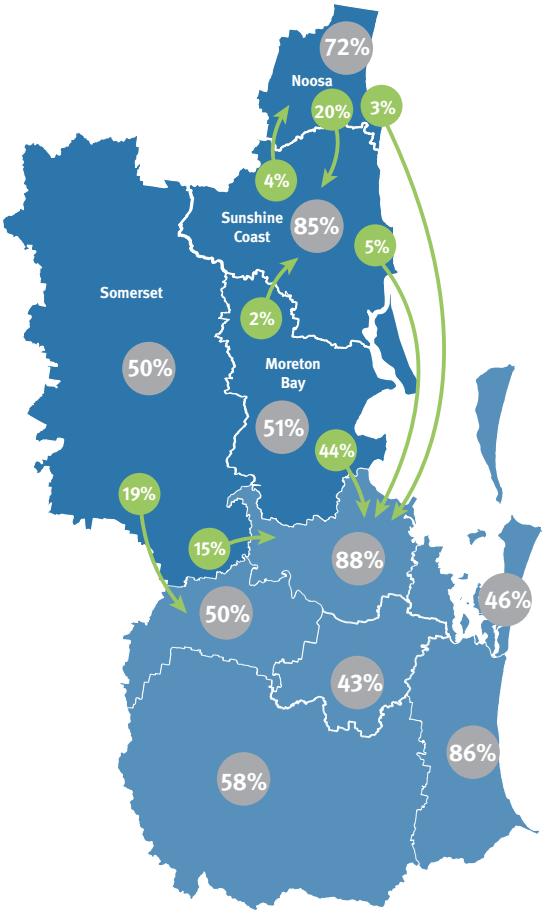


Figure 20: North Coast region mode share for journeys to work

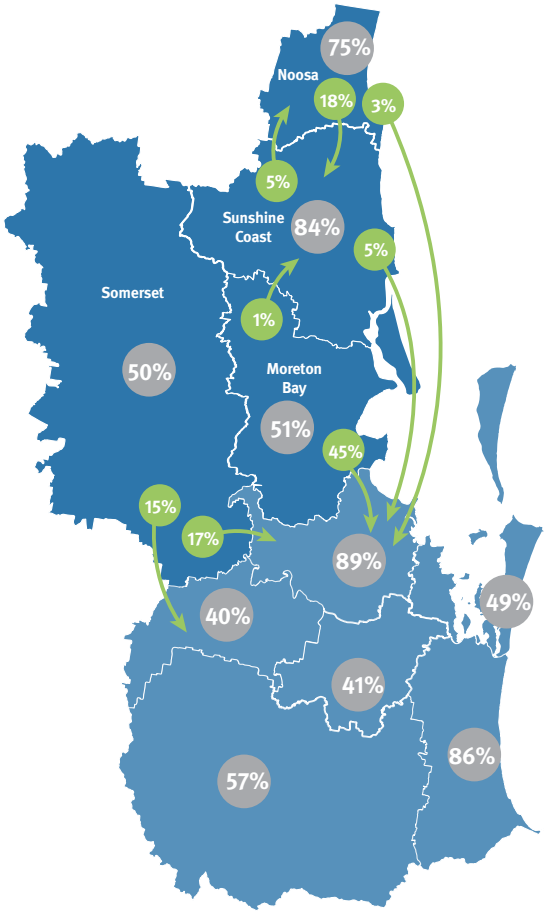
Source: Australian Bureau of Statistics. (2017). *2016 census – Travel to work*

65 Australian Bureau of Statistics. (2019). *Method of Travel to Work (Employed Persons), Family and Community, Local Government Area, 2011-2018.*

Proportion of people that work within their local government area in 2016



Projected proportion of people that work within their local government area in 2041



Total proportion of people working within their local government area

Proportion of people travelling to other local government areas for work

Figure 21: Proportion of people that work within their local government area in 2016 and 2041
Source: Queensland Treasury. (2016). *Journey to Work – South East Queensland, 2010-11 to 2040-41.*

Natural barriers such as rivers, wetlands, protected areas and mountain ranges often limit route options and lead to an unavoidable channeling of traffic along key corridors.

Road congestion has a negative impact on the economy. Figure 22 illustrates that the majority of congestion experienced across the network is recurring congestion,[66] and reductions can potentially occur through improved resilience, management of weather events, and decreasing the frequency and impact of incidents.

While private vehicles can sometimes be more time competitive for longer journeys, encouraging increased use of public and active transport can also help in reducing recurring congestion.

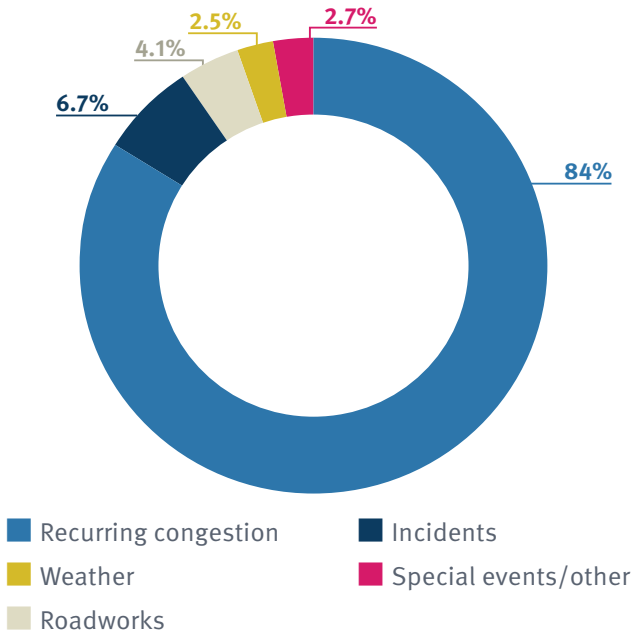


Figure 22: Excessive congestion in the North Coast region in 2018–19
Source: Department of Transport and Main Roads. (2019).

66 'Recurring congestion' is the level of congestion that regularly recurs along a corridor. In other words, this is where demand is exceeding capacity.

Reliance on the private vehicle

There is a heavy reliance on private vehicles to access activity centres from low density and rural areas across the North Coast region.

Public transport options are concentrated in the more densely settled locations such as the urban areas of Moreton Bay, Sunshine Coast and Noosa. Bus journey times are generally not comparable to private vehicles. Figures 23 and 24 show accessibility by car and public transport to the closest key centres. By comparing travel times, this shows that it is significantly easier to access most of the urbanised parts of the North Coast region by private vehicles than public transport. This includes growth areas such as: North Lakes/Mango Hill, Caboolture West, Beerwah East, Caloundra South and Palmview.

The Sunshine Coast and Noosa councils face peak weekend and holiday transport challenges which provides an opportunity for exploring initiatives to achieve modal shift during these periods. Focused marketing communications during holiday periods may reduce traffic and parking demand during peak periods and increase public transport use.

Challenges for freight traffic

The Bruce Highway is the major route for transporting agricultural products from production regions to export markets and beyond via Brisbane Airport and Port of Brisbane. It also plays a major role in transporting large and oversized freight to support mining operations in northern areas of the state. In the North Coast region, there are more than three movements of oversized freight vehicles per day.[67]

Freight by rail is carried on the North Coast line. Regional stakeholders have identified capacity issues and vulnerability to flooding which impacts the reliability and efficiency of freight haulage. The opportunity for growth in rail freight and a shift of regional freight movements from road to rail is constrained. Without upgrade and rail duplication, as proposed under the Beerburrum to Nambour rail upgrade, increasing passenger rail demands are likely to constrain rail freight growth opportunities further.

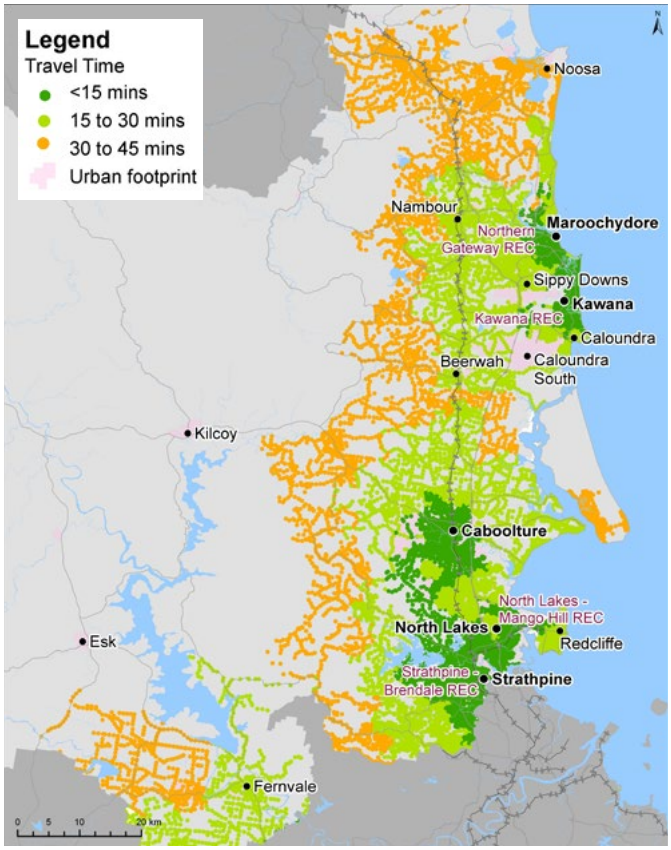


Figure 23: Car accessibility to the closest key centres in the North Coast region

Source: Department of Transport and Main Roads. (2019). *Output from the LUPTAI software, 2019.*

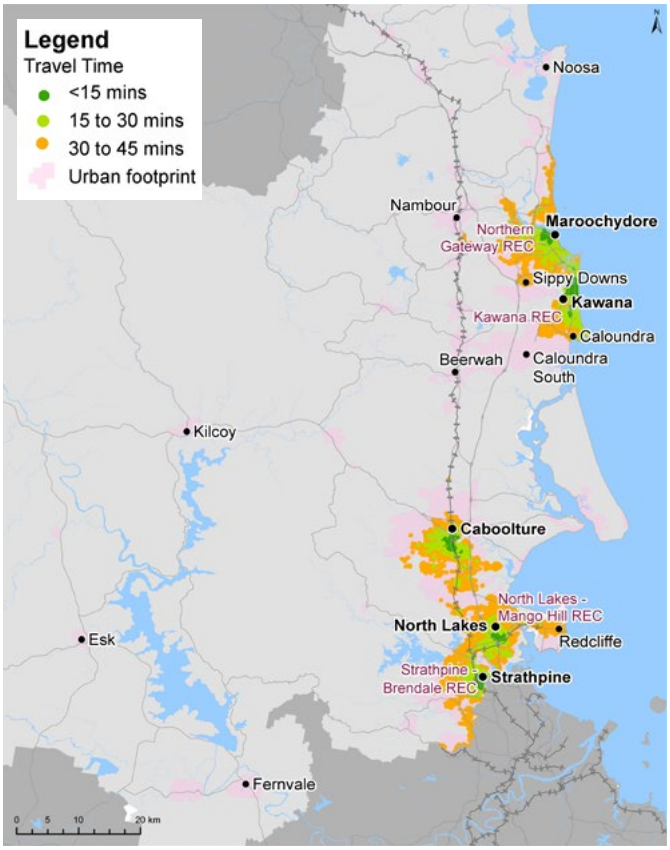


Figure 24: Public transport accessibility to the closest key centres in the North Coast region

Source: Department of Transport and Main Roads. (2019). *Output from the LUPTAI software, 2019.*

67 Department of Transport and Main Roads. (2013). *Moving Freight.*

Safety of road users

Safety of road users is a universal challenge. Overall, road fatalities have increased slightly in the region with a peak in 2013. From 2014 to 2018, there were 179 fatalities and 4066 crashes requiring hospitalisation.[68] Passenger vehicles are the most likely mode to be involved in fatal crashes followed by motorcycles. Improving safety across all modes of travel is important across the North Coast region as well as SEQ.

Dispersed settlements

The region is characterised by dispersed settlement patterns with a number of low-density hinterland and rural communities.

This dispersed settlement pattern impacts greatly on the affordability of providing transport infrastructure and services in the region. It can mean that traditional scheduled public transport services are costly to operate leading to low service frequencies. Transport choices are more limited within these areas.

Stakeholders have raised the issue that rural residential housing is considered to be an important form of housing in the region and supports growth of hinterland townships. Providing accessibility to these residents will continue to be challenging.

ShapingSEQ identifies the importance of retaining the Moreton Bay-Sunshine Coast (northern) inter-urban break. Protecting this and other breaks ensures our major urban areas retain their separate identities. Protecting our valued natural assets and landscapes from negative impacts is an important component of transport infrastructure planning and delivery.

Mobility and accessibility for an ageing population

Compared to the rest of Queensland, the North Coast region has a greater proportion of people aged over 65 years (18 per cent compared with 15 per cent state average in 2018).

Noosa and the Sunshine Coast have higher proportions of seniors than other North Coast councils at 25 per cent and 20 per cent respectively.[69]

Senior residents can be transport disadvantaged as they may be less inclined, or able, to drive or have mobility limitations. They are particularly at risk of social isolation as a result of constrained transport options.[70]

Given the median age of the region's population is expected to increase further, the number of people requiring either special transport assistance, or more convenient transport opportunities, is also expected to increase.

Esk township, Somerset

68 Queensland Government. (2019). Road Crash Locations.
69 Queensland Government Statistician's Office. (2019). *Queensland Regional Profiles: Resident Profile for North Coast Area.*
70 Rosier. K. and McDonald M. (2011). *The relationship between transport and disadvantage in Australia.*

4.3 What do the priorities and objectives mean for the North Coast region?

TRANSPORT SYSTEM

The safety of all transport system customers is our primary priority as we create a single integrated transport network accessible to everyone.

Priority 1: Grow	Priority 2: Prosper	Priority 3: Sustain	Priority 4: Live
Transport objectives			
1.1 Current and future transport networks shape sustainable growth and development of communities. 1.2 Communities in growth (expansion) areas have access to reliable, efficient and sustainable travel options. 1.3 People and goods move safely and efficiently in rural communities.	2.1 Goods and services move efficiently and reliably along supply chains to and between key economic areas and markets. 2.2 Activity centres are connected by a reliable and high-frequency public transport network. 2.3 Transport planning and investment is informed by current and accurate information.	3.1 The transport system is safe, resilient and connected during and after extreme weather, events and incidents. 3.2 Walking, bicycle riding and other sustainable travel options are accessible, convenient and safe. 3.3 The transport system is sustainable and supports the region's environmental and lifestyle values.	4.1 Communities and public places are walkable and well-connected by integrated and sustainable transport options. 4.2 The transport system provides safe, fair and equitable travel options.
What it means for the North Coast region			
■ Urban consolidation and high-quality design, particularly in and around activity centres and along existing and planned public transport corridors. ■ Connecting expansion areas such as Palmview, Caloundra South, Beerwah East, Caboolture West, North Lakes–Mango Hill and Warner to public transport. ■ Improving safety and key connections in rural areas.	■ Improved freight routes, such as the Bruce Highway, D'Aguilar Highway and North Coast Rail line. ■ Increased public transport connecting activity centres and regional economic clusters (e.g. Noosa, Nambour, Maroochydore, Kawana, Mooloolaba, Caloundra, Caloundra South, Beerwah, Caboolture, Redcliffe, North Lakes, Morayfield and Strathpine). ■ Improving data accuracy and usage through smart infrastructure, real-time data and artificial intelligence.	■ Infrastructure is improved and built to minimise the impacts of flooding and incidents, such as on the Bruce Highway, Gympie Road, Sunshine Motorway and North Coast Rail line. ■ Network and incident management is improved to minimise impacts of closures and disruptions. ■ Prioritisation of active transport. ■ Provision of low and zero emission vehicle infrastructure. ■ Infrastructure and services that minimise impacts on scenic landscapes and ecological areas.	■ Safe walking and bike riding is prioritised within local neighbourhoods and activity centres. ■ Transport choice is improved via options appropriate for the demand and land-use, including community and school transport. ■ Transport options for people across all demographics. ■ Personalised transport such as ride share.
Measures of success			
■ Commute time. ■ Commute distance. ■ Road network reliability.	■ Road network productivity. ■ Road network congestion. ■ Public transport accessibility.	■ Road closures. ■ Public and active transport mode share. ■ Transport greenhouse gas emissions.	■ Active transport accessibility. ■ Public transport disadvantage. ■ Public transport patronage. ■ Road safety.

The priorities and objectives for SEQ are outlined in Chapter 3. This section outlines how the priorities and objectives will be achieved in the North Coast region.

4.3.1 Priority 1: Grow – A transport system that supports a consolidated and sustainable urban structure

What does this mean for the North Coast region?

Objective 1.1: Current and future transport networks shape sustainable growth and development of communities.

The North Coast region's population is dispersed across the region at different densities and in different types of communities. Increased densities and high-quality living environments are planned in principal regional activity centres at Caboolture and Maroochydore and major activity centres at Strathpine, North Lakes, Redcliffe, Caboolture West, Beerwah, Caloundra South, Caloundra, Kawana, Sippy Downs, Nambour and Noosa. In addition, urban consolidation is planned to cater for the majority of population growth in the region. A variety of housing types and proximity to essential services will be provided across the region in support of expected population growth.

This objective will support and enable sustainable growth through:

- providing a variety of active, public and private transport options that fit the purpose of existing and growing communities
- enabling urban consolidation and increased densities through access to mass transit and active transport
- incorporating high-quality urban design into transport projects and supporting urban amenity along active streetscapes
- improving the integration of land use and transport planning in strategic and statutory planning instruments and decision-making.

Objective 1.2: Communities in growth (expansion) areas have access to reliable, efficient and sustainable travel options.

While urban consolidation is planned to cater for the majority of growth, urban expansion is also planned to occur. Like consolidated growth, expansion will provide a mix of densities and housing types. However, expansion is expected to provide more lower density and detached housing stock.

Across the region, significant expansion is planned to occur in Warner, North Lakes–Mango Hill, Caboolture West, Caloundra South, Palmview and Beerwah East.

This objective will be achieved for the North Coast region through:

- providing residents with an appropriate range of transport options, including mass transit where appropriate, rather than private cars for a range of trips
- enabling residents to connect to mass transit
- encouraging innovative service delivery models, such as ride sourcing and peer-to-peer mobility
- transit services and connections that evolve to meet the needs of new and established communities as they grow
- encouraging neighbourhoods that support walking and bike riding

Objective 1.3: People and goods move safely and efficiently in rural communities

Many rural communities exist across the region. The majority of land in the region is made up of rural or biodiverse areas. Nearly all freight and inter-town travel is by road and, given the dispersed settlement patterns of the rural areas, will continue to remain so for the foreseeable future. This means road corridor availability and safety is of critical importance to rural communities.

This objective can be achieved for the North Coast region through:

- planning to minimise transport disadvantage in rural settlements
- safe access to essential services, local employment, social support and social interaction
- improving the road network and reducing conflicts between modes and road network users.

Table 8: Priority 1 actions for the North Coast region

PRIORITY 1: GROW A transport system that supports a consolidated and sustainable urban structure.	**OBJECTIVES**		
Objective 1.1: Current and future transport networks shape sustainable growth and development of communities.			
Objective 1.2: Communities in growth (expansion) areas have access to reliable, efficient and sustainable travel options.			
Objective 1.3: People and goods move safely and efficiently in rural communities.			

Actions – short-term	1.1	1.2	1.3
A2.01 Caboolture area public transport planning Progress planning to investigate provision of frequent bus services to the planned major expansion growth area in Caboolture West including an assessment of current and future parking demand at Caboolture station.	✓	✓	
A2.02 Infrastructure coordination plans Collaborate with Queensland Treasury, other state government agencies and local governments on infrastructure coordination plans within the region to improve the alignment of infrastructure planning with local and regional priorities and coordination within and between state and local government.	✓		
A2.03 Maroochydore to Caloundra integrated urban public transport Work in partnership with Sunshine Coast Council to develop a business case for an integrated urban public transport solution for Maroochydore to Caloundra.	✓		
A2.04 Moreton Bay – Southern Sunshine Coast north-south arterial corridor planning Undertake planning for north-south arterial links parallel to the Bruce Highway to provide alternative parallel arterial roads for shorter trips and preserve the Bruce Highway's strategic route role.	✓	✓	
A2.05 Park 'n' ride capacity expansion planning Undertake strategic planning to identify locations suitable for major park 'n' ride capacity expansion at key locations on the North Coast region public transport network.	✓	✓	✓
A2.06 Planning for major developments Undertake planning required to inform Transport and Main Roads input into future transport networks serving major development areas such as Beerwah East, Caboolture West, Caloundra South, Maroochydore City Centre, the Mill at Moreton Bay and Palmview. Participate in master planning activities and development of infrastructure agreements, in partnership with the Department of State Development, Infrastructure, Local Government and Planning, local government and the private sector to ensure state transport interests are protected and to maximise benefits from a 'one network' approach.	✓	✓	

PRIORITY 1: GROW
A transport system that supports a consolidated and sustainable urban structure.

OBJECTIVES

Objective 1.1: Current and future transport networks shape sustainable growth and development of communities.

Objective 1.2: Communities in growth (expansion) areas have access to reliable, efficient and sustainable travel options.

Objective 1.3: People and goods move safely and efficiently in rural communities.

Actions – short-term (cont.)	1.1	1.2	1.3
A2.07 Public transport interchange and bus station upgrade program Undertake planning for public transport interchanges including bus and rail interchanges, bus stations and bus stop upgrades in the region to improve network performance and connectivity at activity centres and interchange locations. Early priorities include Caboolture bus-rail interchange study, Maroochydore interchange study, and the Nambour bus-rail interchange study.	✓		
A2.08 Public transport network planning Undertake regular public transport network planning to ensure route structures are meeting current and future needs. For the North Coast Region, planning will focus on support for expansion areas in Moreton Bay and Sunshine Coast as well as consolidation areas such as the Sunshine Coast coastal corridor.	✓	✓	
A2.09 Rail station accessibility and capacity upgrades Identify areas of most need, prioritise and progressively undertake the detailed planning investigations required to guide investment decisions for rail station upgrades to improve accessibility and capacity in the North Coast region.	✓	✓	
A2.10 Rural and hinterland road corridor planning Undertake planning to establish a reliable, safe and flood immune state road network for the rural and hinterland areas of the Sunshine Coast, Noosa and Somerset.			✓
A2.11 Safety and amenity impacts for rural townships Work with local governments to mitigate safety and amenity issues for rural townships. Priorities include towns along the Brisbane Valley Highway, D'Aguilar Highway and Steve Irwin Way.			✓
A2.12 Sunshine Coast Airport to Beerwah public transport planning Undertake strategic planning for the southern Sunshine Coast's public transport network to determine the most appropriate public transport modes, routes and ancillary infrastructure. Identify an ultimate preferred network, staging and delivery strategy.	✓	✓	

4.3.2 Priority 2: Prosper – A transport system that supports the economic competitiveness of the region

What does this mean for the North Coast region?

Objective 2.1: Goods and services move efficiently and reliably along supply chains to and between key economic areas and markets.

The region is a net receiver of freight, with the Bruce Highway operating as a key freight corridor. The Brisbane Valley Highway, D'Aguilar Highway, Coolum-Yandina Road and North Coast line are also important to the region, providing access to markets for local produce and transporting produce through the region.

The region contains a number of regional economic clusters located on, or nearby to, the key freight corridors. These are located at Maroochydore, Kawana, North Lakes–Mango Hill and Strathpine–Brendale. In addition, major enterprise and industrial areas exist or are planned at Coolum, Yandina East, Caloundra, Elimbah East and Morayfield. Enabling the efficient movement of people and goods to and between these precincts will assist in strengthening the economic competitiveness of the region.

This objective can be achieved for the North Coast region through:

- working with industry to prioritise freight movement in off-peak periods
- improvements through mechanisms such as vehicle types, connective vehicle technologies, route optimisation and data sharing
- minimising conflicts of freight and passenger vehicles on highways and in inter-town connections
- improving the reliability and efficiency of key freight routes
- infrastructure upgrades.

Objective 2.2: Activity centres are connected by a reliable and high-frequency public transport network.

Reliable and high-frequency public transport will be needed to support population and economic growth across the region. Connecting key activity centres with the high frequency network is essential to forming the core spines of the network. This includes services to existing and emerging knowledge and technology precincts.

The network will connect activity centres and knowledge precincts at Noosa, Nambour, Sunshine Coast Airport, Maroochydore, Sippy Downs, Kawana, Caloundra, Caloundra South, Beerwah, Caboolture, Redcliffe, North Lakes and Strathpine.

Objective 2.3: Transport planning and investment is informed by current and accurate information.

Technological advancements have increased the availability of high-quality data about the transport system and its users. This data can inform transport improvements and how they are planned for and implemented. Equally, this data can be used by customers to inform their journey planning and use of the network.

This objective can be achieved for the North Coast region by:

- collaborating within government and with industry to enable shared data capability
- using and distributing accurate, real-time data to understand both current and future customer mobility opportunities
- connecting and engaging with customers in two-way communication
- collecting and using real-time infrastructure data for appropriate infrastructure upgrades.

"If the prosperity that comes from knowledge-intensive activity is to be widely shared, governments need to enable more people to live closer to these areas and to improve road and public transport networks so that they better connect employers and workers".

Source: Kelly, J-F., Donegan, P., Chisholm, C., Oberklaid, M. (2014). *Mapping Australia's Economy: Cities as engines of prosperity (pp. 1).* Grattan Institute.

Sunshine Coast University Hospital

Table 9: Priority 2 actions for the North Coast region

PRIORITY 2: PROSPER
A transport system that supports the economic competitiveness of the region.

OBJECTIVES

Objective 2.1: Goods and services move efficiently and reliably along supply chains to and between key economic areas and markets.

Objective 2.2: Activity centres are connected by a reliable and high-frequency public transport network.

Objective 2.3: Transport planning and investment is informed by current and accurate information.

Actions – short-term	2.1	2.2	2.3
A2.13 Bruce Highway upgrade planning Undertake planning for staged upgrades of Bruce Highway interchanges and links between the Pine River and Cooroy to achieve desired capacity, safety and flood immunity standards.	✓		
A2.14 Caloundra road access planning Undertake planning for staged implementation of intersection upgrades and road widening projects to establish a good level of service for road access to and from Caloundra city centre.	✓		
A2.15 D'Aguilar Highway upgrade planning Undertake planning for capacity, safety and flood immunity upgrades along the D'Aguilar Highway including assessment of freight traffic issues in Kilcoy and planning of capacity upgrades to accommodate increased traffic generated by growth in Caboolture West.	✓		
A2.16 Intersection upgrades Undertake planning to inform options to upgrade intersections across the region to reduce congestion and improve safety.	✓		
A2.17 Maroochydore City Centre road corridor planning Undertake planning in partnership with Sunshine Coast Council to establish reliable and safe arterial road connections to and from Maroochydore City Centre, through cost-effective and staged intersection and link capacity upgrades to ensure that development of the principal regional activity centre, and resulting economic growth and employment opportunities, is not constrained.	✓	✓	
A2.18 Moreton Bay road corridor planning Undertake planning to establish a reliable, safe and flood resilient state road network for the Moreton Bay region through cost-effective, staged road network upgrades. This will support: ■ traffic generated by the Mill Priority Development Area and significant residential developments to the west and north ■ the developing areas of Mango Hill and Griffin ■ the planned future residential developments of Caboolture West, Morayfield South and Pine Valley ■ corridors connecting Caboolture to Redcliffe, Beachmere, and Bribie Island ■ the transition between urban, rural and industrial areas and their associated land uses and traffic generating activities.	✓		

(continued next page)

PRIORITY 2: PROSPER

A transport system that supports the economic competitiveness of the region.

OBJECTIVES

Objective 2.1: Goods and services move efficiently and reliably along supply chains to and between key economic areas and markets.

Objective 2.2: Activity centres are connected by a reliable and high-frequency public transport network.

Objective 2.3: Transport planning and investment is informed by current and accurate information.

Actions – short-term (cont.)	2.1	2.2	2.3
A2.19 North Brisbane – South Moreton transport planning Review planning and develop a strategy to address the long-term transport challenges in the North Brisbane and South Moreton area, including enhanced access to key employment and activity centres, promoting public and active transport use, and efficient freight movement. The strategy is to inform infrastructure, services, corridor preservation and investment decisions that meet the multi-modal transport needs of the area.	✓	✓	
A2.20 SEQ North intermodal freight terminal planning Undertake planning to identify and protect a future intermodal freight terminal north of Brisbane.	✓		
A2.21 Sunshine Coast North road corridor planning Undertake planning to establish a reliable, safe and flood immune state road network for the northern Sunshine Coast area (Sunshine Coast Airport, Coolum, Bli Bli, Cooroy and Noosa) east of Bruce Highway, including planning for future upgrades of David Low Way and east-west connections to the Bruce Highway.	✓		
A2.22 Sunshine Motorway upgrade planning Undertake planning for staged upgrades of the Sunshine Motorway and extension across the Mooloolah River to the Roys Road Interchange on the Bruce Highway, including planning for the Kawana Arterial and Bells Creek Arterial, to achieve a reliable and safe primary road spine for the Sunshine Coast.	✓	✓	
Actions – medium/long-term	**2.1**	**2.2**	**2.3**
A2.23 Nambour to Maroochydore public transport planning Investigate extending a high-frequency bus connection and bus priority measures from Nambour to Maroochydore.		✓	
A2.24 Noosa to Maroochydore public transport planning Investigate providing a high-frequency public transport and bus priority measures from Noosa to Maroochydore.		✓	

4.3.3 Priority 3: Sustain – A transport system that contributes to the environmental sustainability and resilience of the region

What does this mean for the North Coast region?

Objective 3.1: The transport system is safe, resilient and connected during and after extreme weather, events and incidents.

There are many corridors throughout the region that are prone to flash flooding, creek and river flooding as well as storm tide inundation which cause disruption to the transport network. Traffic incidents and events also disrupt the movement of people and goods.

Safety, resilience and connectivity will be supported through appropriate infrastructure upgrades, and through providing customers with the information they need to keep them safe and moving in real-time, as events or incidents are responded to and resolved. Through the use of real-time data and information, infrastructure upgrades can be focused on the links where they are most needed.

This objective can be achieved for the North Coast region through:

- management plans that minimise the impacts of known closures and disruptions to the transport network
- effective and reliable communication, such as early warning systems and real-time information
- innovative incident management and response systems
- targeted infrastructure upgrades.

Objective 3.2: Walking, bicycle riding and other sustainable travel options are accessible, convenient and safe.

Active transport options generate positive benefits for the region's communities, particularly as the region grows. They provide options for a range of trips while supporting positive health and exercise outcomes. Walking and bike riding encourage place making and can increase economic activity, particularly for retail and dining. They also positively impact the environment by reducing emissions generated from mobility.

Active transport will play a critical role in the region's transport network. In the urban context, bicycle and walking infrastructure will provide options for customers to commute, access local mass transit stops and for a variety of recreational activities. Where possible, these options will be separated from vehicle traffic to increase safety.

In rural communities, due to distances, road safety and speed, active transport is mostly relevant to short distance trips within the local townships and neighbourhoods.

This objective can be achieved for the North Coast region through:

- provision of accessible, convenient and safe walking and bike riding infrastructure for a range of trips
- policies and interventions to prioritise the needs of people walking and riding bikes.

Objective 3.3: The transport system is sustainable and supports the region's environmental and lifestyle values

The North Coast region has embraced environmental protection and sustainability to maintain long-term liveability and underpin economic and social development. The communities of the Sunshine Coast and Noosa have a strong commitment to reducing their ecological footprint and greenhouse gas emissions. The Moreton Bay, Noosa and Sunshine Coast councils all have programs to encourage residents to be more sustainable and reduce their environmental footprint.

Somerset has the largest land area in the region and it is important that its extensive rural and environmental areas are protected and preserved. Somerset Dam and Lake Wivenhoe provide most of the drinking water in South East Queensland, therefore development in the area must be sustainable and protective of environmental values.

This objective can be achieved for the North Coast region through:

- minimising impacts on existing habitats and areas of biodiversity
- reducing dependency on private motor vehicles, which is a significant contributor to the region's emissions
- providing sustainable transport options and infrastructure for visitors, including those who arrive by car
- planning for the integration of low and zero emission vehicles.

Pedestrian prioritisation at Redcliffe

Table 10: Priority 3 actions for the North Coast region

PRIORITY 3: SUSTAIN A transport system that contributes to the environmental sustainability and resilience of the region.	**OBJECTIVES**
Objective 3.1: The transport system is safe, resilient and connected during and after extreme weather, events and incidents.	
Objective 3.2: Walking, bicycle riding and other sustainable travel options are accessible, convenient and safe.	
Objective 3.3: The transport system is sustainable and supports the region's environmental and lifestyle values.	

Actions – short-term	3.1	3.2	3.3
A2.25 Flood immunity upgrades Undertake planning to identify and prioritise flood immunity upgrades to the transport network in North Coast region.	✓		
A2.26 Principal cycle network implementation Undertake planning to deliver the principal cycle network in the North Coast region to support more cycling, more often on safe, direct and connected routes via: ■ standalone options analysis and business case development for bike riding infrastructure on highest priority routes ■ provision for bike riding infrastructure as part of planning for other Transport and Main Roads funded projects on all principal routes, pursuant to cycle infrastructure policy.		✓	✓
Actions – medium/long-term	**3.1**	**3.2**	**3.3**
A2.27 Bus layover planning Progress planning for optimal use of layover and other operations to improve efficient service operations and prepare for a move towards a connected network.		✓	
A2.28 Green bridge and link planning Work with local governments to undertake planning to identify and review the need for green bridge/link opportunities to connect strategic active or public transport links.		✓	✓

Shopping in Noosa

4.3.4 Priority 4: Live – A transport system that supports safe, healthy and liveable communities for everyone

What does this mean for the North Coast region?

Objective 4.1: Communities and public places are walkable and well-connected by integrated and sustainable transport options.

Walkability has a direct correlation to amenity, safety and overall quality of life. Walkable communities and public places promote social interaction, sustainable access to goods and services and equitable environments. Walkable urban areas attract activity and environments where people want to be.

Walkability plays a significant role in amenity and moving people. For the North Coast, the dispersed settlement patterns of rural hinterland and urban coastal and bayside living means walking is often limited to local neighbourhoods and within activity centres.

Transport planning will support the retention of this varied and distinct North Coast lifestyle. This includes planning for walkable neighbourhoods in existing and planned growth areas and providing connections to the passenger transport network.

This objective can be achieved for the North Coast region through:

- prioritising walking movements within activity centres across the region
- providing fit for purpose infrastructure to ensure safe and pleasant movement of people walking and riding bikes and public transport users within and between activity centres
- providing for safe and connected walking environments
- integrating walking and bike riding as part of the passenger transport system
- applying transit oriented development principles to urban regeneration and development of new communities.

Objective 4.2: The transport system provides safe, fair and equitable travel options.

People need to be able to move around the region in a way that encourages an active lifestyle, enables community interaction and provides access to facilities. Of particular relevance to the North Coast region, the transport system also needs to support the emerging trend for active ageing where people live longer and have healthier lifestyles.

This objective can be achieved for the North Coast region through:

- transport that enables social inclusion and diverse lifestyles
- transport options for people across all demographics, including the elderly, children and those with disability
- a transport system that provides the connections that allow residents to choose to live in rural and hinterland areas as well as mobility options that enable people to move around the region
- innovative approaches which address accessibility gaps in an affordable way, including through diverse transport options, active transport, personalised mobility and demand-responsive transport
- continued rollout of varied safety initiatives to reduce serious accidents and fatalities.

"communities with high car-dependency, generally, experience four times as many casualty rates as transit-oriented communities".[71]

Bulcock Beach boardwalk, Caloundra

71 Department of Infrastructure and Planning. (2010). *Transit oriented development guide.*

Table 11: Priority 4 actions for the North Coast region

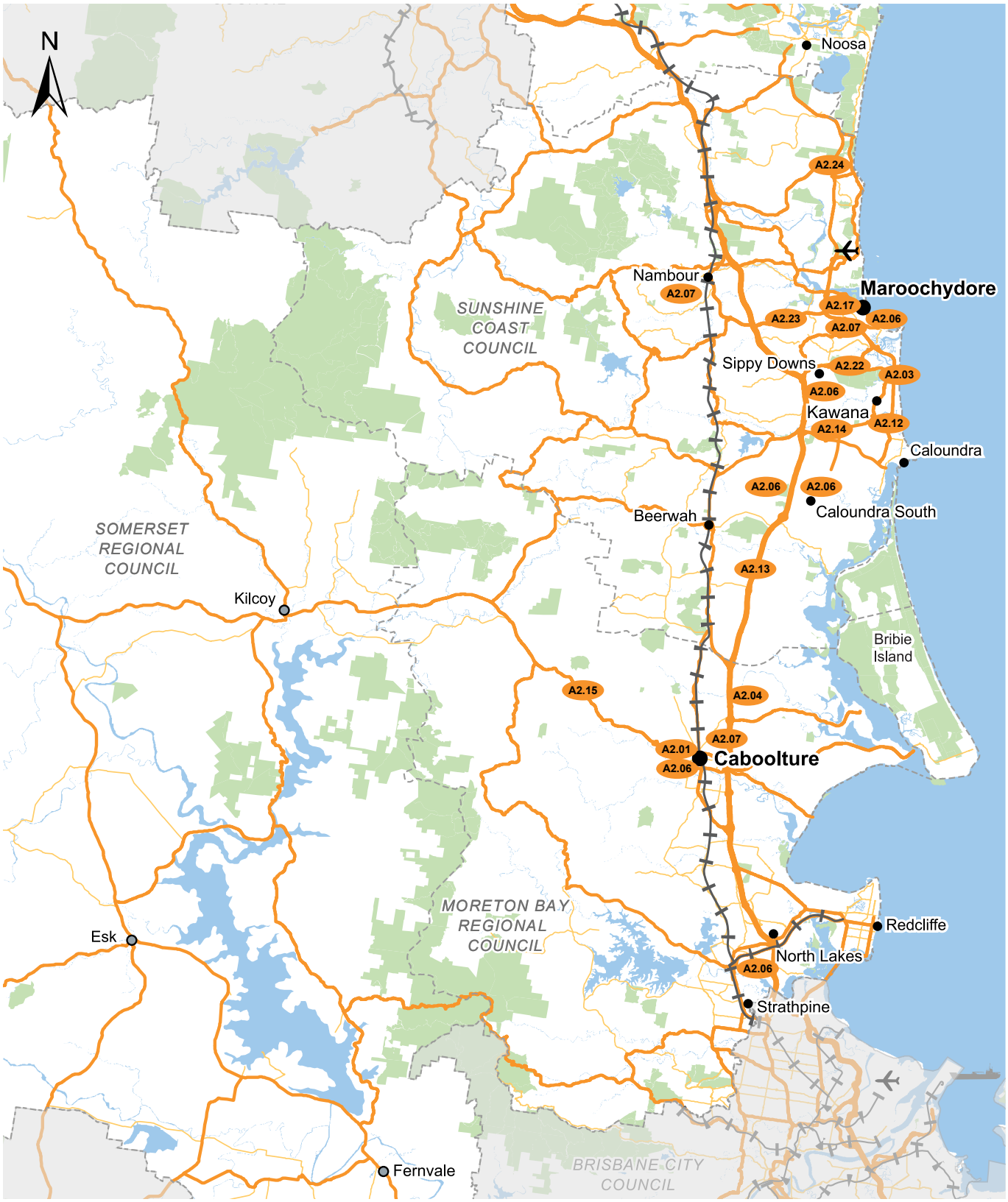
PRIORITY 4: LIVE
A transport system that supports safe, healthy and liveable communities for everyone.

OBJECTIVES

Objective 4.1: Communities and public places are walkable and well-connected by integrated and sustainable transport options.

Objective 4.2: The transport system provides safe, fair and equitable travel options.

Actions – short-term	4.1	4.2
A2.29 Boating infrastructure Prioritise investment in boating infrastructure across the North Coast region based on an assessment of demand and input from the community and stakeholders including through tools such as the Recreational Boating Facilities Demand Forecasting Study.		✓
A2.30 Public transport wayfinding signage Identify opportunities to improve wayfinding signage for public transport facilities in the North Coast region with a focus on southern Moreton Bay areas.	✓	
A2.31 Rest areas in North Coast region Determine investment priorities for new or upgraded rest areas in the region to address driver fatigue risks, encourage safe travel and to provide sufficient capacity and amenities in line with existing guidelines.		✓
A2.32 Road safety projects As part of the High Risk Roads process, undertake planning to inform options for safety related improvements across the North Coast region.		✓
A2.33 Transit oriented developments Identify opportunities to develop and encourage transit-oriented developments (TOD) within the North Coast region. Collaborate with local governments, infrastructure project teams and other state agencies to support increased public transport mode share, residential and employment density at appropriate transport hubs. TOD sites for investigation include key transport nodes on the Caboolture and Redcliffe Peninsula rail lines as well as on future trunk-corridors (Caloundra to Sunshine Coast Airport). Options include Mango Hill (short-term), Kallangur, The Mill Priority Development Area, and locations on the southern Sunshine Coast (medium/long-term).	✓	
Actions – medium/long-term	**4.1**	**4.2**
A2.34 Active transport tourism Provide advice to local government, other state agencies, and tourism bodies to support planning, design and construction of rail trails and tourism routes to support active transport tourism in the North Coast region such as the Caboolture to Wamuran rail trail.	✓	
A2.35 Bicycle parking at public transport nodes Work with local governments in the North Coast region to assess the feasibility and options to help facilitate progressive provision of increased bike parking at public transport nodes.	✓	✓
A2.36 Principal cycle network implementation Support local government to undertake planning to deliver the highest priority routes on the principal cycle network within the North Coast region.	✓	✓



Legend

- National roads
- State-controlled roads
- Local roads of regional significance
- Strategic airport
- Rail line
- Local government boundary
- Actions

Regional activity centres

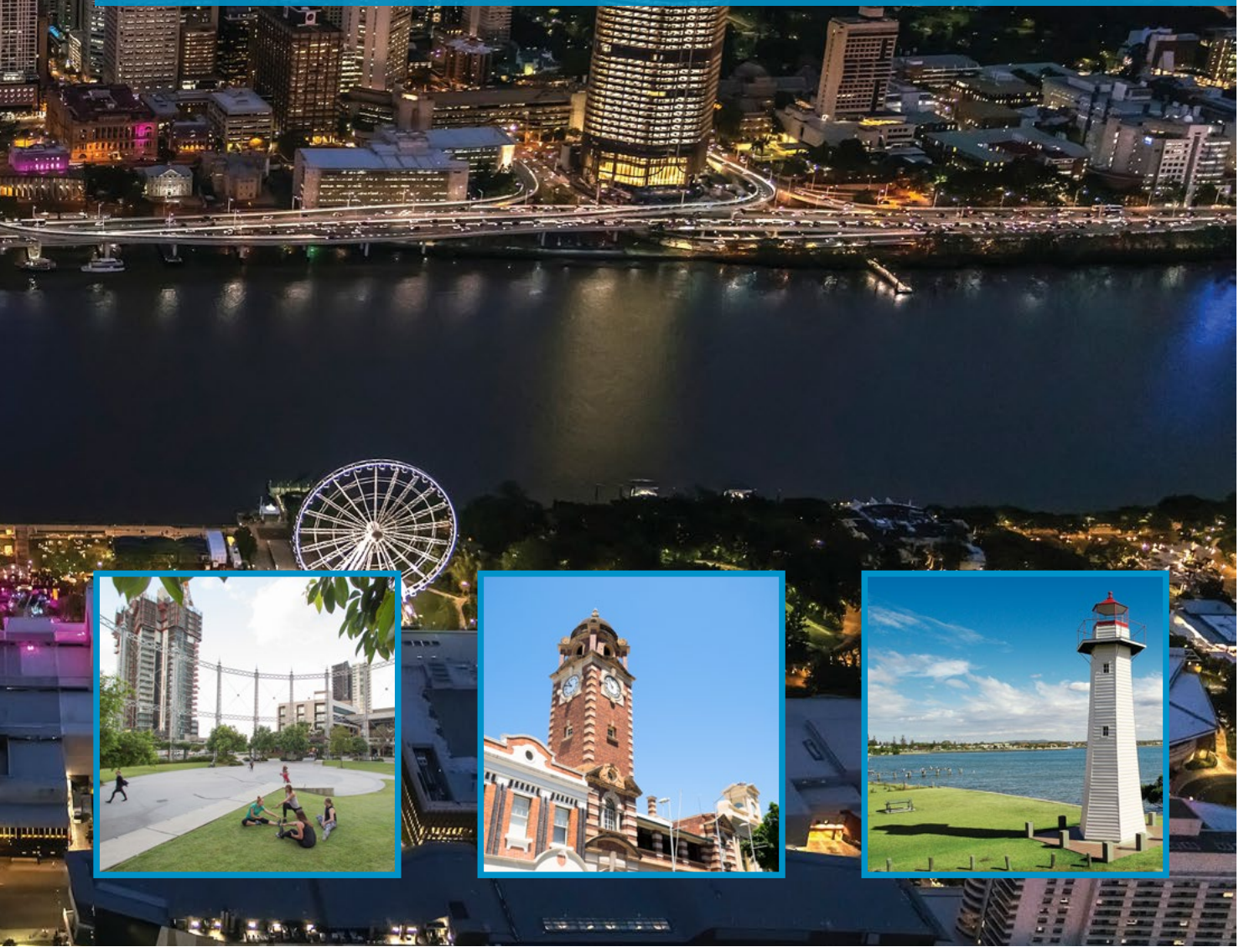
- Principal
- Major
- Major rural

Figure 25: Actions for the North Coast region

Brisbane City; Gasworks, Newstead; Ipswich; Cleveland lighthouse

5.
Metropolitan Regional Transport Plan

Brisbane · Ipswich · Redland



5.1 Region overview

The Metropolitan region (Figure 26) is the central region in South East Queensland (SEQ) and includes the Brisbane, Ipswich and Redland local government areas.

THE METROPOLITAN REGION COVERS AN AREA OF
2965 KM²

POPULATION GROWTH 2016–2041

2016: **1,536,300** PEOPLE

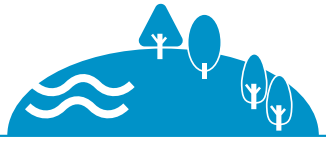
2041: **2,301,200** PEOPLE

GROSS REGIONAL PRODUCT IN 2017–18
$132B
44% OF GROSS STATE PRODUCT

IN 2016
47%
OF THE SEQ POPULATION LIVED IN THE METROPOLITAN REGION

BY 2041
44%
OF THE SEQ POPULATION IS PROJECTED TO LIVE IN THE METROPOLITAN REGION

THERE IS
440 KM²
OF NATURAL PARK AND ENVIRONMENTAL LAND

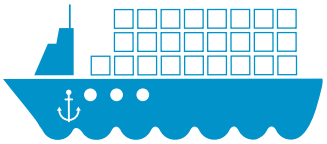


THE AVERAGE REGIONAL POPULATION DENSITY IS
518 PEOPLE PER KM²

THE AVERAGE DAILY TEMPERATURE RANGE IS
14.5°c – 25.3°c

THE AVERAGE RAINFALL IS
1090MM
PER ANNUM

PORT OF BRISBANE HANDLES OVER
$50B OF FREIGHT



BRISBANE AIRPORT HAD OVER
24 MILLION PASSENGER
MOVEMENTS IN 2019

$$$
REGIONAL MEDIAN PERSONAL INCOME PER ANNUM
$38,785

IPSWICH HAS ONE THIRD OF THE AVAILABLE INDUSTRIAL LAND IN SEQ

EMPLOYMENT WITHIN THE REGION

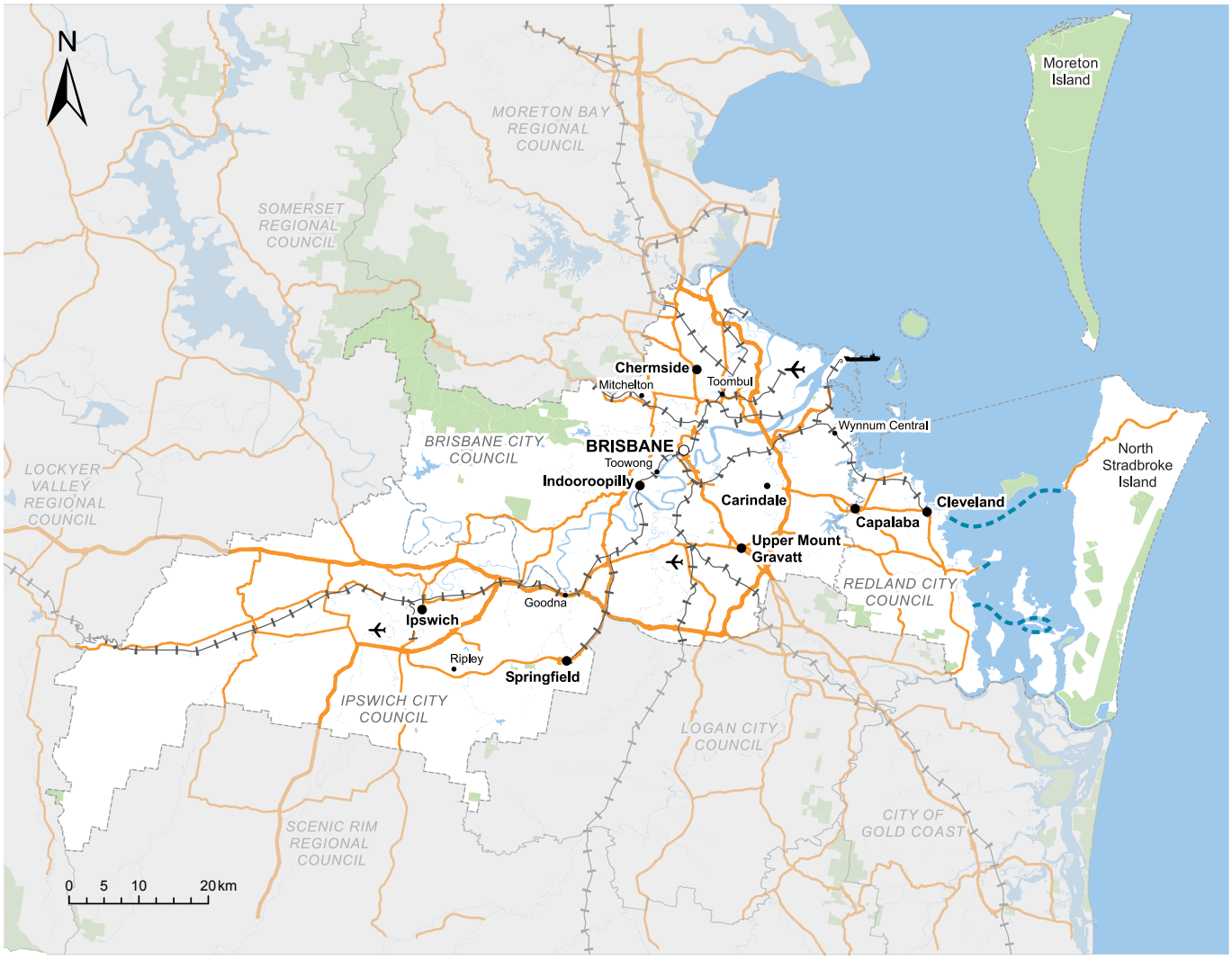
- **13.4%** HEALTH CARE AND SOCIAL ASSISTANCE
- **9.1%** EDUCATION AND TRAINING
- **9.1%** PROFESSIONAL, SCIENTIFIC AND TECHNICAL SERVICES
- **8.8%** RETAIL TRADE

SHAPINGSEQ IDENTIFIES GROWTH IN

- HEALTH CARE AND SOCIAL ASSISTANCE
- PROFESSIONAL, SCIENTIFIC AND TECHNICAL SERVICES

65+
12.4%
OF THE POPULATION IS AGED 65 YEARS AND OVER

Sources:
Queensland Government Statistician's Office. (2019). *Queensland Regional Profiles: Resident Profile for Metropolitan region.*
Department of Infrastructure, Local Government and Planning. (2017). *ShapingSEQ – South East Queensland Regional Plan 2017.*
National Institute of Economic and Industry Research. (2018). *National Economic Indicators for Local Government Areas, 2017/2018.*
Port of Brisbane. (2017). *About the Port.*
The Bureau of Infrastructure, Transport and Regional Economics (BITRE). (2020). *Airport Traffic Data.*
Department of Infrastructure, Local Government and Planning. (2010). *South East Queensland Growth Management Program.*



Legend

- National roads
- State-controlled roads
- Local roads of regional significance
- Ferry route
- Strategic airport
- Port
- Rail line
- Local government boundary

Regional activity centres

- Capital city centre
- Principal
- Major

Figure 26: The Metropolitan region

BRISBANE

2018 ESTIMATED POPULATION: 1,231,600[72]
2041 PROJECTED POPULATION: 1,551,200[73]
+1.0% GROWTH RATE

Economy:

The Brisbane local government area produced $117.18 billion of Gross Regional Product and had 863,013 jobs and 123,286 businesses in 2017–18.[74] As the centre of Queensland's economy, the area has growing national and international importance, along with significant potential to lead in the fields of professional services and niche manufacturing.[75]

As of 2016, the health care and social assistance industry provided 13.2 per cent of all jobs within Brisbane, followed by professional, scientific and technical services (9.8 per cent), education and training (8.9 per cent) and public administration and safety (8.4 per cent).[76]

Employment:

In 2016, the main industries in which Brisbane residents were employed included health care and social assistance (13.6 per cent), professional, scientific and technical services (10.5 per cent), education and training (10.2 per cent) and retail trade (8.6 per cent).[77]

Growth:

Brisbane is expecting growth of 319,500 people by 2041.[78] *ShapingSEQ* indicates that an additional 188,200 dwellings[79] will be required to accommodate the population growth projected for Brisbane, with 94 per cent of those dwellings expected to be provided through consolidation.[80]

Education:

Queensland University of Technology and University of Queensland are two of the state's largest universities which are both based in Brisbane. Griffith University also has three campuses in Brisbane. There are other universities with branch campuses in Brisbane including the Australian Catholic University and Central Queensland University.

Recreation:

Brisbane has an extensive range of parkland, cultural, retail and entertainment precincts and community spaces. This includes many of SEQ's most iconic destinations such as South Bank Parklands, the Cultural Centre precinct, Mount Coot-tha and Fortitude Valley. In addition, Brisbane's proximity to Moreton Bay, Ipswich, the Redlands and links to the Gold and Sunshine coasts and hinterland areas provides residents and visitors with significant outdoor and active recreational opportunities.

72 Australian Bureau of Statistics. (2019). *Regional Population Growth, Australia (cat. no. 3218.0)*.
73 Queensland Government Statistician's Office. (2018). *Queensland Government population projections, 2018 edition.*
74 National Institute of Economic and Industry Research. (2018). *National Economic Indicators for Local Government Areas, 2017/2018.*
75 Brisbane City Council. (2012). *Brisbane Economic Development Plan 2012–2031.*
76 Queensland Government Statistician's Office. (2018). *Queensland Regional Profiles: Workforce Profile for Brisbane (C) Local Government Area.*
77 Queensland Government Statistician's Office. (2018). *Queensland Regional Profiles: Resident Profile for Brisbane (C) Local Government Area.*
78 Queensland Government Statistician's Office. (2018). *Queensland Government population projections, 2018 edition.*
79 Dwelling supply benchmarks based on *ShapingSEQ* policy for growth distribution by local government area.
80 Department of Infrastructure, Local Government and Planning. (2017). *ShapingSEQ – South East Queensland Regional Plan 2017.*

IPSWICH

2018 ESTIMATED POPULATION: 213,600[81]
2041 PROJECTED POPULATION: 557,700[82]
+4.3% GROWTH RATE

Economy:

The Ipswich local government area produced $9.42 billion of Gross Regional Product and had 76,917 jobs and 8933 businesses in 2017–18.[83] Strong growth has spurred these figures with Ipswich experiencing population growth of 3.5 per cent between 2006 and 2016, compared with the state population growth of 1.9 per cent.[84]

The area has a diverse economy underpinned by an industrial and manufacturing base that includes the building industry, metal product manufacturing and logistics, aviation and defence as well as warehouse distribution.[85]

As of 2016, the health care and social assistance industry provided 14.4 per cent of all jobs within Ipswich, followed by manufacturing (12.0 per cent), retail trade (11.3 per cent) and education and training (11.0 per cent).[86]

Employment:

In 2016, the main industries in which Ipswich residents were employed included health care and social assistance (13.2 per cent), retail trade (10.5 per cent), manufacturing (10.0 per cent) and public administration and safety (9.1 per cent).[87]

Growth:

Ipswich is expecting significant growth of 344,000 people by 2041.[88] *ShapingSEQ* indicates that an additional 111,700 dwellings[89] will be required to accommodate the population growth projected for Ipswich, with 75 per cent of those dwellings expected to be provided through expansion development.[90]

Education:

The University of Southern Queensland has two campuses one in Ipswich city centre and one within a 15-minute walk of Springfield Central Station with over 1000 and 2300 students respectively.[91] There are also two TAFE Queensland campuses at Bundamba and Springfield Central.

Recreation:

Ipswich has a wide range of community spaces, facilities, parks and gardens and has a number of areas of natural and heritage significance which provide opportunities for recreation. The Ipswich Motorsport Precinct and Queensland Railway Museum are among a range of signature recreation facilities in the city. Ipswich is also a gateway to the rural and natural regional landscapes to the west in Lockyer Valley, Scenic Rim and Somerset.

81 Australian Bureau of Statistics. (2019). *Regional Population Growth, Australia (cat. no. 3218.0).*
82 Queensland Government Statistician's Office. (2018). *Queensland Government population projections, 2018 edition.*
83 National Institute of Economic and Industry Research. (2018). *National Economic Indicators for Local Government Areas, 2017/2018.*
84 Australian Bureau of Statistics. (2019). *Regional Population Growth, Australia (cat. no. 3218.0).*
85 Ipswich City Council. (2017). *Business in Ipswich.*
86 Queensland Government Statistician's Office. (2018). *Queensland Regional Profiles: Workforce Profile for Ipswich (C) Local Government Area.*
87 Queensland Government Statistician's Office. (2018). *Queensland Regional Profiles: Resident Profile for Ipswich (C) Local Government Area.*
88 Queensland Government Statistician's Office. (2018). *Queensland Government population projections, 2018 edition.*
89 Dwelling supply benchmarks based on *ShapingSEQ* policy for growth distribution by local government area.
90 Department of Infrastructure, Local Government and Planning. (2017). *ShapingSEQ – South East Queensland Regional Plan 2017.*
91 University of Southern Queensland. (2016). *Ipswich campus.*

REDLAND

2018 ESTIMATED POPULATION: 156,900[92]
2041 PROJECTED POPULATION: 192,400[93]
+0.9% GROWTH RATE

Economy:

The Redland local government area produced $5.73 billion of Gross Regional Product and had 51,601 jobs and 11,859 businesses in 2017–18.[94] With the area connecting the Moreton Bay islands, Brisbane, Gold Coast and the Port of Brisbane, it has substantial opportunities in export orientated and value-add industries as well as existing strengths in professional, scientific and technical services, financial and insurance services, health care and social assistance and food services.[95]

As of 2016, the health care and social assistance industry provided 15.4 per cent of all jobs within Redlands, followed by retail trade (13.6 per cent), education and training (9.9 per cent) and construction (9.8 per cent).[96]

Employment:

In 2016, the main industries in which Redlands residents were employed included health care and social assistance (12.6 per cent), construction (11.9 per cent), retail trade (10.3 per cent) and education and training (8.3 per cent).[97]

Growth:

Redland is expecting growth of 35,600 people by 2041.[98] *ShapingSEQ* indicates that an additional 17,200 dwellings[99] will be required to accommodate the population growth projected for Redland, with 73 per cent of those dwellings expected to be provided through consolidation.[100]

Education:

In addition to the Alexandra Hills TAFE located in the Redlands, a number of higher education facilities in surrounding local government areas are accessible. This includes universities in Brisbane, Logan, Ipswich and the Gold Coast.

Recreation:

Moreton Bay, its islands and coastal areas of the region are significant recreational drawcards for the area. It is home to North Stradbroke Island (Minjerribah), the world's second-largest sand island and is a significant tourism attraction for the area and the state. Many natural and environmental areas, as well as community parks and spaces, also provide spaces for recreational activity.

Minjerribah Futures

Minjerribah Futures is a $24.75 million investment by the State Government to assist the economic transition of Minjerribah (North Stradbroke Island) from its traditional reliance on sand mining to a sustainable future as a globally recognised cultural and eco-tourism destination, supported by expanded research and education activities.

Over the next 3 years (2019-2021), the economic transition will be assisted by the delivery of a range of projects dedicated to:

- developing a sustainable, cultural and eco-tourism industry
- celebrating arts and culture
- expanding education and training opportunities
- supporting economic development and growth.

92 Australian Bureau of Statistics. (2019). *Regional Population Growth, Australia (cat. no. 3218.0)*.
93 Queensland Government Statistician's Office. (2018). *Queensland Government population projections, 2018 edition.*
94 National Institute of Economic and Industry Research. (2018). *National Economic Indicators for Local Government Areas, 2017/2018.*
95 Redland City Council. (2014). *Redland City Economic Development Framework 2014–2041.*
96 Queensland Government Statistician's Office. (2018). *Queensland Regional Profiles: Workforce Profile for Redland (C) Local Government Area.*
97 Queensland Government Statistician's Office. (2018). *Queensland Regional Profiles: Resident Profile for Redland (C) Local Government Area.*
98 Queensland Government Statistician's Office. (2018). *Queensland Government population projections, 2018 edition.*
99 Dwelling supply benchmarks based on *ShapingSEQ* policy for growth distribution by local government area.
100 Department of Infrastructure, Local Government and Planning. (2017). *ShapingSEQ – South East Queensland Regional Plan 2017.*

5.1.1 Projected population and employment growth

Between 2016 and 2041 the largest population growth is expected on the outer suburbs and edges of the Metropolitan region, particularly within Ipswich City Council, in areas such as Ripley Valley, Springfield Lakes, Rosewood, and Bellbird Park – Brookwater. Continued population growth is expected in the inner city areas of South Brisbane, West End and Newstead – Bowen Hills.

Figures 27 (below) and 28 show the expected total population and employment change across the region from 2016 to 2041. The larger land sizes of the zones around Rosewood depict high population and employment growth. As this change is over the total land area the intensity of change is anticipated to be lower than suggested by the colour tone.

Employment growth in the Brisbane CBD is set to grow substantially by 2041. Outside of Brisbane City, employment growth is also expected at South Brisbane, Rocklea – Acacia Ridge (the location of SEQ's major intermodal rail terminal), the Brisbane Airport, and in the Newstead – Bowen Hills area.

The concentration of employment in the Brisbane CBD and inner frame outweighs employment growth in all the other regional centres in the Metropolitan region. The combination of projected population growth in dispersed areas in the south of the region as well as to the north in the North Coast region, along with projected employment growth centred in the Brisbane CBD will continue to place pressure on the region's transport system.

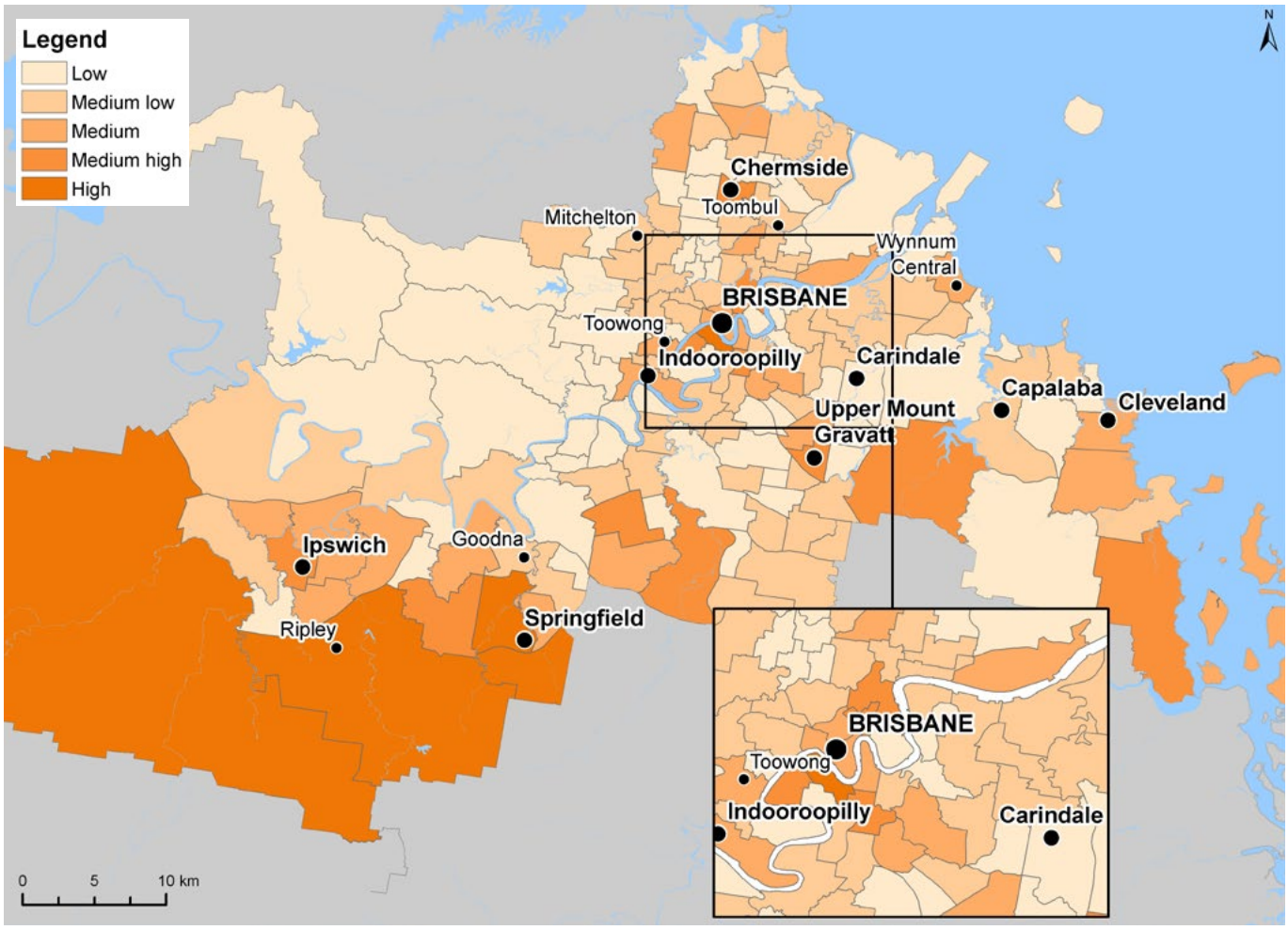


Figure 27: Metropolitan total projected population growth, 2016-2041

Source: Queensland Government Statistician's Office. (2018). *Queensland Government Population projections: 2018 edition (medium series).*

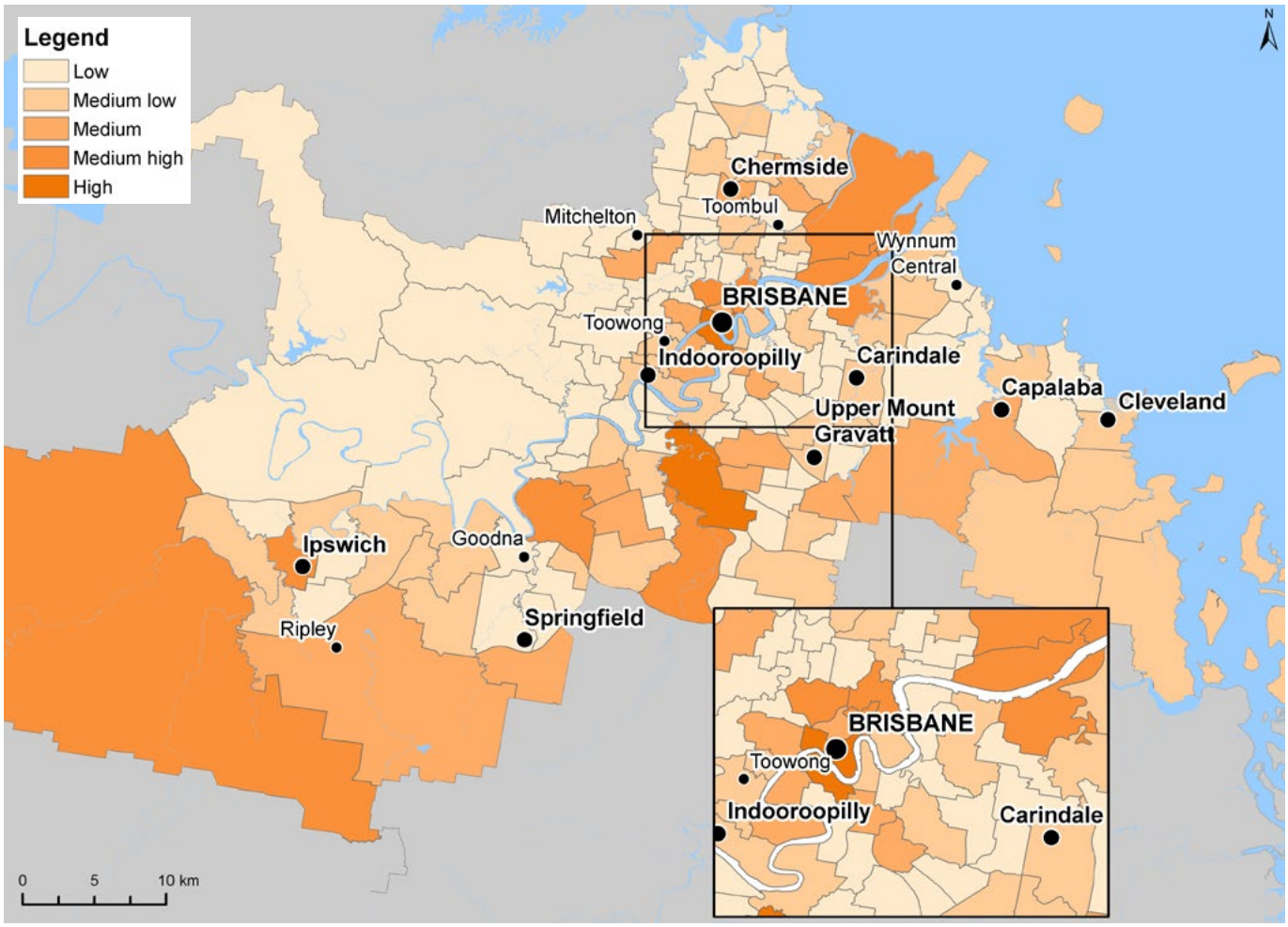


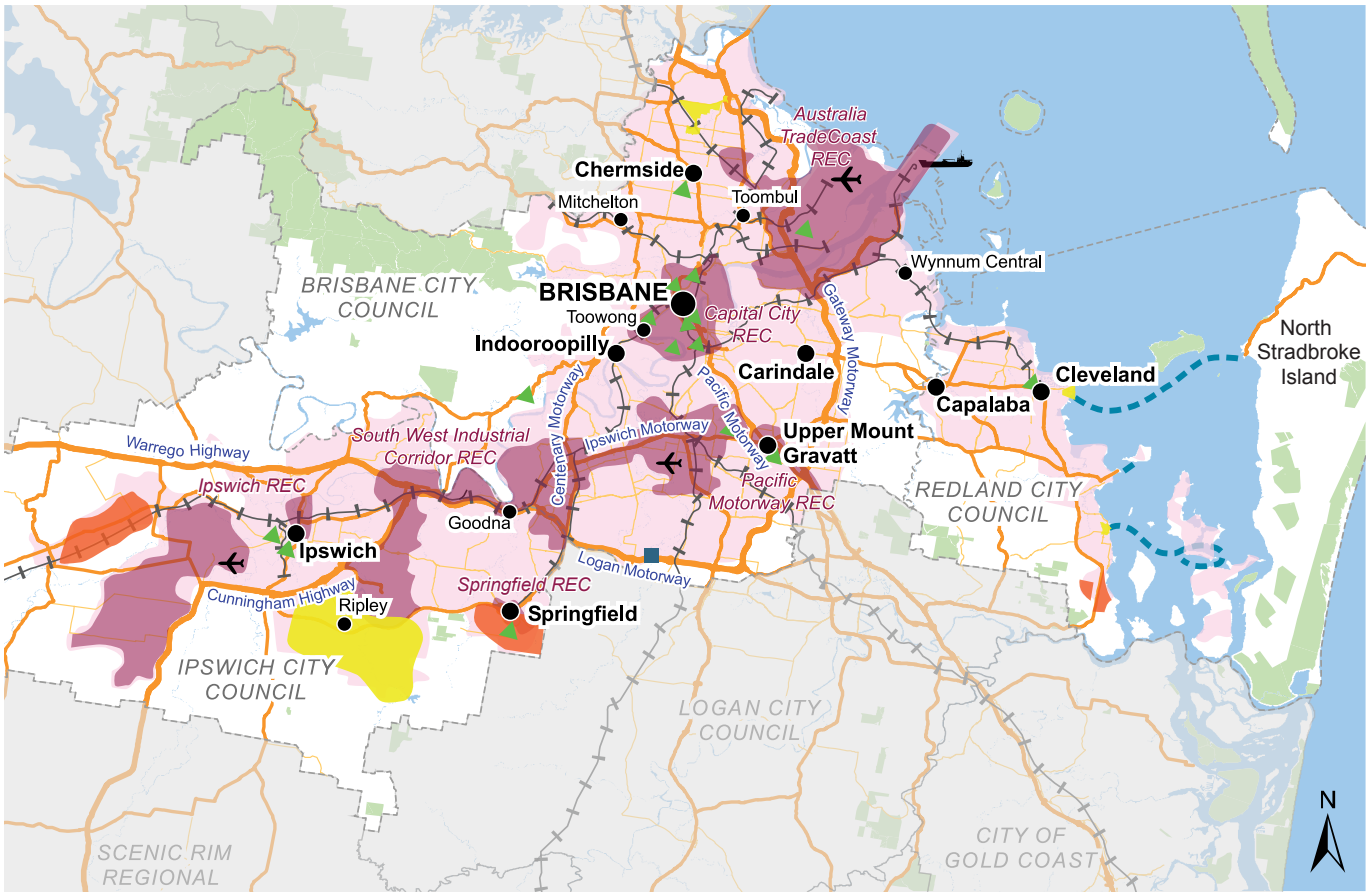
Figure 28: Metropolitan total projected employment growth, 2016-2041

Source: Queensland Treasury. (2016). *Regional Employment Projections, 2010-11 to 2040-41.* Department of Transport and Main Roads. (2019).

5.1.2 Regional economic and growth areas

A range of regional economic and growth areas will have an impact on the current and future regional transport network.

These areas include State Development Areas, Priority Development Areas, regional economic clusters, knowledge and technology precincts and major expansion areas. These areas are highlighted in Figure 29 and are detailed further in *ShapingSEQ*.



Legend

- National roads
- State-controlled roads
- Local roads of regional significance
- Ferry route
- Strategic airport
- Port
- Rail line
- Local government boundary

Regional activity centres

- Capital city centre
- Principal
- Major

- Major expansion area
- Priority Development Area
- Regional Economic Cluster (REC)
- Urban Footprint
- Knowledge and technology precinct
- Major enterprise and industrial area

Figure 29: Regional economic and growth areas for the Metropolitan region

5.1.3 Key regional projects

A number of major large-scale projects in public transport, road transport and urban development will help create significant social, economic or environmental opportunities and play a critical role in driving and shaping the Metropolitan region. These projects are detailed below.

Cross River Rail

A project to increase capacity and connectivity in the rail network by providing a direct connection between the southern and northern rail networks, via a tunnel through Brisbane City and across the Brisbane River from Dutton Park to Bowen Hills.[101] Cross River Rail is the Queensland Government's highest priority infrastructure project.

European Train Control System

Complementing Cross River Rail, the European Train Control System will modernise the signalling system on the SEQ rail network to unlock additional capacity on existing rail infrastructure by allowing trains to operate more closely to each other. The system will be initially installed from Northgate to Milton and is expected to increase capacity by 20 per cent.[102]

Ipswich Motorway – Rocklea to Darra

An upgrade of the eastern end of the Ipswich Motorway between Rocklea and Darra which will widen the motorway from four to six lanes along this section.

101 Cross River Rail Delivery Authority. (2019). *More Train, More Often.*
102 Queensland Government. (2016, June 21). *World-class signalling system on track to boost SEQ's train capacity.* [Media release].

Rail station upgrades

A number of rail stations will be upgraded as part of the continuing Station Accessibility Upgrade program. These upgrades will significantly improve access for all customers including those with disability, the elderly, parents with prams, people with injuries or even simply those carrying luggage. Upgrades are underway at Auchenflower, Central, Cannon Hill and East Ipswich stations. Upgrade works are being planned for Albion, Banyo, Bundamba, Buranda, Lindum, Morningside, Southbank and Wooloowin stations. The Cross River Rail Delivery Authority is also delivering station upgrades at Salisbury, Rocklea, Moorooka, Yeerongpilly, Yeronga and Fairfield stations.

Northern Transitway

The Northern Transitway will provide a high quality public transport corridor along Gympie Road, from Kedron to Chermside. The $53 million investment will deliver targeted bus priority and support high frequency on-road bus services improving operational safety, efficiency and reliability of this important link in Brisbane's northern public transport network.

Eastern Transitway

The Eastern Transitway project is intended to deliver cost effective bus priority improvements on Old Cleveland Road between Coorparoo and Carindale. Construction of stage 1 of the project commenced in August 2020. This investment is the next step in providing a high quality public transport corridor on Old Cleveland Road. This section of Old Cleveland Road is a local government road under the jurisdiction of Brisbane City Council and Transport and Main Roads is working closely with council during the design and delivery phases of this project.

Brisbane Metro

A Brisbane City Council project to upgrade the existing busway with upgraded stations and a new fleet of metro vehicles. Brisbane Metro will be a turn-up-and-go service with two dedicated lines from Eight Mile Plains to Roma Street and Royal Brisbane and Women's Hospital to University of Queensland.[103]

Cleveland – Redland Bay Road upgrade

The $60m investment for Cleveland – Redland Bay Road commenced at the Anita Street intersection in August 2020 and will improve traffic flow, reduce congestion and increase safety for all road users. The Anita Street intersection will be upgraded to include four through lanes, traffic signals, pedestrian crossing facilities and provision for people who ride bikes. Other work includes the duplication of a section of Cleveland – Redland Bay Road, north from the Anita Street intersection including separated bicycle tracks, upgraded footpaths and improved bus stops as well as resurfacing.

Brisbane Airport's new parallel runway

A new 3300 metre long parallel runway opened in July 2020 and will allow the airport to have sufficient capacity to meet forecast future demand.[104]

International Cruise Ship Terminal

The Port of Brisbane is building south-east Queensland's first mega cruise ship terminal at Luggage Point. The facility will be able to cater for cruise vessels of all sizes, including the largest ocean going cruise ships in the world.

Queen's Wharf Brisbane

Queen's Wharf Brisbane is an integrated resort development that will deliver a new tourism, leisure and entertainment precinct in the heart of Brisbane CBD.[105]

Priority Development Areas

Priority Development Areas (PDA) have been identified for specific accelerated development, with a focus on economic growth. The locations within the Metropolitan region are:[106]

- Albert Street Cross River Rail PDA
- Bowen Hills PDA
- Fitzgibbon PDA
- Herston Quarter PDA
- Northshore Hamilton PDA
- Oxley PDA
- Queen's Wharf PDA
- Ripley Valley PDA
- Toondah Harbour PDA
- Weinam Creek PDA
- Woolloongabba PDA
- Yeronga PDA.

Centenary Motorway upgrade planning

The Centenary Motorway is the primary link between Brisbane's fast-growing western corridor and the city's inner northern suburbs and CBD.

The *Centenary Motorway Upgrade Planning Study* was finalised in early 2019 and focuses on improving traffic safety and efficiency. It assesses the four-lane sections between Toowong and the Ipswich Motorway and identifies a range of staged transport solutions to reduce congestion on the local road network, while investigating opportunities to safely accommodate people riding bikes and walking.

Design has been completed for the first stage – the Centenary Bridge Upgrade in Jindalee – which proposes a new northbound bridge and investigated alterations to the existing southbound bridge.

The Queensland Government has committed $132 million towards the Centenary Bridge upgrade, with a further $112 million committed by the Australian Government.

103 Brisbane City Council. (2017). *Brisbane Metro.*
104 Brisbane Airport Corporation. (2017). *Brisbane's new runway.*
105 Department of State Development, Manufacturing, Infrastructure and Planning. (2019). *Queen's Wharf Brisbane.*
106 Department of State Development, Infrastructure Local Government and Planning. (2020). *Priority Development Areas.*

5.2 Regional transport network

5.2.1 Current regional transport network

The region's transport network consists of a maturing road network and growing public and active transport networks, the state's major international airport, as well as major freight facilities such as the Port of Brisbane and the Acacia Ridge Rail Terminal.

Active transport

Transport and Main Roads and local governments recognise the important role active transport can play in the way people move.

Well designed and connected streets and activity centres which encourage walking as the preferred method of travel present a range of social and economic benefits. This is particularly important in activity centres where people walking and riding bikes will be prioritised over vehicle movement.

Recent cycleway infrastructure upgrades in the Metropolitan region include:

- the North Brisbane Bikeway which connects Brisbane's northern suburbs to Brisbane City. Stage 4 is under construction to complete the 4.3 kilometre cycleway
- the Bicentennial Bikeway which connects Brisbane City to Toowong and carries an estimated 6500 people walking and riding bikes per day[107]
- The upgraded V1 Veloway forms a 17 kilometre dedicated cycleway, which connects to Southbank at Lower Terrace in South Brisbane and continues to the Gateway Motorway off ramp at Eight Mile Plains
- Brassall Bikeway which is a 4.8 kilometre off-road bicycle facility linking the Ipswich City Centre with Brassall and connecting major destinations along its route
- reconstruction of the Riverwalk between New Farm and Howard Smith Wharves by Brisbane City Council (BCC) costing $72 million and co-funded by BCC along with the Queensland and Australian governments.

Public transport

The public transport network in the Metropolitan region consists of rail, bus and ferry services. All services operate under an integrated fare and ticketing system. In 2016, public transport accounted for 62 per cent of all journeys during the morning peak period to Brisbane CBD.[108] The bus network currently caters for the majority of public transport trips.

The core rail and bus network is largely radial and is designed to provide fast and reliable commuting to and from Brisbane City. The network also provides accessibility to major destinations such as hospitals, activity centres and universities.

There are three main busways in the Metropolitan region:

- the South East Busway
- the Northern Busway
- the Eastern Busway.

These busways converge in the Brisbane CBD.

There are 12 rail lines in the region. All of the rail lines converge in the Brisbane CBD between Bowen Hills and Roma Street. Frequency of services is limited by rail capacity through the central lines and across the Brisbane River. The rail network also accommodates passenger trips and freight, which can lead to competition for running slots.

Connectivity to the rail, busway and high frequency bus network with other modes such as walking and bike riding, feeder bus services and park 'n' ride helps maximise the utility of the rail network. The Queensland Government is working with local governments to progressively improve station accessibility through bus interchange, park 'n' ride, and local walking and bike network upgrades.

Commuter at Springfield Central Station

107 Department of Transport and Main Roads. (2016). *South East Queensland Principal Cycle Network Plan.*
108 Department of Infrastructure, Local Government and Planning. (2017). *Connecting Brisbane.*

The Citycat ferry service operates along the Brisbane River between the University of Queensland at St Lucia in the west and Hamilton in the east. Ferries also provide access to the southern Moreton Bay islands from Redland Bay and to Stradbroke Island from Cleveland.

Rail freight

The Metropolitan region's rail freight network is operated by several rail operators. It provides access to key intermodal rail terminals such as Acacia Ridge Rail Terminal, as well as the Port of Brisbane. It also connects to and from the rest of the regional freight network including the North Coast line and the West Moreton, Western and South Western lines. Freight products include general freight, industrial products, rural commodities and coal.

The rail network is mainly shared between passenger rail and freight services. Passenger rail has priority over freight services limiting freight movement to the off-peak commuter periods.

Roads

The majority of journeys for passengers and freight are by road. The road network, shown in Figure 29 (on page 97), is characterised by radial roads and motorways where the main focus is on accessing the Brisbane CBD.

The Brisbane River divides the region from north to south and is a natural challenge to transport connectivity. River crossings are located around Brisbane City resulting in much of the north-south inner city traffic demand flowing through the Brisbane CBD.

Major motorways in the region include the Pacific Motorway, Gateway Motorway, Port of Brisbane Motorway, Clem7 tunnel, Airport Link, Ipswich Motorway, Logan Motorway, Centenary Highway and Legacy Way. The Inner City Bypass provides connectivity between major motorways and key arterials.

Significant freight movements flow to other ports and airports via the region's motorways and highways toward the north and south.

Major roads approved to handle 'B-double' multi-combination freight vehicles include the Gateway Motorway, Port of Brisbane Motorway and local roads around the port area including Lytton Road.

Air

Brisbane Airport is the key strategic passenger and freight airport in Queensland, and had over 24 million passenger movements in 2019. Other strategic airports include the Archerfield Airport and Amberly RAAF Base Airport near Ipswich.

Marine

The Port of Brisbane, located at the mouth of the Brisbane River, is the main container port for Queensland's exports and imported freight. The port handles 95 per cent of Queensland's international container trade and approximately 50 per cent of its agricultural exports.[109] In 2018–19, the commodities that made up most of the freight passing through the port included coal, crude and refined oils, dredging sands, mineral ores and sands, and cement.[110] The port is connected to the road network via the Port of Brisbane Motorway and is connected to the intrastate and interstate rail network.[111]

Gateway Motorway

109 Department of Transport and Main Roads. (2018). *Trade Statistics for Queensland Ports.*
110 Port of Brisbane. (2019). *Historical Aggregated Monthly Container Trade Report July 2018 – August 2019.*
111 Port of Brisbane. (2016). *Business Review.*

5.2.2 Transport challenges in the Metropolitan region

In partnership with stakeholders the following challenges for the Metropolitan region have been identified.

Employment travel patterns

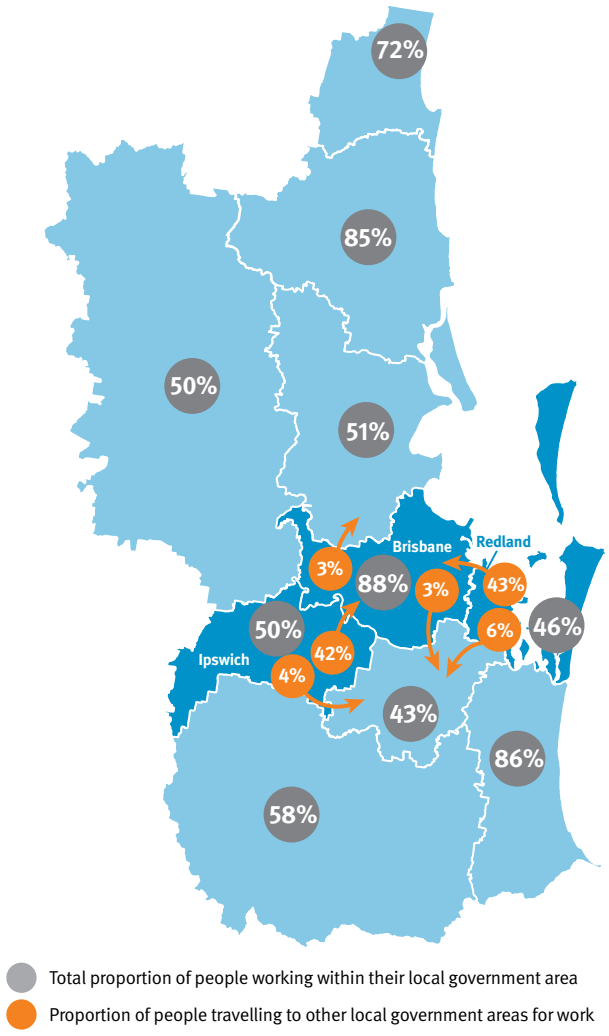
In the Metropolitan region, many people travel both within and outside of their local government area for work each day. Figure 30 shows the extent of such movements. For example in 2016, approximately 50 per cent of employed people travelled within their respective local government areas in both Ipswich and Redland. Within the Brisbane local government area 88 percent of people already travel within this area in addition to 42 per cent of people travelling from Ipswich and 43 per of people travelling from Redland.

As Figure 30 also shows, these trends are expected to continue for at least the next 20 years and planning needs to continue to facilitate the efficient movement of the region's residents to employment centres.

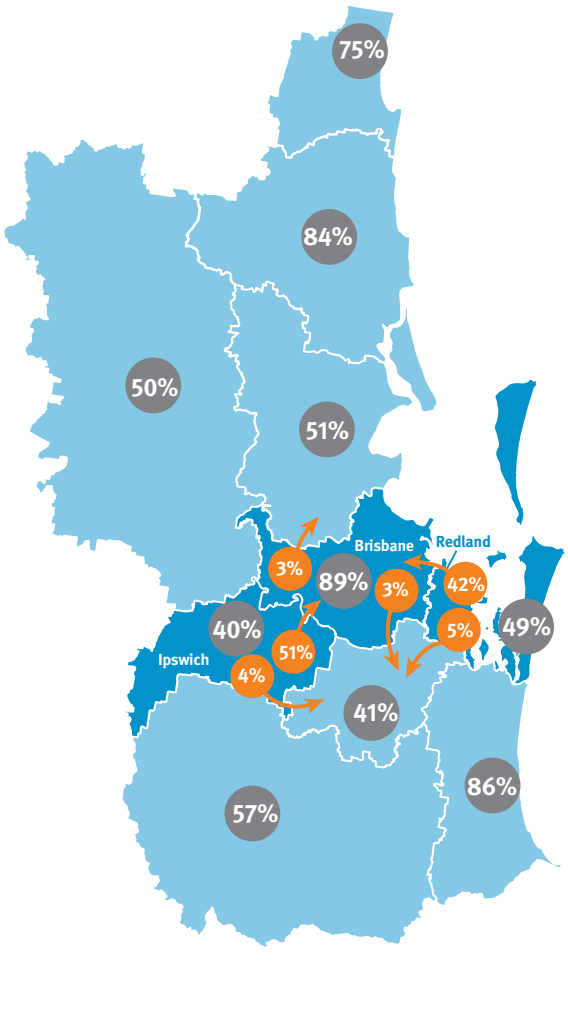
Travel preferences and mode competitiveness

In SEQ, private vehicle mode share has gradually increased over time and remains the highest mode share for all trips. Public transport declined through the 1980s and 1990s, before beginning to increase in the early 2000s. Active travel such as walking and bike riding has either declined or maintained a very small mode share over time. Figure 31 (on page 102) provides a breakdown of method of travel to work in 2016.[112]

Proportion of people that work within their local government area in 2016



Projected proportion of people that work within their local government area in 2041



Total proportion of people working within their local government area

Proportion of people travelling to other local government areas for work

Figure 30: Proportion of people that work within their local government area in 2016 and 2041
Source: Queensland Treasury. (2016). *Regional Employment Projections, 2010-11 to 2040-41.*

112 Australian Bureau of Statistics. (2019). *Method of Travel to Work (Employed Persons), Family and Community, Local Government Area, 2011-2018.*

Road congestion

High levels of reliance on travel by private vehicles has created challenges for the reliability and efficiency of the road network. The region's road network is operating at, or close to, capacity in most of the key commuter corridors to the Brisbane CBD during peak periods. This results in congestion for all road users, including buses and freight vehicles.

Road congestion has a negative impact on the economy. In 2018–2019, it was estimated that 88.8 per cent of excessive congestion was caused by recurring congestion (Figure 32).[113] Better use of available road space is needed to encourage the shift of traffic demand to different time periods (peak spreading). While private vehicles can sometimes be more time competitive for longer journeys, encouraging increased use of public and active transport can also help in reducing recurring congestion.

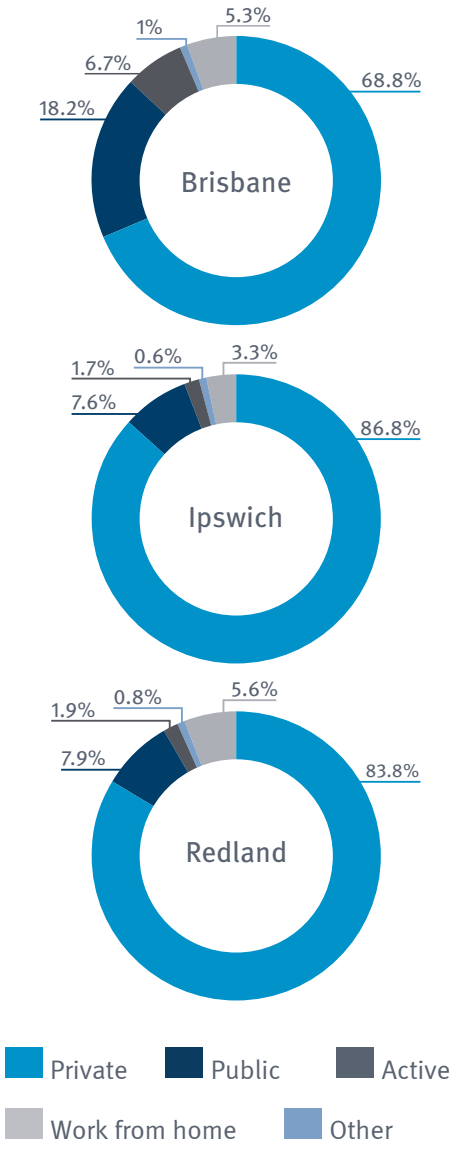


Figure 31: Metropolitan region mode share for journeys to work

Source: Australian Bureau of Statistics. (2019). *Method of Travel to Work (Employed Persons), Family and Community, Local Government Area, 2011-2018.*

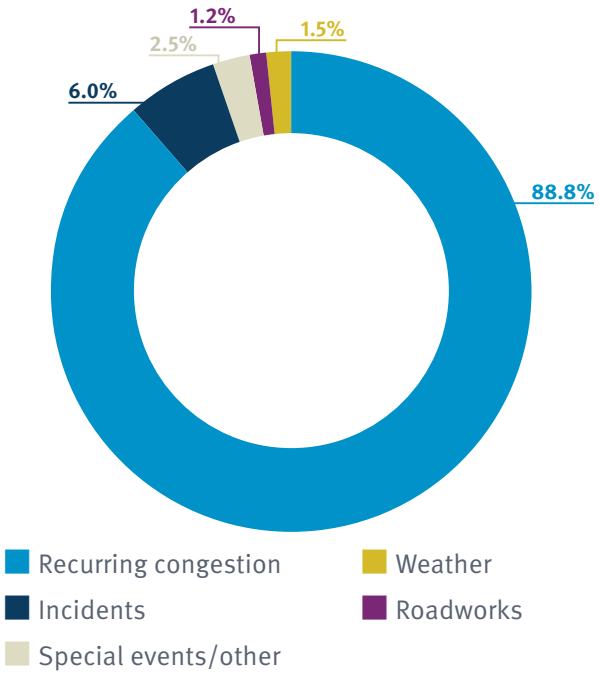


Figure 32: Excessive congestion in the Metropolitan region in 2018–19

Source: Department of Transport and Main Roads. (2019).

113 'Recurring congestion' is the level of congestion that regularly recurs along a corridor. In other words, this is where demand is exceeding capacity.

Resilience of the road network

The topography of the Metropolitan region along with the historical pattern of development along the Brisbane River impacts on the resilience of the road network. There are a limited number of bridges and tunnels, as a result, traffic incidents on major connectors within inner-city Brisbane can cause severe congestion which flows on to impact the rest of the inner-city network. This lack of cross-river connections also results in indirect access to the Brisbane CBD from inner and outer suburbs as well as from areas on either side of the river despite short physical distances separating the areas.

The limited number of river crossings over the Brisbane and Bremer rivers is also an issue for Ipswich where the rail line severs communities from the Ipswich CBD. A challenge to network reliability in the Redlands area is a concentration of a limited number of intra- and inter-local government road connections, especially to Brisbane. Network reliability issues are impacted by the concentration of traffic through Capalaba and Cleveland and around key access points to the bay and island ferries.

Barriers to active transport

Currently, the proportion of commuters who bike ride to work in the Metropolitan region ranges from 0.3 to 1.8 per cent.[114] In comparison, Vancouver, which like Brisbane also developed rapidly in the age of motorisation in the second half of the 20th century has a bicycle mode share of 10 per cent.

The modest proportion of commuters who bike ride to work is often attributed to a number of barriers. These include SEQ's sub-tropical climate and topography, as well as the perceived danger of bicycle riding on the road with mixed traffic. Another barrier that is often raised by bicycle user groups as restraining people from bike riding and walking in the metropolitan region, is the disconnectedness of the bike and shared path networks. In particular, many women, children and older people are put off by discontinuous provision of safe bicycle and walking corridors along major movement routes and the lack of safe and prioritised road crossings at key locations. In recent years, there has been significant investment in bike riding infrastructure and the network of bike paths physically separated from mixed traffic continues to grow and develop.

Bike riders in South Bank

114 Australian Bureau of Statistics. (2019). *Method of Travel to Work (Employed Persons), Family and Community, Local Government Area, 2011-2018.*

Bus congestion

Bus congestion, particularly in inner city Brisbane, is a challenge, with limited physical road space meaning that buses are often operating in a mixed traffic environment. The impact of general traffic congestion results in unreliable bus travel times and inefficient use of fleet.

Approximately two-thirds of all buses heading to inner city Brisbane utilise one or all of the three busways.

The South East Busway is the most heavily used busway. Sections of it in the inner city are operating at or above capacity which results in bus bunching and delays. In 2012, during the morning peak hour, the Victoria Bridge was operating at 125 per cent capacity and the South East Busway between Woolloongabba junction and Allen Street was operating at 126 per cent capacity.[115] To relieve congestion across the Victoria Bridge and the underground bus stations at Queens Street and King George Square, many express (Rocket) services travel into the Brisbane CBD across the Captain Cook Bridge.

Buses are also operating at capacity on other key routes during the morning peak hour. Many other bus routes heading to Brisbane City, and major suburban destinations such as Toowong, Chermside and the University of Queensland, are operating at capacity.

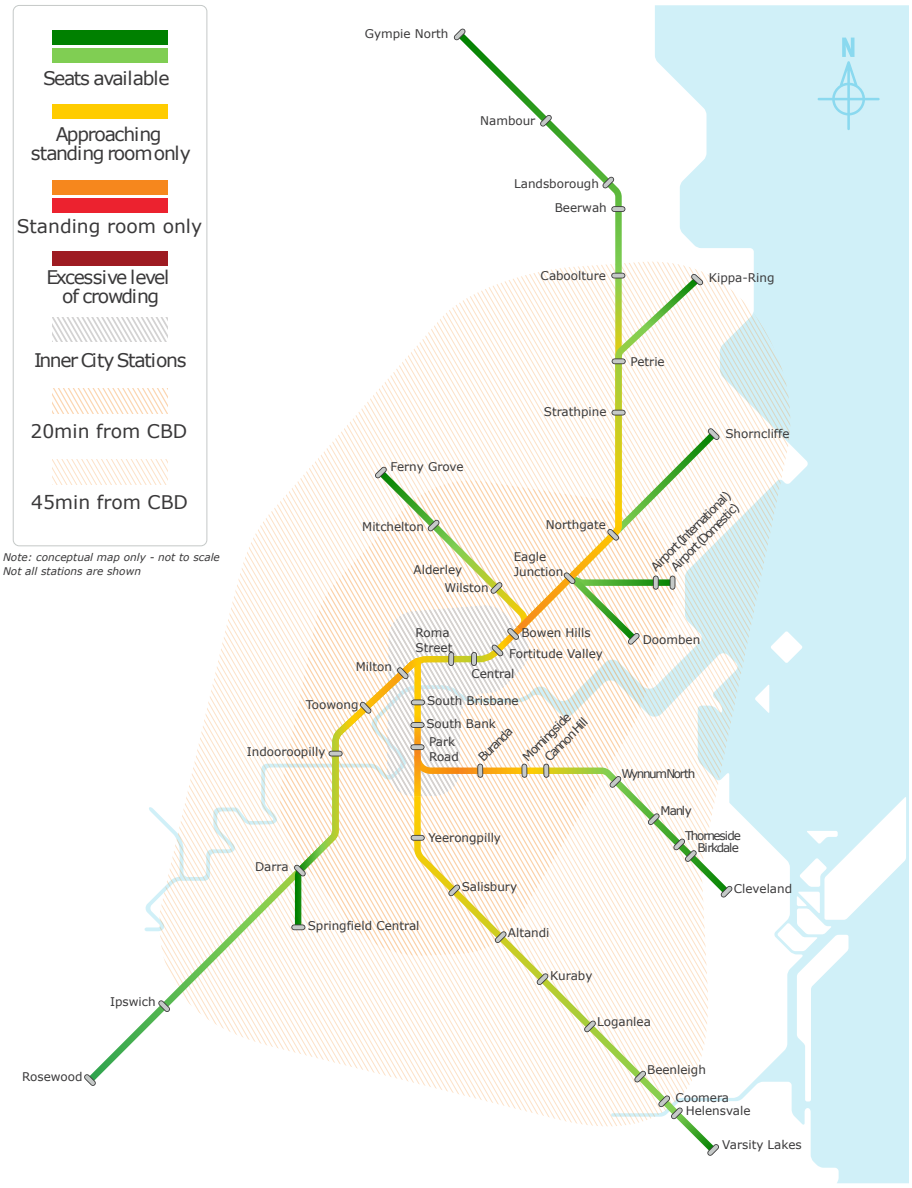


Figure 33: Passenger loading on the rail network during the morning peak in 2019

Capacity constraints on the rail network

Rail demand is expected to double between 2015 to 2026 and triple by 2036, with patronage on trains forecast to exceed capacity sometime between 2021 and 2026.[116]

Most of the capacity constraints are within the inner Brisbane area on lines entering Brisbane City as shown in Figure 33. The Merivale Bridge, the main rail crossing over the Brisbane River for trains connecting to the Gold Coast, Beenleigh, Cleveland and the Port of Brisbane, is expected to approach capacity by 2021. The network has several locations where trains must merge onto single tracks at rail junctions causing operational conflicts. As demand continues to increase, these conflicts will erode service reliability and cause increasing delays to rail users, as outlined in the Cross-River Rail Business Case.

On an average weekday, rail users make up 29 per cent of all public transport trips.[117] Unreliability and delays in rail trips to the city centre due to rail capacity constraints will have a negative impact on the economic competitiveness of south-east Queensland.

Freight trains operate on the same network as passenger services, limiting the number of passenger trains and the times that freight trains can be operated. As regional and intercity freight grows, and passenger demand increases, there will be greater pressure on the entire rail network.

115 Department of Transport and Main Roads. (2014). *BaT Project, Environmental Impact Statement.*
116 Building Queensland. (2017). *Cross River Rail Business Case.*
117 Department of Transport and Main Roads. (2019).

Cross River Rail Albert Street Station precinct, artist impression

Public transport accessibility and connectivity

Private vehicle access is often more time competitive than public transport as shown in Figures 34 and 35, which make it a less attractive option for commuters.

In the outer suburbs, land use is primarily residential, which requires residents to commute to areas of employment. In addition, a lot of residential growth is expected in expansion areas at the northern, southern and western fringes of the region where there are fewer public transport connections compared to the inner suburbs, resulting in higher reliance on private vehicles.

In inner-city Brisbane and Ipswich, public transport stations and stops can be accessed by comprehensive footpath networks. However, in outer suburbs of Brisbane, Ipswich and Redlands, factors including incomplete or substandard footpath networks and distance to a public transport stop can reduce effective walk-up catchments. Public transport stations with limited residential catchments are often used as good locations for park 'n' ride facilities. However, where demand for park 'n' ride exceeds supply people will often choose to either park in local streets or use their private vehicles for their entire trip. Public transport frequencies are often lower in outer and emerging suburbs which can also contribute to a greater reliance on private vehicles.

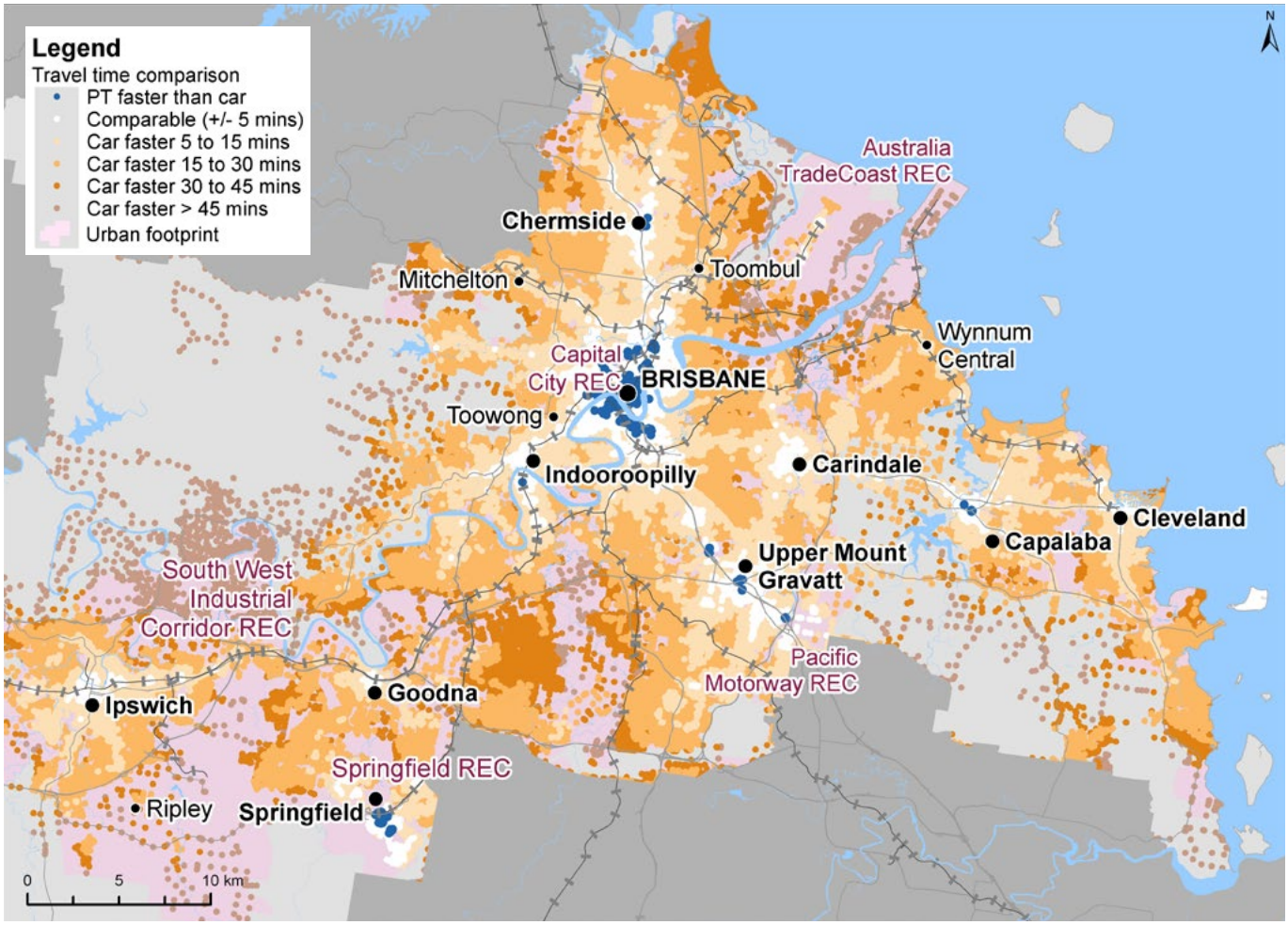


Figure 34: Car vs public transport accessibility to the Brisbane CBD in the Metropolitan region
Source: Department of Transport and Main Roads. (2019). *Output from the LUPTAI software, 2019.*

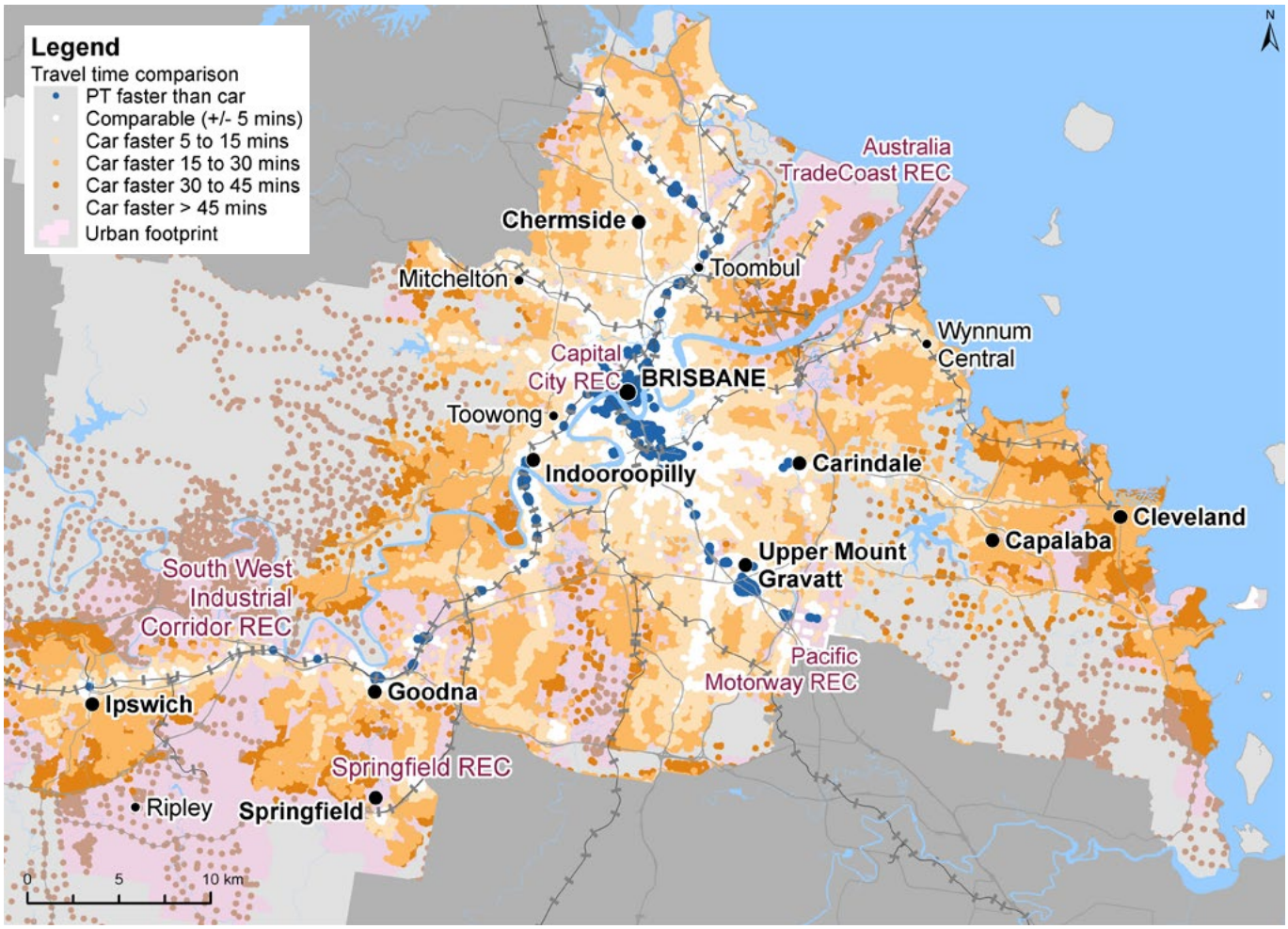


Figure 35: Car vs public transport accessibility to the closest key centres in the Metropolitan region

Source: Department of Transport and Main Roads. (2019). *Output from the LUPTAI software, 2019.*

Capacity constraints in rail and road freight networks

The rail network in the Metropolitan region provides access to intermodal rail terminals and the Port of Brisbane for freight from the north, south and west of Queensland. Freight from the North Coast and West Moreton rail lines converge in the region. The North Coast line supports general rail freight movement in the state. The West Moreton line, links to the Western and South Western lines, primarily supporting the movement of agricultural and mining products from Darling Downs and the South West to the Port of Brisbane.

Growth in rail freight demand is expected to have an impact on existing freight terminal capacity. The Acacia Ridge Rail Terminal is the state's largest freight terminal. It handles the majority of interstate freight and a large volume of intrastate freight. Opportunities exist to improve and redevelop the site to provide greater capacity and better efficiency.

Freight trains run on the majority of the rail network with the exception of the purely passenger suburban lines such as those to Sandgate, Ferny Grove and Brisbane Airport. On lines where passenger rail services are given priority access, the times which freight trains can operate are constrained.

Most of the container trade in Queensland passes through the Port of Brisbane and about 94 per cent[118] of all container movements to and from the port are moved by road. Container trade is forecast to grow significantly creating further pressure.

There are also growing issues with light, urban freight due to the popularity of electronic commerce which causes increasing numbers of courier vehicles to share the road system with other users.

118 Department of Transport and Main Roads. (2016). *Moving Freight.*

5.3 What do the priorities and objectives mean for the Metropolitan region?

TRANSPORT SYSTEM

The safety of all transport system customers is our primary priority as we create a single integrated transport network accessible to everyone.

Priority 1: Grow	Priority 2: Prosper	Priority 3: Sustain	Priority 4: Live
Transport objectives			
1.1 Current and future transport networks shape sustainable growth and development of communities. 1.2 Communities in growth (expansion) areas have access to reliable, efficient and sustainable travel options. 1.3 People and goods move safely and efficiently in rural communities.	2.1 Goods and services move efficiently and reliably along supply chains to and between key economic areas and markets. 2.2 Activity centres are connected by a reliable and high-frequency public transport network. 2.3 Transport planning and investment is informed by current and accurate information.	3.1 The transport system is safe, resilient and connected during and after extreme weather, events and incidents. 3.2 Walking, bicycle riding and other sustainable travel options are accessible, convenient and safe. 3.3 The transport system is sustainable and supports the region's environmental and lifestyle values.	4.1 Communities and public places are walkable and well-connected by integrated and sustainable transport options. 4.2 The transport system provides safe, fair and equitable travel options.
What it means for the Metropolitan region			
■ Urban consolidation and integrated design, particularly in and around activity centres and along existing and planned public transport corridors. ■ Connecting expansion areas such as Southern Redland Bay, Ripley, Springfield, Redbank Plains, Bellbird Park, Collingwood Park and western areas of Ipswich to the public transport network. ■ Improving safety and key connections in rural areas.	■ Increased efficiencies for freight and service delivery. ■ Improved freight routes (e.g. to the Port of Brisbane, Brisbane Airport, Acacia Ridge and South West Industrial Corridor). ■ Increased public transport connecting activity centres and regional economic clusters. ■ Improving data accuracy and usage through smart infrastructure, real-time data and artificial intelligence.	■ Infrastructure is improved and built to minimise the impacts of weather and other disruptive incidents. ■ Network and incident management is improved to minimise impacts of closures and disruptions. ■ Prioritisation of active transport. ■ Provision of low and zero emission vehicle infrastructure. ■ Infrastructure and services that minimise impacts on scenic landscapes and significant ecological areas.	■ Safe walking and bike riding is prioritised within local neighbourhoods and activity centres. ■ Transport choice is improved via options appropriate for the demand and land use, including community and school transport. ■ Transport options for people across all demographics. ■ Personalised transport such as demand-responsive transit and ride share.
Measures of success			
■ Commute time. ■ Commute distance. ■ Road network reliability.	■ Road network productivity. ■ Road network congestion. ■ Public transport accessibility.	■ Road closures. ■ Public and active transport mode share. ■ Transport greenhouse gas emissions.	■ Active transport accessibility. ■ Public transport disadvantage. ■ Public transport patronage. ■ Road safety.

The priorities and objectives for SEQ are outlined in Chapter 3. This section outlines how the priorities and objectives will be achieved in the Metropolitan region.

5.3.1 Priority 1: Grow – A transport system that supports a consolidated and sustainable urban structure

What does this mean for the Metropolitan region?

Objective 1.1: Current and future transport networks shape sustainable growth and development of communities.

Across Brisbane and Redlands, growth is predominantly planned in existing urban areas through consolidation, whereas in Ipswich it will be facilitated mostly through expansion.

This planning reflects the contextual differences within the three local government areas and supports diverse housing types together with diverse transport options. To support and enable this, the region's transport system will provide sustainable transport options that fit the context of existing and planned growth areas. Additionally, high-quality design outcomes will become inherent in all new transport planning.

This objective can be achieved for the Metropolitan region through:

- prioritising mass transit on major urban development corridors
- supporting private and public land use development options that prioritise active and public transport
- incorporating high-quality urban design into transport projects and supporting urban amenity along active streetscapes.

CASE STUDY: Upper Mount Gravatt

The adjoining land use along this corridor was previously low-density residential. Rezoning opened up the possibility of large suburban blocks being developed into multi-story apartment buildings or small block subdivisions. This has allowed for the provision of improved high-frequency bus and active travel options such as the South East Busway and Veloway 1, to link with retail, commercial and educational uses.

Objective 1.2: Communities in growth (expansion) areas have access to reliable, efficient and sustainable travel options.

Expansion is expected in outer areas of the region including Southern Redland Bay, Ripley, Springfield, Redbank Plains, Bellbird Park, Collingwood Park and western areas of Ipswich. In these communities, traditional public transport may not always be available. To support and enable sustainable growth within such communities and existing lower density areas, flexible and innovative public transport solutions will be provided to meet demand.

This objective can be achieved for the Metropolitan region through:

- providing residents with an appropriate range of transport options, including mass transit where appropriate, rather than private cars for a range of trips
- providing a blend of alternate service delivery models, including peer-to-peer transport, ride sourcing and demand-responsive transit for shorter trips and 'last mile' connections to mass transit
- providing private vehicle access where it's appropriate.

Objective 1.3: People and goods move safely and efficiently in rural communities.

While the Metropolitan region is predominately urban in nature, parts of Redlands and areas in southern and western Ipswich are rural. In these areas, private vehicles provide the most appropriate mobility option and rural customers still need to be able to move safely and access the urban network appropriately.

This objective can be achieved for the Metropolitan region through:

- transport options for people to access key centres from outlying areas
- planning to ensure transport disadvantage of rural settlements is minimised
- safe access to essential services, local employment and social support and interaction to enhance amenity
- improving the road network, managing speeds and reducing potential conflicts between modes and users of the road network.

Table 12: Priority 1 actions for the Metropolitan region

PRIORITY 1: GROW

A transport system that supports a consolidated and sustainable urban structure.

OBJECTIVES

Objective 1.1: Current and future transport networks shape sustainable growth and development of communities.

Objective 1.2: Communities in growth (expansion) areas have access to reliable, efficient and sustainable travel options.

Objective 1.3: People and goods move safely and efficiently in rural communities.

Actions – short-term	1.1	1.2	1.3
A3.01 Beenleigh and Gold Coast rail line (Kuraby to Beenleigh) planning Undertake planning to develop and assess options to improve the capacity and reliability of the Gold Coast and Beenleigh lines, including identified capacity constraints between Kuraby and Beenleigh.	✓	✓	
A3.02 Beenleigh rail line (Dutton Park to Salisbury) rail corridor planning Undertake planning for the Dutton Park to Salisbury rail corridor to determine and preserve corridor requirements for future upgrades.	✓		
A3.03 Brassall and Yamanto to Ipswich bus priority planning Undertake planning to provide bus priority between Brassall and Yamanto via the Ipswich central business district.	✓	✓	
A3.04 Brisbane inner city public transport planning Investigate the need for higher capacity public transport solutions for the inner city to complement and build upon Cross River Rail and Brisbane Metro and the strategic direction outlined in *Connecting Brisbane*.	✓	✓	
A3.05 Browns Plains to South East Busway bus priority planning Undertake planning to develop options for providing bus priority on the Mains Road corridor between the South East Busway and Browns Plains Bus Station.	✓		
A3.06 Cleveland rail line upgrade planning Undertake planning to develop and assess options to upgrade the rail corridor between Park Road and Cleveland to improve reliability and network capacity.	✓		
A3.07 Infrastructure coordination plans Collaborate with Queensland Treasury, other state government agencies and local governments on infrastructure coordination plans within the Metropolitan region to improve the alignment of infrastructure planning with local and regional priorities and coordination within and between state and local government.	✓		
A3.08 Inner Brisbane bus priority planning Investigate opportunities to provide bus priority on key corridors connecting to the Brisbane CBD, consistent with the future public transport network identified in Figure 12.	✓		
A3.09 Ipswich to Springfield rail corridor planning Undertake planning for the Ipswich to Springfield rail corridor to refine and preserve corridor land, being cognisant of development activity in support of the long-term vision for the corridor.	✓	✓	

PRIORITY 1: GROW

A transport system that supports a consolidated and sustainable urban structure.

OBJECTIVES

Objective 1.1: Current and future transport networks shape sustainable growth and development of communities.

Objective 1.2: Communities in growth (expansion) areas have access to reliable, efficient and sustainable travel options.

Objective 1.3: People and goods move safely and efficiently in rural communities.

Actions – short-term (cont.)	1.1	1.2	1.3
A3.10 North Stradbroke Island public transport connectivity In collaboration with key stakeholders, undertake detailed investigations for North Stradbroke Island (Minjerribah) public transport improvements to support the Queensland Government's *Minjerribah Futures*.	✓		✓
A3.11 Park 'n' ride capacity expansion planning Undertake strategic planning to identify locations suitable for major park 'n' ride capacity expansion at key locations in the Metropolitan region public transport network.	✓	✓	✓
A3.12 Planning for major developments Undertake planning required to inform Transport and Main Roads' input into future transport networks serving major development areas such as Ripley, Southern Redland Bay, and Springfield. Participate in master planning activities and development of infrastructure agreements, in partnership with the Department of State Development, Infrastructure, Local Government and Planning, local government and the private sector, to maximise benefits from a 'one network' approach.	✓	✓	
A3.13 Public transport interchange and bus station upgrade planning Undertake planning for public transport interchanges including bus and rail interchanges, bus stations, and bus stop upgrades in the region to improve network performance and connectivity at activity centres and interchange locations. Early priorities include bus-rail interchange studies at Altandi, Carseldine, Morningside, Bowen Hills, Chermside bus interchange study, and Toombul bus interchange.	✓		
A3.14 Public transport network planning Undertake regular public transport network planning to ensure route structures are meeting current and future needs. For the Metropolitan Region, planning will focus on work to ensure readiness for the introduction of Cross River Rail and Brisbane Metro.	✓	✓	
A3.15 Rail station accessibility and capacity upgrades Identify areas of most need, prioritise and progressively undertake the detailed planning investigations required to guide investment decisions for rail station upgrades to improve accessibility and capacity within the Metropolitan region.	✓	✓	
A3.16 Salisbury to Beaudesert rail corridor planning Undertake planning for the Salisbury to Beaudesert rail corridor to determine and preserve corridor land, including planning to inform investment decisions for the staged delivery of passenger rail in this corridor.	✓	✓	✓
A3.17 Southwest growth areas public transport planning Progress planning to investigate provision of frequent public transport services to major expansion growth areas including Springfield and Ripley Valley.	✓	✓	

(continued next page)

PRIORITY 1: GROW

A transport system that supports a consolidated and sustainable urban structure.

OBJECTIVES

Objective 1.1: Current and future transport networks shape sustainable growth and development of communities.

Objective 1.2: Communities in growth (expansion) areas have access to reliable, efficient and sustainable travel options.

Objective 1.3: People and goods move safely and efficiently in rural communities.

Actions – medium/long-term	1.1	1.2	1.3
A3.18 Brisbane inner city multi-modal area transport strategy Brisbane City Council and Transport and Main Roads to develop a multi-modal area transport strategy for the Brisbane central business district and adjacent areas to support development occurring in and around the inner city.	✓		
A3.19 Capalaba to Redland Bay public transport planning Investigate options to improve bus reliability and support high-frequency services between Capalaba and Redland Bay.	✓	✓	
A3.20 Eastern Brisbane and Redlands Coast area transport investigation Develop a multi-modal area transport strategy for eastern Brisbane and the Redlands Coast.	✓	✓	
A3.21 Kenmore to Brisbane bus planning Undertake planning to improve bus quality on the Moggill Road corridor including through Kenmore.	✓		

Aerial view of Cleveland

5.3.2 Priority 2: Prosper – A transport system that supports the economic competitiveness of the region

What does this mean for the Metropolitan region?

Objective 2.1: Goods and services move efficiently and reliably along supply chains to and between key economic areas and markets.

The region experiences significant freight movement particularly from other regions transporting products to export through the Port of Brisbane and Brisbane Airport by road, rail and air along key freight corridors such as the Pacific Motorway, Logan Motorway, Warrego Highway, Cunningham Highway, Gateway Motorway, Western Rail Line and North Coast Line. Freight is also moved and distributed within the region, typically via the region's industrial precincts, the most significant of which are located within the regional economic clusters and major enterprise and industrial areas.

The region contains a number of regional economic clusters located on or nearby to key freight corridors. These are located at Australia TradeCoast, the Capital City Centre, the South West Industrial Corridor, Ipswich, Springfield and Pacific Motorway. In addition, major enterprise and industrial areas exist or are planned at Crestmead/Berrinba and Heathwood/Larapinta.

Enabling the efficient movement of people and goods to and between these precincts will assist in strengthening the economic competitiveness of the region. In addition, a connected freight network will need to accommodate growth in volumes in a way that maintains the amenity of growing inner city environments.

This objective can be achieved for the Metropolitan region through:

- optimising supply chains through interventions and infrastructure upgrades, such as freight lanes where appropriate and prioritising freight movement in off-peak periods
- optimising capacity on road and rail corridors and providing new freight corridors
- working with industry to shift freight movement to commuter off-peak periods
- improvements to vehicle types, connective vehicle technologies, route optimisation and data sharing
- supporting road access controls to ensure the efficient movement of freight while maintaining urban amenity.

Objective 2.2: Activity centres are connected by a reliable and high-frequency public transport network.

In support of both population and economic growth, reliable and high-frequency public transport will be needed to connect all activity centres across the region. This includes services to existing and emerging knowledge and technology precincts.

The network will connect activity centres and knowledge and technology precincts at Chermside, Mitchelton, Toombul, Wynnum Central, Brisbane City, Toowong, Indooroopilly, Carindale, Capalaba, Cleveland, Upper Mount Gravatt, Goodna, Springfield, Ripley and Ipswich.

Objective 2.3: Transport planning and investment is informed by current and accurate information.

Technological advancements have increased the availability of high-quality data about the transport system and its users. This data can inform transport improvements and how they are planned for and implemented. This data can be used by customers to inform their journey planning and use of the network.

In the Metropolitan region, technology advancements and accurate real-time data provide opportunities for better informed decision-making by network managers and customers. This can also inform effective management of transport assets and enable positive customer experiences.

This objective can be achieved for the Metropolitan region by:

- collaborating with local government and industry to enable shared data capability and supporting technology advancements
- using accurate, real-time data to understand both current and future customer mobility demands and opportunities
- connecting and engaging with customers in two-way communication
- collecting and analysing real-time infrastructure usage and performance data to inform infrastructure upgrades.

Table 13: Priority 2 actions for the Metropolitan region

PRIORITY 2: PROSPER

A transport system that supports the economic competitiveness of the region.

OBJECTIVES
Objective 2.1: Goods and services move efficiently and reliably along supply chains to and between key economic areas and markets.
Objective 2.2: Activity centres are connected by a reliable and high-frequency public transport network.
Objective 2.3: Transport planning and investment is informed by current and accurate information.

Actions – short-term	2.1	2.2	2.3
A3.22 Brisbane Metro planning Brisbane City Council to undertake planning and investigations necessary to advance delivery of the Brisbane Metro proposal such that optimum transport, public realm and community outcomes are achieved for Brisbane and the region.		✓	
A3.23 Centenary Motorway upgrade and extension planning Progress planning to inform investment decisions for the staged upgrade of the Centenary Motorway consistent with a master planned investment strategy, including: ■ Toowong to Ellen Grove – upgrade to six lanes ■ Deebing Heights to Amberley – extension planning including corridor identification and preservation.	✓	✓	
A3.24 Cunningham Highway transport planning Progress planning to inform investment decisions for the improvement of the Cunningham Highway between Ripley and Willowbank, including interchanges, consistent with a master planned strategy that meets multi-modal transport needs.	✓		
A3.25 Dutton Park to Indooroopilly public transport planning Investigate opportunities for a trunk public transport connection from Dutton Park, connecting through the University of Queensland to Indooroopilly.		✓	
A3.26 Gateway Motorway corridor planning Undertake planning studies to inform corridor protection and investment decisions regarding the development of the Gateway Motorway corridor to suit the transport system.	✓		
A3.27 Gympie Road corridor planning Progress planning to inform investment decisions for the improvement of the Gympie Road corridor consistent with a master planned strategy that meets multi-modal transport needs, with a particular focus on provision of staged delivery of priority for high-frequency bus services and integration with land use outcomes for northern Brisbane.	✓	✓	

PRIORITY 2: PROSPER

A transport system that supports the economic competitiveness of the region.

OBJECTIVES

Objective 2.1: Goods and services move efficiently and reliably along supply chains to and between key economic areas and markets.

Objective 2.2: Activity centres are connected by a reliable and high-frequency public transport network.

Objective 2.3: Transport planning and investment is informed by current and accurate information.

Actions – short-term (cont.)	2.1	2.2	2.3
A3.28 Intersection upgrades Undertake planning to inform options to upgrade intersections across the Metropolitan region to reduce congestion and improve safety. Priority intersections include intersections on Gympie Road, Beaudesert Road, Stafford Road, Sandgate Road, Old Northern Road, Logan Road, Western Arterial Road, Centenary Highway, Samford Road, Capalaba-Cleveland Road (including Old Cleveland, Moreton Bay and Finucane roads) and Cleveland Redland Bay Road.	✓		
A3.29 Ipswich Motorway (Rocklea to Darra) upgrade planning Progress planning to inform future investment decisions for the improvement of the Ipswich Motorway corridor between Rocklea and Darra consistent with a master planned strategy that meets multi-modal transport needs.	✓		
A3.30 Level crossing review Undertake a strategic review of level crossings on the SEQ Citytrain network to identify relative priorities for further investigation. Current priorities include progress of a precinct investigation at Lindum and removal of level crossings at Beams Road, Carseldine and Boundary Road, Coopers Plains.	✓		
A3.31 Logan Motorway/Centenary Highway interchange planning Progress planning to inform investment decisions for the upgrade of the Logan Motorway/ Centenary Highway interchange consistent with a master planned strategy.	✓		
A3.32 Mount Lindesay Arterial Road (Beaudesert Road) upgrade planning Progress planning to inform investment decisions for the improvement of the Mount Lindesay Arterial Road (Beaudesert Road) corridor consistent with a master planned strategy that meets multi-modal transport needs.	✓	✓	
A3.33 North Brisbane – South Moreton transport planning Review planning and develop a strategy to address the long-term transport challenges in the North Brisbane and South Moreton area, including enhanced access to key employment and activity centres, promoting public and active transport use, and efficient freight movement. The strategy is to inform infrastructure, services, corridor preservation and investment decisions that meet the multi-modal transport needs of the area.	✓	✓	
A3.34 Northern Bus Priority Corridor (Herston to Bracken Ridge) planning Undertake planning for staged delivery of bus priority to the remaining sections of the northern bus corridor between Herston to Bracken Ridge, including Federation Street to Truro Street and Kedron to Bracken Ridge. Identify and plan for delivery of interim measures such as transitway; and determine and preserve corridor land requirements for the long-term Northern Busway corridor.		✓	

(continued next page)

PRIORITY 2: PROSPER

A transport system that supports the economic competitiveness of the region.

OBJECTIVES

Objective 2.1: Goods and services move efficiently and reliably along supply chains to and between key economic areas and markets.

Objective 2.2: Activity centres are connected by a reliable and high-frequency public transport network.

Objective 2.3: Transport planning and investment is informed by current and accurate information.

Actions – short-term (cont.)	2.1	2.2	2.3
A3.35 Pacific Motorway upgrade planning Progress planning to inform investment decisions for the upgrade of the Pacific Motorway to reduce congestion and improve safety outcomes, including capacity upgrades from Gateway Motorway at Eight Mile Plains to Logan Motorway at Loganholme.	✓		
A3.36 Port of Brisbane rail planning Undertake planning with the Australian Government to investigate rail freight needs between Acacia Ridge and the Port of Brisbane.	✓		
A3.37 Review of planning and access declarations Review planning and access declarations on state-controlled roads within the Metropolitan region to inform decisions for the improvement of safety, congestion and access to the transport system.	✓		
A3.38 Road corridor planning Undertake strategic interventions for urban arterial roads in the Metropolitan region. Priority road corridors include: ■ Brisbane Road ■ Brisbane urban corridor (including Granard, Riawena, Kessels, and Mount Gravatt Capalaba roads) ■ Capalaba–Cleveland Road (including Old Cleveland and Finucane roads) ■ Cleveland Redland Bay Road ■ Linkfield Road ■ Logan Road ■ Old Northern Road ■ Redland Sub-Arterial/Redland Bay Road (including Mount Cotton, Duncan and Boundary roads) ■ Samford Road ■ Stafford Road.	✓	✓	
A3.39 Sandgate Road corridor planning Progress planning to inform investment decisions for the improvement of the Sandgate Road corridor consistent with a planned strategy that meets multi-modal transport needs.	✓	✓	
A3.40 Warrego Highway planning Progress planning to inform investment decisions for the safety of the Warrego Highway within the Ipswich local government area consistent with a planned safety strategy that meets transport needs. Refer to *Darling Downs Regional Transport Plan* for further actions for the Warrego Highway.	✓		

PRIORITY 2: PROSPER

A transport system that supports the economic competitiveness of the region.

OBJECTIVES

Objective 2.1: Goods and services move efficiently and reliably along supply chains to and between key economic areas and markets.

Objective 2.2: Activity centres are connected by a reliable and high-frequency public transport network.

Objective 2.3: Transport planning and investment is informed by current and accurate information.

Actions – short-term (cont.)	2.1	2.2	2.3
A3.41 Warrego Highway and Haigslea Amberley Road intersection upgrade planning Undertake planning for the safety upgrade of the Warrego Highway/Haigslea Amberley Road intersection.	✓		
A3.42 Warrego Highway to Cunningham Highway planning Progress planning of the Warrego Highway to Cunningham Highway Connection Corridor master plan to inform decisions for preservation and investment strategies consistent with the development of the transport system.	✓		
A3.43 Western Brisbane connectivity planning Investigate improvements to arterials in western Brisbane to improve transport connectivity, optimise traffic flow and increase public transport accessibility for local communities between Toowong and Everton Park.	✓	✓	
Actions – medium/long-term	**2.1**	**2.2**	**2.3**
A3.44 Eastern Busway (Coorparoo to Capalaba) bus priority and transport corridor planning Progress planning for staged delivery of bus priority from the Eastern Busway at Coorparoo to Carindale and Capalaba along Old Cleveland Road to meet longer-term multi-modal transport needs.		✓	
A3.45 Moggill Pocket sub-arterial corridor planning Progress planning of the Moggill Pocket sub-arterial corridor to inform preservation and investment decisions consistent with the development of the western Brisbane transport network in relation to active, passenger and freight traffic.	✓		
A3.46 Regional activity centre transport planning Undertake transport network reviews to develop local transport network strategies, including modal priority consistent with *ShapingSEQ* to best support the objectives of principal regional activity centres and other regional economic clusters.	✓	✓	
A3.47 Passenger and rail freight efficiency Assess opportunities to maximise the efficiency of the rail network ensuring consideration of passenger and freight requirements.	✓		

5.3.3 Priority 3: Sustain– A transport system that contributes to the environmental sustainability and resilience of the region

What does this mean for the Metropolitan region?

Objective 3.1: The transport system is safe, resilient and connected during and after extreme weather, events and incidents.

There are many corridors throughout the region that are prone to flash flooding, creek and river flooding as well as storm-tide inundation, which cause disruption to the transport network. Traffic incidents and events also disrupt the movement of people and goods.

Safety, resilience and connectivity will be supported through appropriate infrastructure upgrades, and also through providing customers with the information they need to keep them safe and moving, as events or incidents occur. Through the use of real-time data and information, infrastructure upgrades can be focused on the key links where they are most needed.

This objective can be achieved for the Metropolitan region through:

- management plans that minimise impacts of known closures and disruptions to the transport network
- effective and reliable communication, such as the coverage of early warning systems and real-time information
- innovation in traffic incident management and response across all modes
- targeted infrastructure upgrades.

Objective 3.2: Walking, bicycle riding and other sustainable travel options are accessible, convenient and safe.

Active transport will play a critical role in the region's transport network. In the urban context, bike riding and walking infrastructure will provide options for customers to commute, access local mass transit stops and essential services and for a variety of recreational activities. Where possible, these options will be separated from vehicle traffic to increase safety.

In rural areas, due to distances, road safety and traffic speeds, active transport will mostly be relevant for short distance trips within the local neighbourhood.

This objective can be achieved for the Metropolitan region through:

- providing a safe, convenient and connected active transport network that enables access to all of the regions activity centres
- incorporating safe and connected walking and bicycle options along the region's existing roads where appropriate
- policies and interventions to prioritise the needs of people walking and bike riding.

Objective 3.3: The transport system is sustainable and supports the region's environmental and lifestyle values.

The Metropolitan region is known for its diverse lifestyle opportunities which blend dense urban areas, low-density housing and rural living areas. These opportunities are afforded by the desirable sub-tropical climate, diverse natural landscapes, parklands and open spaces. Brisbane also has a high diversity of native plants and wildlife compared with other capital cities.

The Brisbane and Bremer Rivers are intrinsic and highly valued features of the region's landscape and lifestyle, as is Moreton Bay and the southern Moreton Bay islands. These features are vital to the lifestyle and tourism opportunities available in the region. Supporting the region's diverse lifestyle opportunities and environmental values requires deliberate consideration of sustainable transport approaches.

This objective can be achieved for the Metropolitan region through:

- planning for the integration of low and zero emission vehicles
- minimising transport emissions and noise and the associated impact on amenity in urban environments
- the use of more renewable sources of energy and providing more sustainable transport options for people
- minimising impacts on existing habitats and areas of biodiversity.

Table 13: Priority 3 actions for the Metropolitan region

PRIORITY 3: SUSTAIN

A transport system that contributes to the environmental sustainability and resilience of the region.

OBJECTIVES

Objective 3.1: The transport system is safe, resilient and connected during and after extreme weather, events and incidents.

Objective 3.2: Walking, bicycle riding and other sustainable travel options are accessible, convenient and safe.

Objective 3.3: The transport system is sustainable and supports the region's environmental and lifestyle values.

Actions – short-term	3.1	3.2	3.3
A3.48 Brisbane green bridge planning Work with Brisbane City Council as they undertake planning for five new green bridges across the city as part of the *Transport Plan for Brisbane* implementation plan.		✓	✓
A3.49 Centenary cycleway upgrade planning Progress development of a cycleway upgrade strategy for the Centenary Motorway between Frederick Street, Toowong and Springfield to inform future investment strategies. The strategy will address ways to increase the attractiveness of the route to increase patronage.		✓	✓
A3.50 Flood immunity upgrades Undertake planning to identify and prioritise flood immunity upgrades to the transport network in Metropolitan region.	✓		
A.3.51 Moggill Road bike riding requirements Progress planning to inform investment decisions for priority bicycle requirements along Moggill Road.		✓	✓
A3.52 Principal cycle network implementation Undertake planning to deliver the principal cycle network in the Metropolitan region to support more cycling, more often on safe, direct and connected routes via: ■ standalone options analysis and business case development for bike riding infrastructure on highest priority routes ■ provision for bike riding infrastructure as part of planning for other Transport and Main Roads funded projects on all principal routes, pursuant to cycle infrastructure policy.		✓	✓
Actions – medium/long-term	**3.1**	**3.2**	**3.3**
A3.53 Bus layover planning Progress planning for optimal use of layover and other bus operations to improve service efficiency and prepare for a move towards a connected network.		✓	
A3.54 Centenary cycleway upgrade planning Undertake planning to inform options for a priority cycle route along the Centenary Motorway between Springfield and Yamanto.		✓	✓

5.3.4 Priority 4: Live – A transport system that supports safe, healthy and liveable communities for everyone

What does this mean for the Metropolitan region?

Objective 4.1: Communities and public places are walkable and well-connected by integrated and sustainable transport options.

Walkable communities and public places promote social interaction, sustainable access to goods and services and equitable environments for people. Walkable urban areas also attract activity and provide environments that people want to experience.

Walkability plays a significant role in both amenity and people movement. It is an important active travel mode in the Metropolitan region within local neighbourhoods, activity centres and the central business district.

Transport planning will support the retention of walkable neighbourhoods in both existing and planned growth areas and also provide connections to the passenger transport network.

This objective can be achieved for the Metropolitan region through:

- prioritising the movement of people within all activity centres across the region
- high-quality design in walkable spaces that leverages the region's subtropical character
- public transport stops and stations that are well designed and support good accessibility for people walking
- enabling walking and bike riding as primary modes, particularly within activity centres
- enhanced wayfinding as well as more door-to-door and integrated end-to-end services.

Objective 4.2: The transport system provides safe, fair and equitable travel options.

Across the region, the further a person lives from an activity centre, typically the more challenging their accessibility becomes. Equally, the further a person lives from their place of employment, the more their daily commute costs. While proximity to local employment is encouraged and supported through this plan, so too is providing equal opportunity for all people to move, regardless of their circumstances.

This objective can be achieved for the Metropolitan region through:

- mobility solutions that provide greater personalisation and accessibility for everyone
- transport that enables social inclusion and supports diverse lifestyles
- transport options for people across all demographics, including the elderly, children and those with disability
- innovative approaches which address accessibility gaps in an affordable way, including through diverse transport options, active transport, personalised mobility and demand-responsive transport
- provision of safe mobility options where the safety of both people walking and people travelling on all modes is facilitated
- continued rollout of varied safety initiatives to reduce serious accidents and fatalities.

CASE STUDY: CAVI – Ipswich trial

The Queensland Government is preparing for Australia's largest trial of Cooperative Intelligent Transport Systems (C-ITS) technologies as part of its Cooperative and Automated Vehicle Initiative (CAVI). Up to 500 Ipswich residents will be recruited and their vehicles retrofitted with C-ITS technology for on road testing as part of the project.

C-ITS devices use traffic and road infrastructure data to provide safety warnings about a range of conditions, for example, a pedestrian crossing at a signalised intersection, a red light runner or a hazard ahead.

The rapidly developing cooperative and automated vehicle technologies could significantly reduce crashes and congestion and reduce vehicle emissions and fuel use.

The CAVI project is funded by the Motor Accident Insurance Commission and iMOVE Cooperative Research Centre (iMOVE CRC) and will be delivered with support from Ipswich City Council, Queensland University of Technology and other organisations.

Table 14: Priority 4 actions for the Metropolitan region

PRIORITY 4: LIVE
A transport system that supports safe, healthy and liveable communities for everyone.

OBJECTIVES

Objective 4.1: Communities and public places are walkable and well-connected by integrated and sustainable transport options.

Objective 4.2: The transport system provides safe, fair and equitable travel options.

Actions – short-term	4.1	4.2
A3.55 Boating infrastructure Prioritise investment in boating infrastructure across the Metropolitan region based on an assessment of demand and input from the community and stakeholders including through tools such as the *Recreational Boating Facilities Demand Forecasting Study*.		✓
A3.56 Bremer River crossing planning Work with Ipswich City Council as they undertake detailed planning to inform options for a new crossing of the Bremer River to address congestion, cross river connectivity and network resilience in the Ipswich City Centre.	✓	
A3.57 Bus route operational planning Undertake detailed planning and develop business cases to progress initiatives to improve the capacity, operational performance and customer experience of existing bus routes. These include: ■ more efficient passenger loading ■ increased service coordination and information technology systems ■ busway platform management and associated ticketing reforms ■ improved bus priority on high-frequency bus routes.	✓	✓
A3.58 Public transport wayfinding signage Identify opportunities to improve wayfinding signage for public transport facilities in the Metropolitan region.	✓	
A3.59 Road safety projects As part of the High Risk Roads process, undertake planning to inform options for safety related improvements across the Metropolitan region.		✓
A3.60 Principal cycle network implementation Support local government to undertake planning to deliver the highest priority routes on the principal cycle network within the Metropolitan region.	✓	✓
A3.61 Transit oriented developments Identify opportunities to develop and encourage transit oriented developments within the Metropolitan region. Collaborate with local governments, infrastructure project teams and other state agencies to support increased public transport mode share, residential and employment density at appropriate transport hubs. In particular investigate opportunities associated with rail and bus nodes at, for example: ■ in the short-term at Albion, Buranda, Cleveland, Coorparoo Junction, Ferny Grove, Fortitude Valley and redevelopment opportunities as a result of Cross River Rail ■ in the medium/long term at Cannon Hill, Coorparoo, Corinda, Darra and Eight Mile Plains.	✓	

(continued next page)

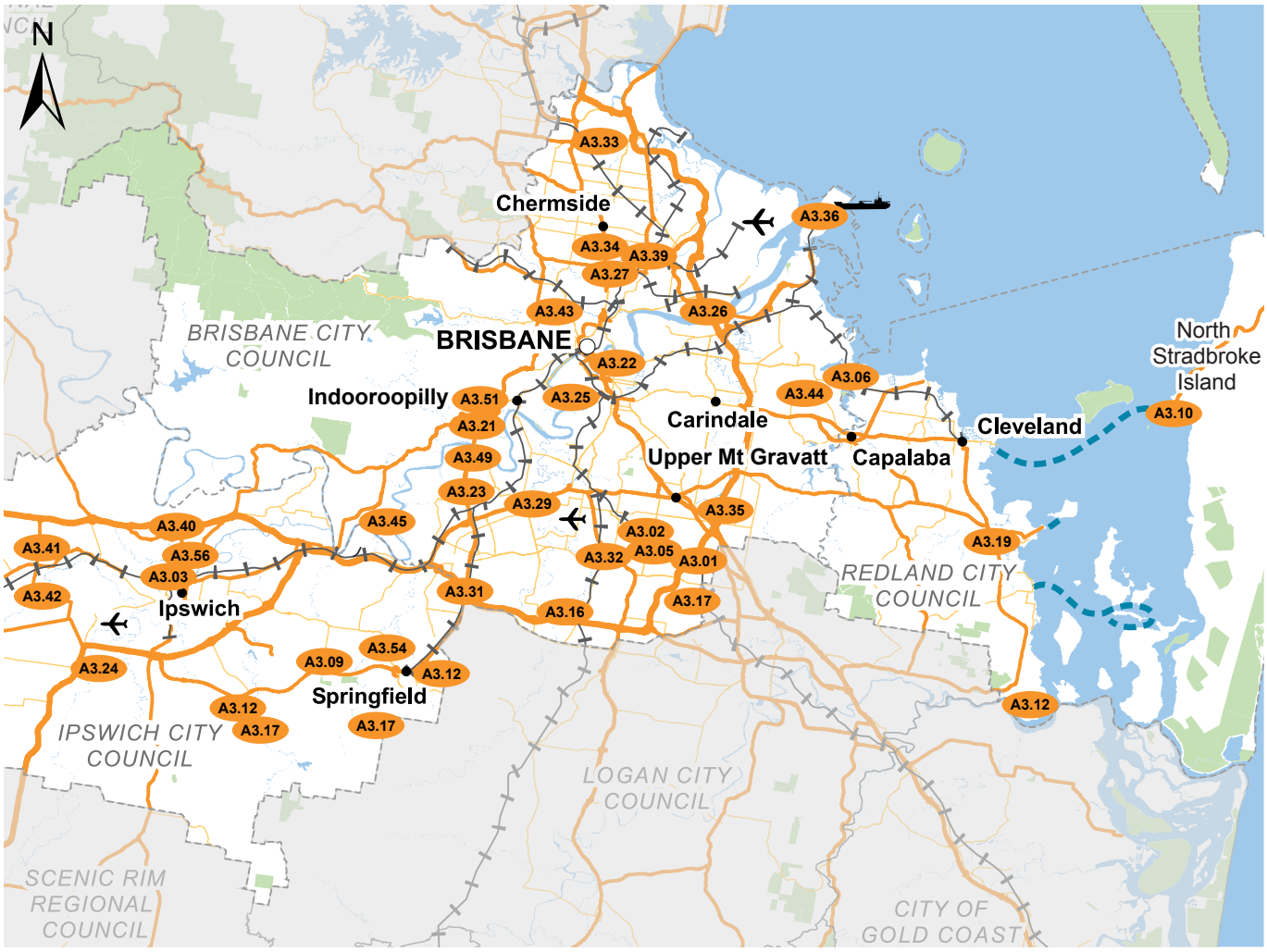
PRIORITY 4: LIVE

A transport system that supports safe, healthy and liveable communities for everyone.

	OBJECTIVES
Objective 4.1: Communities and public places are walkable and well-connected by integrated and sustainable transport options.	
Objective 4.2: The transport system provides safe, fair and equitable travel options.	

Actions – medium/long-term	4.1	4.2
A3.62 Active transport tourism Provide advice to local government, other state agencies, and tourism bodies to support planning, design and construction of rail trails and tourism routes to support active transport tourism in the Metropolitan region.	✓	
A3.63 Bicycle parking at public transport nodes Work with local governments in the Metropolitan region to assess the feasibility and options to help facilitate progressive provision of increased bike parking at public transport nodes.	✓	✓

Entertainment precinct, Brisbane



Legend

- National roads
- State-controlled roads
- Local roads of regional significance
- Ferry route (South Moreton Bay Island ferry routes)
- Strategic airport
- Port
- Rail line
- Local government boundary
- Actions

Regional activity centres

- Capital city centre
- Principal

Figure 36: Actions for the Metropolitan region

Surfers Paradise, Springwood Station, Gold Coast hinterland, Scenic Rim

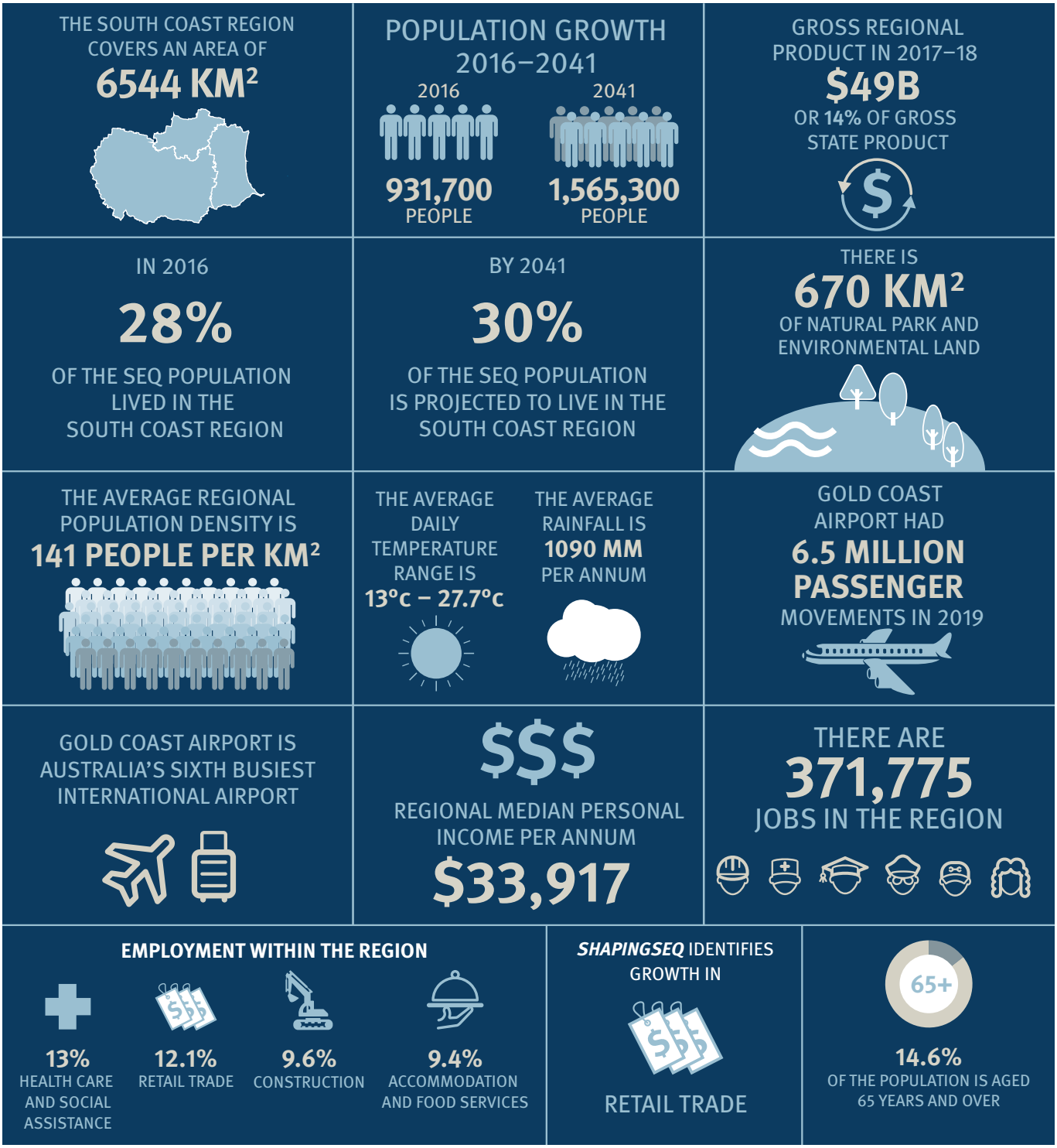
6.

South Coast Regional Transport Plan

Gold Coast · Logan · Scenic Rim

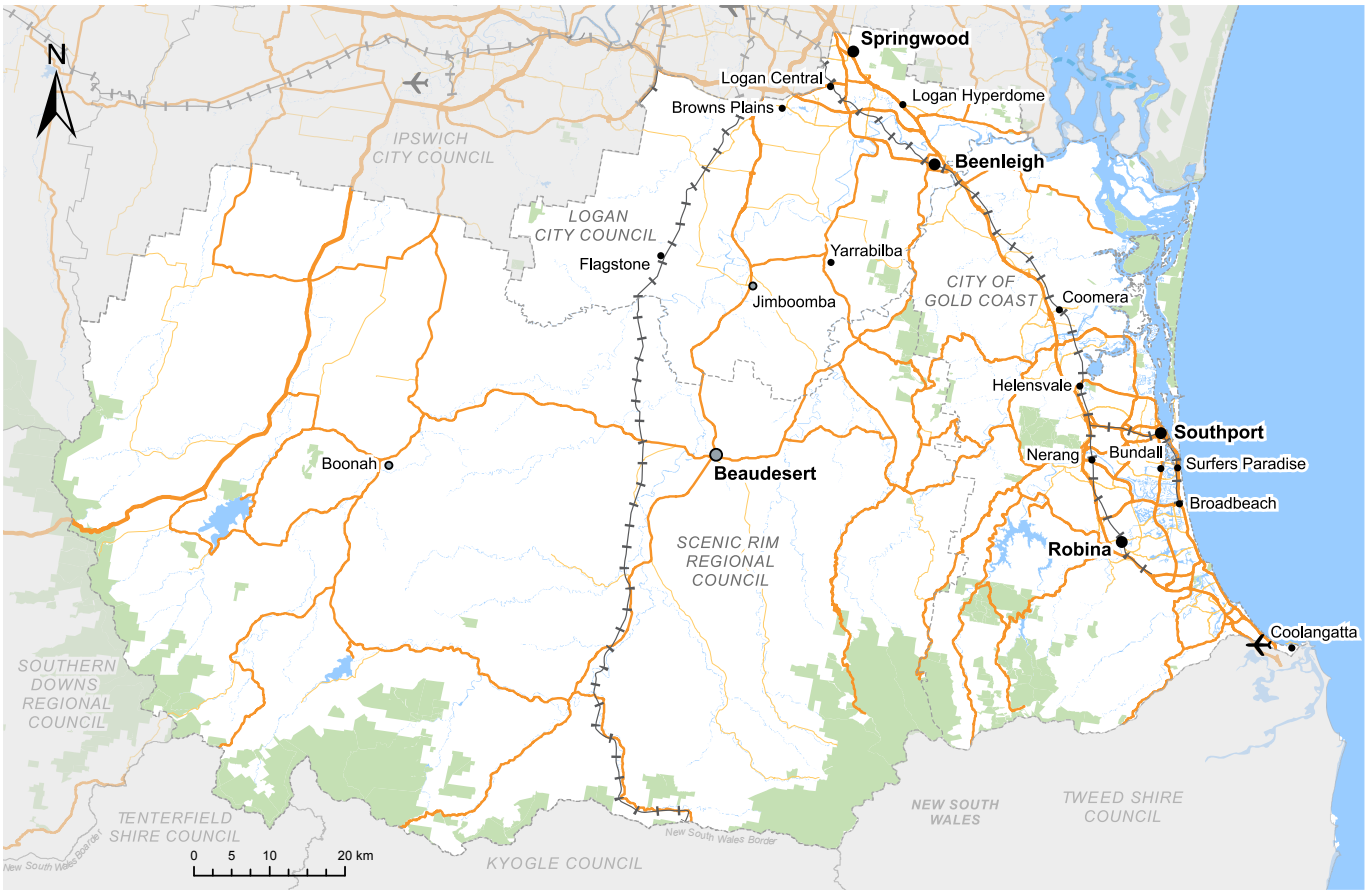
6.1 Region overview

The South Coast region (Figure 37) is the second largest urban area in South East Queensland (SEQ) and includes the Gold Coast, Logan and Scenic Rim local government areas.



Sources:

Queensland Government Statistician's Office. (2019). *Queensland Regional Profiles: Resident Profile for South Coast region.*
Bureau of Infrastructure, Transport and Regional Economics. (2020). *Airport traffic data.*
National Institute of Economic and Industry Research. (2018). *National Economic Indicators for Local Government Areas, 2017/2018.*
Department of Infrastructure, Local Government and Planning. (2017). *ShapingSEQ – South East Queensland Regional Plan 2017.*



Legend

- National roads
- State-controlled roads
- Local roads of regional significance
- Strategic airport
- Rail line
- Local government boundary

Regional activity centres

- Principal
- Major
- Principal rural
- Major rural

Figure 37: The South Coast region

Beenleigh Town Square

Economy:

The Gold Coast local government area produced $35.24 billion of Gross Regional Product and had 396,366 jobs and 67,767 businesses in 2017-18.[121] The property, tourism and retail sectors traditionally dominate the composition of the area's economy. While the economy continues to rely on these strengths, growing industries including health, education, professional services and financial services are increasingly driving the area's economic growth.[122] The Gold Coast is renowned as one of Australia's premier tourism destinations with over 12.2 million overnight and day visitors each year.[123]

As of 2016, the health care and social assistance industry provided 13 per cent of all jobs within the Gold Coast, followed by retail trade (11.7 per cent), accommodation and food services (10.6 per cent) and construction (9.3 per cent).[124]

Employment:

In 2016, the main industries in which Gold Coast residents were employed included health care and social assistance (12.4 per cent), construction (11.5 per cent), retail trade (11.2 per cent) and accommodation and food services (9.7 per cent).[125]

Growth:

Gold Coast is expecting to grow by 337,000 people by 2041.[126] *ShapingSEQ* indicates that an additional 158,900 dwellings[127] will be required to accommodate the population growth projected for the Gold Coast, with 80 per cent of those dwellings expected to be provided through consolidation.[128]

Education:

There are three universities in the Gold Coast. Griffith University has a major campus at Southport with more than 18,000 students. Southern Cross University has a campus at Coolangatta adjacent to the Gold Coast Airport with more than 5000 students. Bond University is a private institution with more than 4000 students.

Recreation:

Significant recreational opportunities exist for residents and visitors from world-class beaches and natural hinterland to community precincts, theme parks and major events.

119 Australian Bureau of Statistics. (2019). *Regional Population Growth, Australia (cat. no. 3218.0).*
120 Queensland Government Statistician's Office. (2018). *Queensland Government population projections, 2018 edition.*
121 National Institute of Economic and Industry Research. (2018). *National Economic Indicators for Local Government Areas, 2017/18.*
122 City of Gold Coast. (2013). *Economic development Strategy 2013–2023.*
123 Tourism Research Australia. (2020). *Local Government Area Profiles 2019, Gold Coast.*
124 Queensland Government Statistician's Office. (2018). *Queensland Regional Profiles: Workforce Profile for Gold Coast (C) Local Government Area.*
125 Queensland Government Statistician's Office. (2018). *Queensland Regional Profiles: Resident Profile for Gold Coast (C) Local Government Area.*
126 Queensland Government Statistician's Office. (2018). *Queensland Government population projections, 2018 edition.*
127 Dwelling supply benchmarks based on *ShapingSEQ* policy for growth distribution by local government area.
128 Department of Infrastructure, Local Government and Planning. (2017). *South East Queensland Regional Plan.*

LOGAN

2018 ESTIMATED POPULATION: 326,600[129]
2041 PROJECTED POPULATION: 554,300[130]
+2.3% GROWTH RATE

Economy:

The Logan local government area produced $11.77 billion of Gross Regional Product and had 115,574 jobs and 21,126 businesses in 2017–18.[131] The area has an established economy characterised by the manufacturing, rental hiring and real estate services, construction, retail and wholesale trade sectors. Emerging industries include transport and logistics, food manufacturing and processing, health care, education and training.[132]

As of 2016, the health care and social assistance industry provided 13.5 per cent of all jobs within Logan, as did retail trade (also 13.5 per cent), followed by both the construction industry and the education and training sector (10.5 per cent each).[133]

Employment:

In 2016, the main industries in which Logan residents were employed included construction (12.0 per cent), health care and social assistance (11.5 per cent), retail trade (10.5 per cent) and manufacturing (9.7 per cent).[134]

Growth:

Logan is expecting to grow by 227,700 people by 2041.[135] *ShapingSEQ* indicates that an additional 89,900 dwellings[136] will be required to accommodate the population growth projected for Logan, with 78 per cent of those dwellings expected to be provided through consolidation.[137]

Education:

Griffith University has a satellite campus in Logan with almost 2500 students.[138] TAFE Queensland also has a campus in Loganlea.

Recreation:

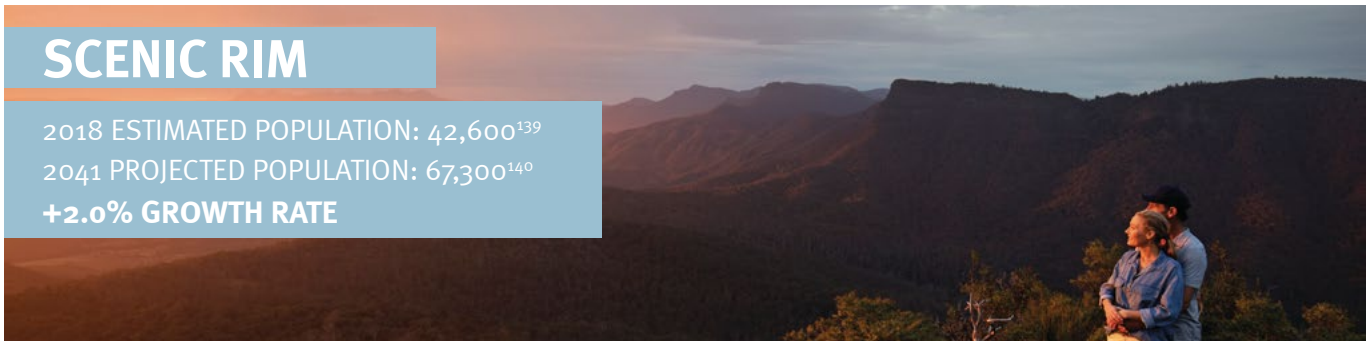
Logan is a predominately urban area featuring community precincts, parks and spaces. Logan is conveniently located between Brisbane and the Gold Coast and benefits from the recreational opportunities that comes with being one of Queensland's largest and fastest growing cities.

Mount Lindesay Highway 10 year forward plan

The Mount Lindesay Highway is one of Queensland's busiest highways with between 25,000 and 45,000 vehicles per day using it between Browns Plains and Jimboomba. It is projected to remain the primary north-south road transport link connecting Brisbane and Logan City with the Greater Flagstone Priority Development Area and the Bromelton State Development Area.

To support these future growth areas, Transport and Main Roads has released a 10 year forward plan for the Mount Lindesay Highway that seeks to upgrade the highway in stages. The plan identifies staged projects to add highway capacity and strategically located signalised intersections to the south of Jimboomba.

129 Australian Bureau of Statistics. (2019). *Regional Population Growth, Australia (cat. no. 3218.0).*
130 Queensland Government Statistician's Office. (2018). *Queensland Government population projections, 2018 edition.*
131 National Institute of Economic and Industry Research. (2017/2018). *National Economic Indicators Series.*
132 Logan City Council. (2017). *City of Logan Investment Snapshot.*
133 Queensland Government Statistician's Office. (2018). *Queensland Regional Profiles: Workforce Profile for Logan (C) Local Government Area.*
134 Queensland Government Statistician's Office. (2018). *Queensland Regional Profiles: Resident Profile for Logan (C) Local Government Area.*
135 Queensland Government Statistician's Office. (2018). *Queensland Government population projections, 2018 edition.*
136 Dwelling supply benchmarks based on *ShapingSEQ* policy for growth distribution by local government area.
137 Department of Infrastructure, Local Government and Planning. (2017). *ShapingSEQ – South East Queensland Regional Plan 2017.*
138 Griffith University. (2016). *About Griffith: campuses and facilities: Logan.*



SCENIC RIM

2018 ESTIMATED POPULATION: 42,600[139]
2041 PROJECTED POPULATION: 67,300[140]
+2.0% GROWTH RATE

Economy:

The Scenic Rim local government area produced $1.77 billion of Gross Regional Product and had 15,257 jobs and 4349 businesses in 2017–18.[141] The area's fertile land and proximity to SEQ markets provides a comparative advantage for the agriculture, forestry and fishing sector. Construction, rental hiring and real estate services and scientific and professional services sectors also contribute to a thriving regional economy.[142] Given the relatively small size of the area's economy, the development of the Bromelton State Development Area will have a significant impact on its scale and composition.[143]

As of 2016, the agriculture, forestry and fishing industry provided 12.7 per cent of all jobs within the Scenic Rim, followed by health care and social assistance (10.9 per cent), education and training (10.5 per cent) and accommodation and food services (10.3 per cent).[144]

Employment:

In 2016, the main industries in which Scenic Rim residents were employed included construction (10.7 per cent), health care and social assistance (10.5 per cent), education and training (9.4 per cent), and agriculture, forestry and fishing (8.8 per cent).[145]

Growth:

Scenic Rim is expecting to grow by 24,700 people by 2041.[146] *ShapingSEQ* indicates that an additional 10,000 dwellings[147] will be required to accommodate the population growth projected for Scenic Rim, with all of those dwellings expected to be provided through consolidation.[148]

Education:

Institutions in neighbouring local government areas provide education opportunities to the region including Logan and the Gold Coast.

Recreation:

The Scenic Rim features vast natural and rural landscapes and hinterland which offer a range of outdoor recreational experiences. It includes the World Heritage listed Gondwana Rainforest. Scenic Rim is also in close proximity to key centres and coastal areas which provide a range of additional opportunities for recreation and entertainment.

139 Australian Bureau of Statistics. (2019). *Regional Population Growth, Australia (cat. no. 3218.0).*
140 Queensland Government Statistician's Office. (2018). *Queensland Government population projections, 2018 edition.*
141 National Institute of Economic and Industry Research. (2018). *National Economic Indicators for Local Government Areas, 2017/18.*
142 Australian Bureau of Statistics. (2014). *Scenic Rim LGA statistical data.*
143 Department of State Development. (2017). *Bromelton State Development Area.*
144 Queensland Government Statistician's Office. (2018). *Queensland Regional Profiles: Workforce Profile for Scenic Rim (R) Local Government Area.*
145 Queensland Government Statistician's Office. (2018). *Queensland Regional Profiles: Resident Profile for Scenic Rim (R) Local Government Area.*
146 Queensland Government Statistician's Office. (2018). *Queensland Government population projections, 2018 edition.*
147 Dwelling supply benchmarks based on *ShapingSEQ* policy for growth distribution by local government area.
148 Department of Infrastructure, Local Government and Planning. (2017). *ShapingSEQ – South East Queensland Regional Plan 2017.*

6.1.1 Projected population and employment growth

Between 2016 and 2041 the areas with the largest projected population growth include the Greenbank - Flagstone, and Jimboomba – Yarrabilba expansion areas and Boronia Heights - Park Ridge in Logan, and Coomera, Pimpama, Surfers Paradise and Southport North in the Gold Coast.

Figure 38 shows the expected total population change by mappable areas across the region from 2016 to 2041. The larger land sizes of the mapped areas in the southwest depict medium to medium-high population growth. Similarly, Figure 39 depicts high employment growth in the southwest. It is noted that this change is over the total land area and subsequently the intensity of change is anticipated to be lower.

The majority of employment growth is projected to occur in the Gold Coast at centres including Southport, Ormeau – Yatala, Robina and Coomera (Figure 39), with high growth also projected for expansion areas in Greenbank and Jimboomba.

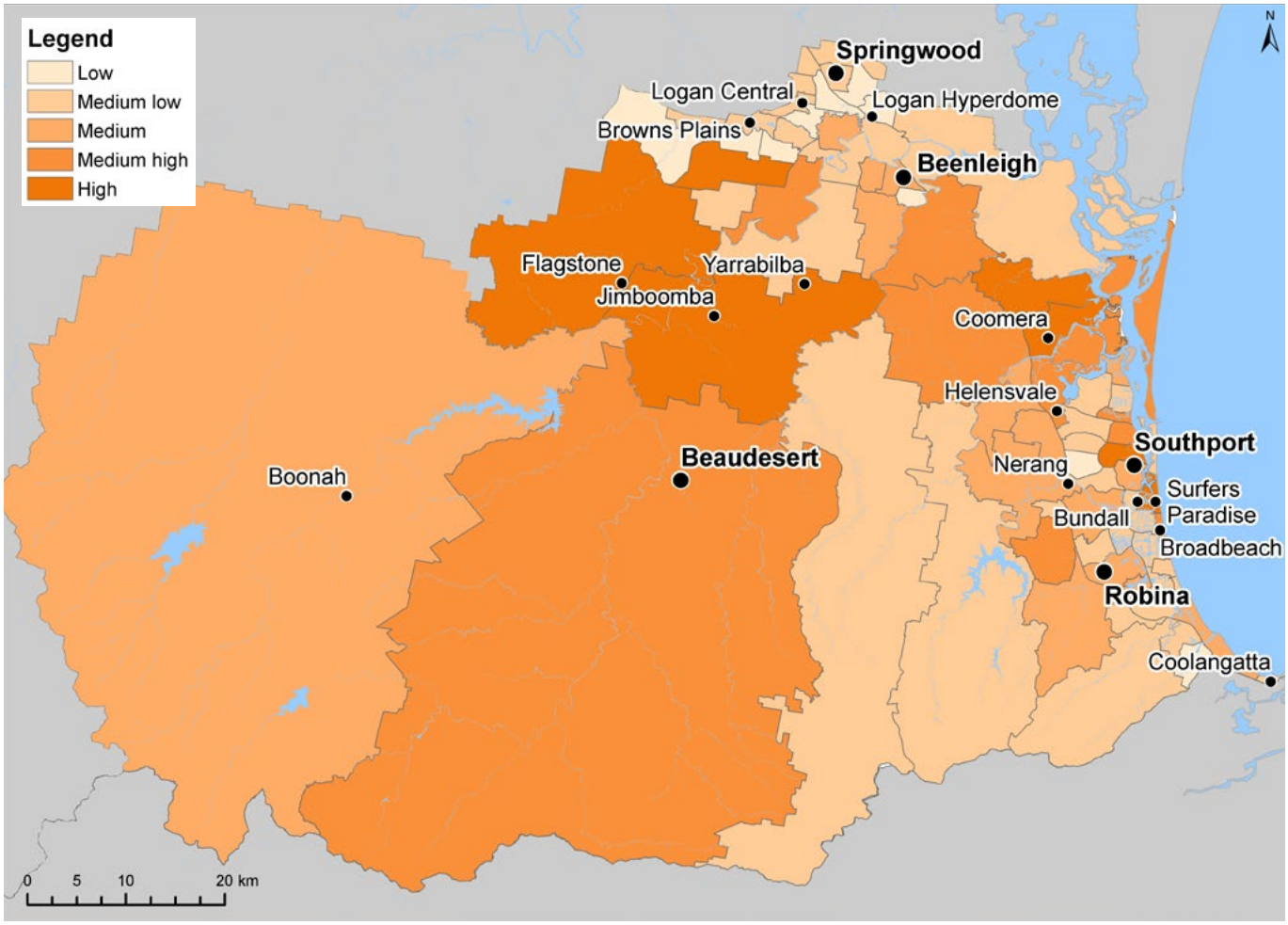


Figure 38: South Coast total projected population growth, 2016-2041

Source: Queensland Government Statistician's Office. (2018). *Queensland Government population projections: 2018 edition (medium series).*

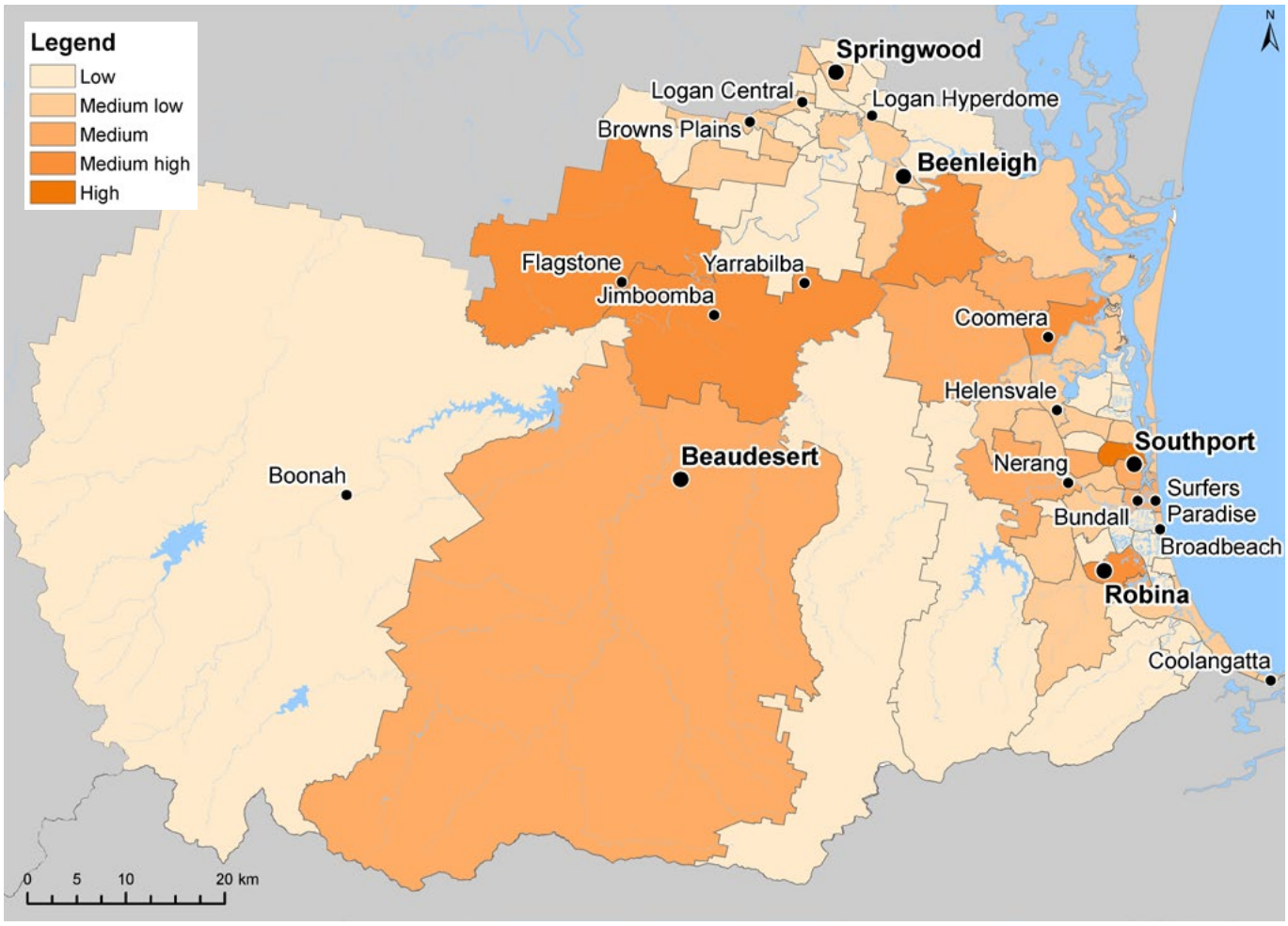


Figure 39: South Coast total projected employment growth, 2016-2041

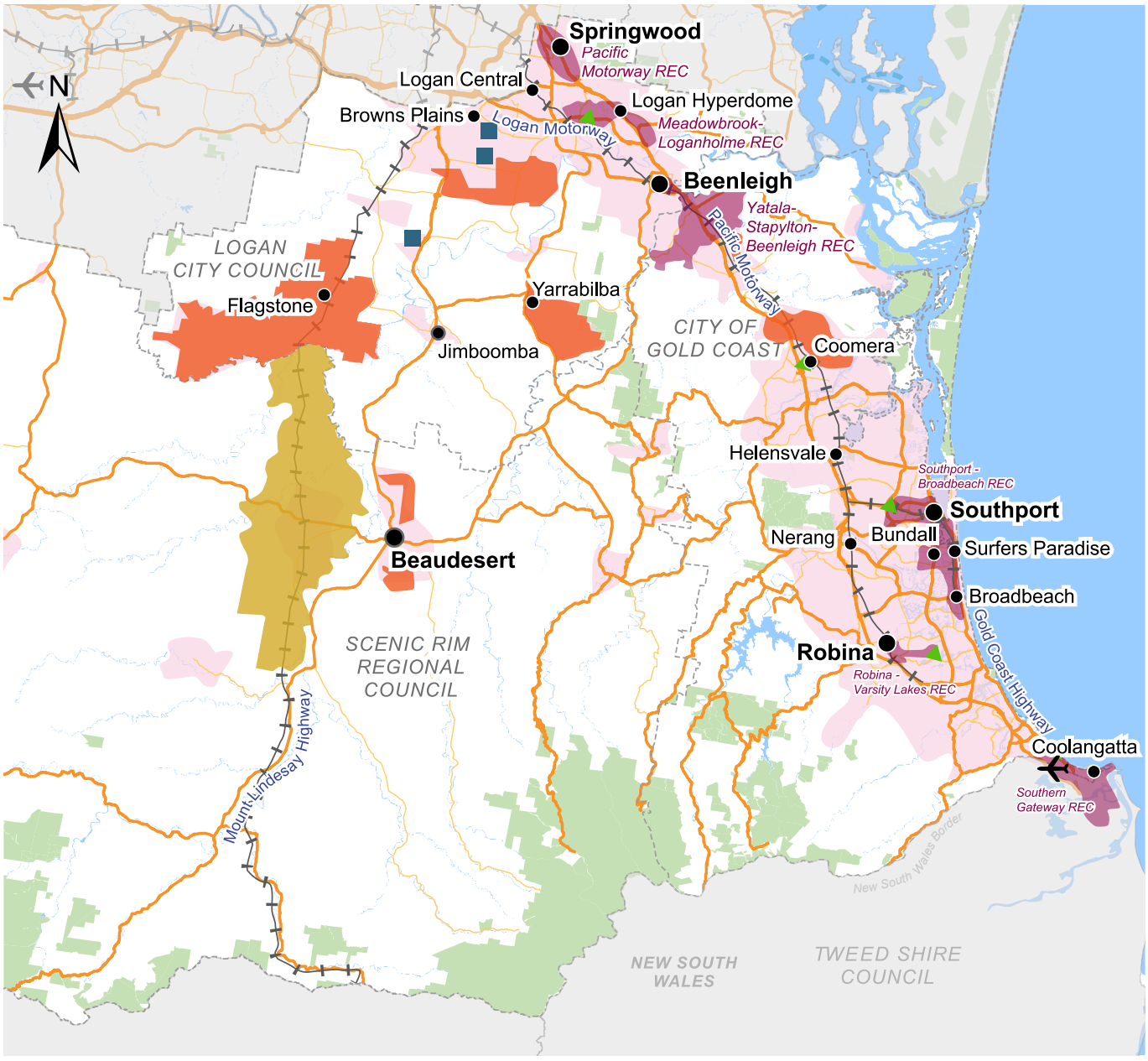
Source: Queensland Treasury. (2016). *Regional Employment Projections, 2010-11 to 2040-41.* Department of Transport and Main Roads. (2019).

Buses on the Gold Coast

6.1.2 Regional economic and growth areas

A range of regional economic and growth areas will have an impact on the current and future regional transport network.

These areas include State Development Areas, Priority Development Areas, regional economic clusters, knowledge and technology precincts and major expansion areas. These areas are highlighted in Figure 40 and are detailed further in *ShapingSEQ*.



Legend

- National roads
- State-controlled roads
- Local roads of regional significance
- Strategic airport
- Rail line
- Local government boundary

Regional activity centres

- Principal
- Major
- Principal rural
- Major rural

- Major expansion area
- Regional economic clusters (REC)
- Urban Footprint
- Knowledge and technology precinct
- Major enterprise and industrial area
- Bromelton State Development Area

Figure 40: Regional economic and growth areas for the South Coast region

6.1.3 Key regional projects

A number of major large-scale projects in public transport, road transport and urban development will help create significant social, economic or environmental opportunities and play a critical role in driving and shaping the South Coast region. These projects are detailed below.

New Gold Coast rail stations

The Queensland Government will provide additional funding of $120 million to build three new train stations at Pimpama, Helensvale North and Merrimac. The three new stations will allow more Gold Coast residents to benefit from the 3150 extra peak-hour seats being provided by increased rail services on the Gold Coast rail line, which will help take pressure off the M1 motorway. Construction will begin in 2020-21 with project delivery anticipated to occur in advance of the first service on Cross River Rail.

Gold Coast Light Rail

The Queensland Government, in partnership with the Australian Government and City of Gold Coast, has agreed to fund the delivery of the Stage 3 extension of the Gold Coast Light Rail from Broadbeach South to Burleigh Heads. Stage 3 of the light rail will build on the success of the current G:Link light rail by extending the light rail route a further 6.7 kilometres to Burleigh Heads and including eight new stations.

Since the opening of Stage 1 in 2014, connecting the Gold Coast University Hospital to Broadbeach, and the Stage 2 extension in 2017 connecting to Helensvale and adding three new stations and two park 'n' ride facilities, more than 50 million passengers have used the light rail system.

Planning for a further light rail extension to Coolangatta has commenced in response to *ShapingSEQ* regional directions.

Pacific Motorway (M1) upgrades

Pacific Motorway (M1) upgrades are complete for the M1/M3 Gateway Merge southbound from Eight Mile Plains, Mudgeeraba to Varsity Lakes. Upgrades are currently being delivered between Eight Mile Plains and Daisy Hill including busway extension to Springwood and extension of the V1 cycleway, interchange upgrades at Yatala South (Exit 41), Ormeau (Exit 45), at Pimpama (Exit 49) and between Varsity Lakes and Tugun.

Planning and design is continuing for future upgrades such as from Daisy Hill to Loganholme, and interchange and Smart Motorways improvements between Loganholme and Nerang.

Coomera Connector

Planning ahead for future growth, the Coomera Connector will deliver an alternative transport corridor to complement the function and role of the Pacific Motorway (M1).

The Queensland Government and the Australian Government have committed $765 million each to prioritise delivery of the southern section of the Coomera Connector between Coomera and Nerang to take pressure off the M1, support the growing communities and commercial hubs of Helensvale and Coomera, and complement the existing multi-modal infrastructure of the M1, light rail and heavy rail. A footprint for the 45-kilometre Coomera Connector corridor between Loganholme and Nerang was formally gazetted in March 2019.

Construction is expected to commence on Stage 1 between Coomera and Nerang - in mid-2021.

Gold Coast Airport expansion plans

Gold Coast Airport is a significant economic and aviation gateway to the region. An economic impact assessment was commissioned as part of the 2017 Master Plan process. The five-year impact of the Master Plan projects an increase of the airport's direct operations contribution to the region of $818 million by 2022, growing to $2.3 billion by 2037.[149] The Master Plan includes continued development and expansion of the airport as a major commercial and education hub.

Bromelton State Development Area

The State Development Area comprises 15,610 hectares, located within the Scenic Rim, approximately six kilometres west of Beaudesert and 75 kilometres south of Brisbane. It provides access to the rail network along the Sydney–Brisbane rail corridor, servicing freight and logistics operations for industries. The intermodal freight terminal at Bromelton opened in 2017 with trains arriving on a regular basis delivering freight to the logistics hub for ongoing distribution by road and rail to other locations.

Loganlea Station relocation

The delivery of a new Loganlea station will enhance Loganlea's position in the rail network making it a key station in the region and contribute to the development of the Meadowbrook knowledge and technology precinct.

The new station will offer a range of benefits including improved connections to Logan Hospital, Loganlea TAFE and Loganlea State High School as well as improved accessibility for people with disability and bus/active transport connections.

Priority Development Areas

Priority Development Areas (PDA) have been identified for specific accelerated development, with a focus on economic growth. The locations within the South Coast region are: [150]

- Greater Flagstone PDA
- Parklands PDA
- Southport PDA
- Yarrabilba PDA.

149 Gold Coast Airport. (2017). *Gold Coast Airport 2017 Master Plan.*
150 Department of State Development, Infrastructure Local Government and Planning. (2020). *Priority Development Areas.*

6.2 Regional transport network

6.2.1 Current regional transport network

Transport services and infrastructure in the South Coast region vary depending on the context and development history of the different areas. The region includes a maturing road network and growing public and active transport networks. Each of these enables people and goods to move throughout and beyond the region.

Active transport

Transport and Main Roads and local governments recognise the important role active transport can play in the way people move.

Well designed and connected streets and activity centres that encourage walking as the preferred method of travel present a range of social and economic benefits. This is particularly important in busy pedestrian centres such as Gold Coast coastal and tourist areas where walking should be prioritised over vehicle movements.

Key bicycle infrastructure in the South Coast region includes:

- Veloway 1 adjacent to the Pacific Motorway, progressively connecting the region and Brisbane
- Logan City cycleways such as links to Logan Central, Springwood, Slacks Creek, Shailer Park and Crestmead
- On and off-road facilities along key corridors on the Gold Coast such as along the Gold Coast Oceanway, Nerang-Broadbeach Road, and at Surfers Paradise, Robina and Nerang
- Bicycle and walking bridges such as the Nerang River, Scrubby Creek, Lake Intrepid, Lake Huron, Sundale (Southport), Kropp Park (Currumbin), and Galeen-Honeyeater (Burleigh Waters)
- Other biking attractors such as the Gold Coast Cycle Centre (Velodrome), world class mountain biking trails and BMX facilities.

Transport and Main Roads is delivering the next stages of the Veloway cycleway from Brisbane city to the Gateway Motorway off-ramp at Eight Mile Plains. A dedicated cycleway will provide a safe route for people commuting by bike.

Public transport

The South Coast region's public transport system includes heavy rail, light rail and bus networks. The region is served by a heavy rail line that runs from Varsity Lakes to Brisbane City. The Gold Coast's light rail, G:Link, is a 20 kilometre line with 19 stations spanning from Broadbeach to Helensvale where it connects with heavy rail services to Brisbane and the broader SEQ rail network. Nine all day high-frequency bus routes provide connections with the heavy and light rail trunk corridors.

There is also a network of bus services that provide important connections throughout the region and to neighbouring regions. Frequent links are provided from Logan to Brisbane.

During 2017–2018, TransLink commenced a partnership with Yellow Cabs to deliver an ongoing trial of Demand Responsive Transport (DRT) services in selected Logan suburbs. DRT is a pre-booked service that adapts to its users by changing routes, vehicles and destinations to suit the number of passengers.

Varsity Lakes Station

Rail freight

Interstate freight services travel through the region. Inland Rail is proposed to link with the interstate line at Kagaru offering significant opportunities for intermodal freight from terminals such as the Acacia Ridge intermodal terminal and the Bromelton intermodal freight terminal.

Roads

The region's road network is shown in Figure 40 (on page 133). Major roads in the South Coast region include the Pacific Motorway, the Cunningham Highway, the Mount Lindesay Highway and the Logan Motorway. Generally, the road network is characterised by a large number of north-south routes with fewer east-west connections.

Air

The South Coast region is serviced by the Gold Coast Airport. The Gold Coast Airport now welcomes approximately 6.5 million passengers per year. It is the sixth busiest international airport in Australia.[151]

Marine

With an abundance of waterways, the Gold Coast attracts recreational boating, water sports and fishing. Currently the Gold Coast has more than 35,000 registered boats. The navigation channel network links together the Broadwater, Moreton Bay, Gold Coast Seaway and Gold Coast Marine Precincts (Coomera and Steiglitz).

The Gold Coast Waterways Authority is responsible for the promotion and management of sustainable use of Gold Coast waterways for marine industries, tourism and recreation. The *Gold Coast Waterways Authority Act 2012* requires the authority to prepare a 10-year waterways management strategy and an annual waterways management program that provides a rolling investment plan.

6.2.2 Transport challenges in the South Coast region

In partnership with stakeholders the following challenges for the South Coast region have been identified.

Employment travel patterns

In the South Coast area, many people travel both within and outside of their local government area for work each day. Figure 41 shows the extent of such movements. For example, in 2016 a large proportion of working residents from Gold Coast and Scenic Rim travelled within their respective local government area for work. In Logan 43 per cent of working residents travelled within their local government area for work, with a further 43 per cent of working residents travelling to Brisbane for work. These trends are expected to continue for at least the next 20 years and planning needs to continue to facilitate the efficient movement of the region's residents for employment purposes.

Travel preferences and mode competitiveness

The South Coast region has high reliance on private vehicles. This is largely due to the dispersed development pattern throughout much of the region. The proportion of trips made by public transport and active travel such as walking and bike riding have either declined or have remained stable at small mode shares over time. Figure 42 provides a breakdown of method of travel to work in 2016.[152]

Projected population growth presents a need to mature the transport network, both to support planned infill development and to better service existing and future lower density areas and encourage more sustainable travel options.

Commuters travelling by rail

151 Bureau of Infrastructure, Transport and Regional Economics. (2020). *Airport Traffic Data*.
152 Australian Bureau of Statistics. (2019). *Method of Travel to Work (Employed Persons), Family and Community, Local Government Area, 2011-2018.*

Proportion of people that work within their local government area in 2016

Projected proportion of people that work within their local government area in 2041

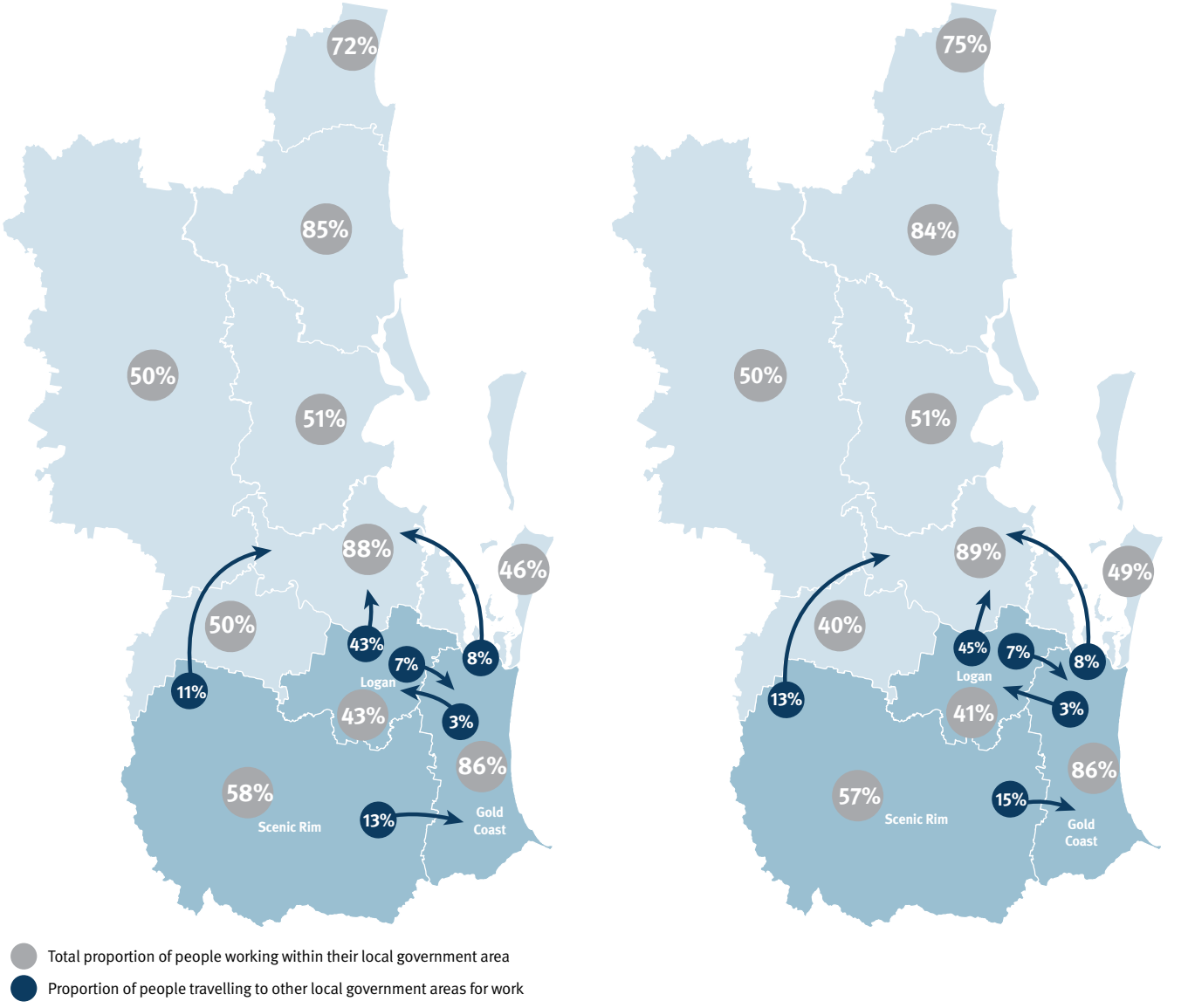


Figure 41: Proportion of people that work within their local government area in 2016 and 2041

Source: Queensland Treasury. (2016). *Journey to Work - South East Queensland, 2010-11 to 2040-41.*

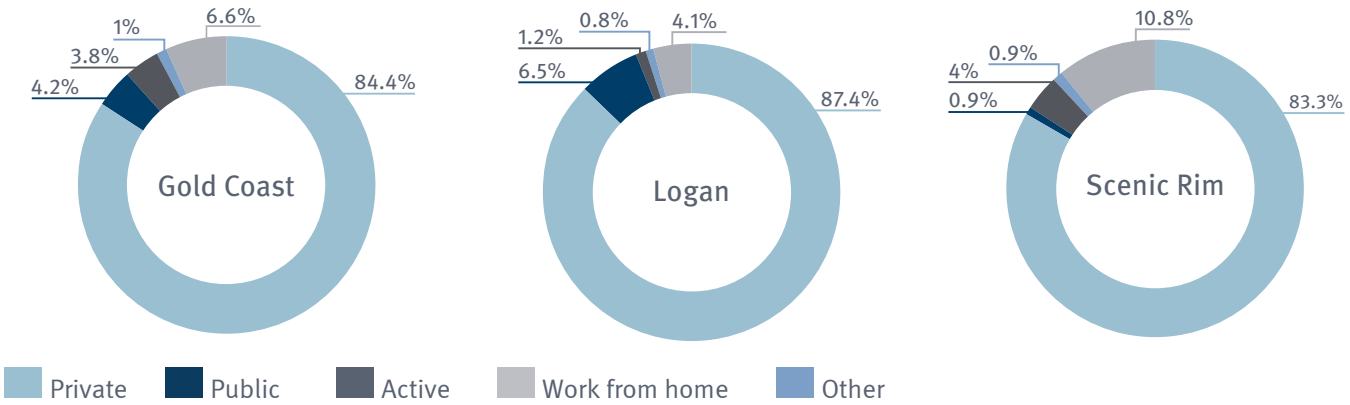


Figure 42: South Coast region mode share for journeys to work

Source: Australian Bureau of Statistics. (2019). *Method of Travel to Work (Employed Persons), Family and Community, Local Government Area, 2011-2018.*

Road congestion

Private vehicles are the dominant way in which people move around the region. The linear nature of the Gold Coast has meant historically, urban development has not been concentrated around public transport corridors. Therefore, residential, employment and major activity centres are dispersed on a north-south axis that spreads from the urban fringes of Logan to the border with NSW.

In Logan, major roads such as the Mount Lindesay Highway, Logan Motorway, and Pacific Motorway are all impacted by congestion due to commuting patterns. Congestion in the morning peak hour is already excessive on the Pacific Motorway at Springwood. There is high congestion on roads leading to new expansion developments such as Park Ridge and Yarrabilba. Adding capacity to the Pacific Motorway at Springwood and along the Mount Lindesay Highway is already underway, with further upgrades being planned for along these and other key routes.

In the Gold Coast, there is high congestion on the Pacific Motorway particularly from Coomera to Nerang and on major east-west roads that link activity centres to the motorway. Traffic is forecast to become more congested by 2031, based on current trends. In the short to medium term, Pacific Motorway upgrades and the southern section of the Coomera Connector between Coomera and Nerang are being prioritised to alleviate this increasing congestion.

In the past, additional capacity would have been added to the road network as the key strategy to help address congestion issues. However, roads cannot be expanded indefinitely. Physical constraints, limited financial resources and sustainability of travel mean alternative approaches are also needed. Expanding public and active transport options, coupled with behavioural changes, such as shifting to off-peak periods or car sharing, will be required to manage congestion.

Much of the recurring congestion (Figure 43)[153] experienced across the network could be managed with network improvements, reallocation of demand, safety interventions, or through improved resilience and management of weather events and incident management.

While private vehicles can sometimes be more time competitive for longer journeys, encouraging increased use of public and active transport can also help in reducing recurring congestion.

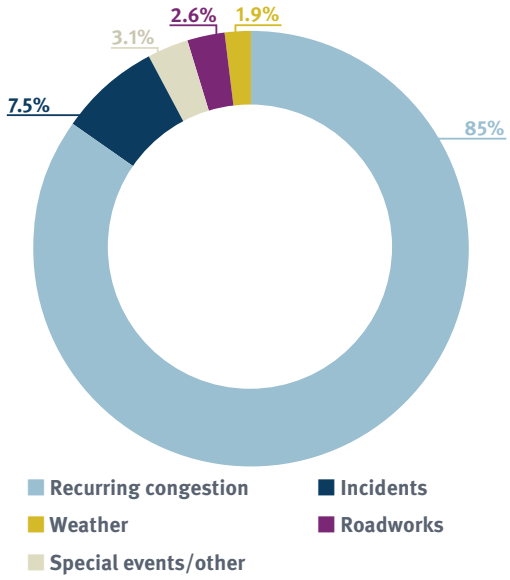


Figure 43: Excessive congestion in the South Coast region in 2018–19

Source: Department of Transport and Main Roads. (2019).

Smith Street and Olsen Avenue interchange

153 'Recurring congestion' is the level of congestion that regularly recurs along a corridor. In other words, this is where demand is exceeding capacity.

Public transport challenges

Due to the dispersed urban development and employment patterns in the South Coast region it is sometimes challenging for public transport travel time to be competitive with private vehicles.

Figures 44 and 45 show the accessibility by car and public transport to the closest key centres in the South Coast region. In most of the urbanised areas of Logan and the Gold Coast, private vehicle travel to key centres such as Springwood, Beenleigh, Southport and Robina and regional economic clusters can take less than 30 minutes, while journeys by public transport are only comparable in travel times if the journeys start near these key centres. For residents living in expansion developments in outer suburban areas, similar journeys by public transport can take more than 45 minutes.

Park 'n' ride facilities are an important part of the public transport system. When located in the right places, they can extend catchments and provide an important connection point for people that might not otherwise have access to public transport.

In SEQ, many park 'n' ride facilities are at or near capacity, and adding capacity presents several challenges.

The identification of appropriate locations for additional park 'n' ride capacity needs to be carefully considered. Managing the demand and use of existing facilities also needs to be explored. Funding facilities, either through user charges or alternative funding mechanisms could be considered.

Connectivity to and from new urban expansion areas

Greater Flagstone and Yarrabilba are two Priority Development Areas for residential growth. The existing road network will require upgrades to accommodate future planned growth including at these Priority Development Areas.

Current public transport services from Beaudesert and Yarrabilba mostly serve weekday peak hour commuting trips to Brisbane City and take more than 1.5 hours. As a result, there is a high dependence on private vehicles.

Developing these and other expansion areas with reliable and frequent public transport, active transport connections, and improved roadways will be essential to create high-quality, liveable communities.

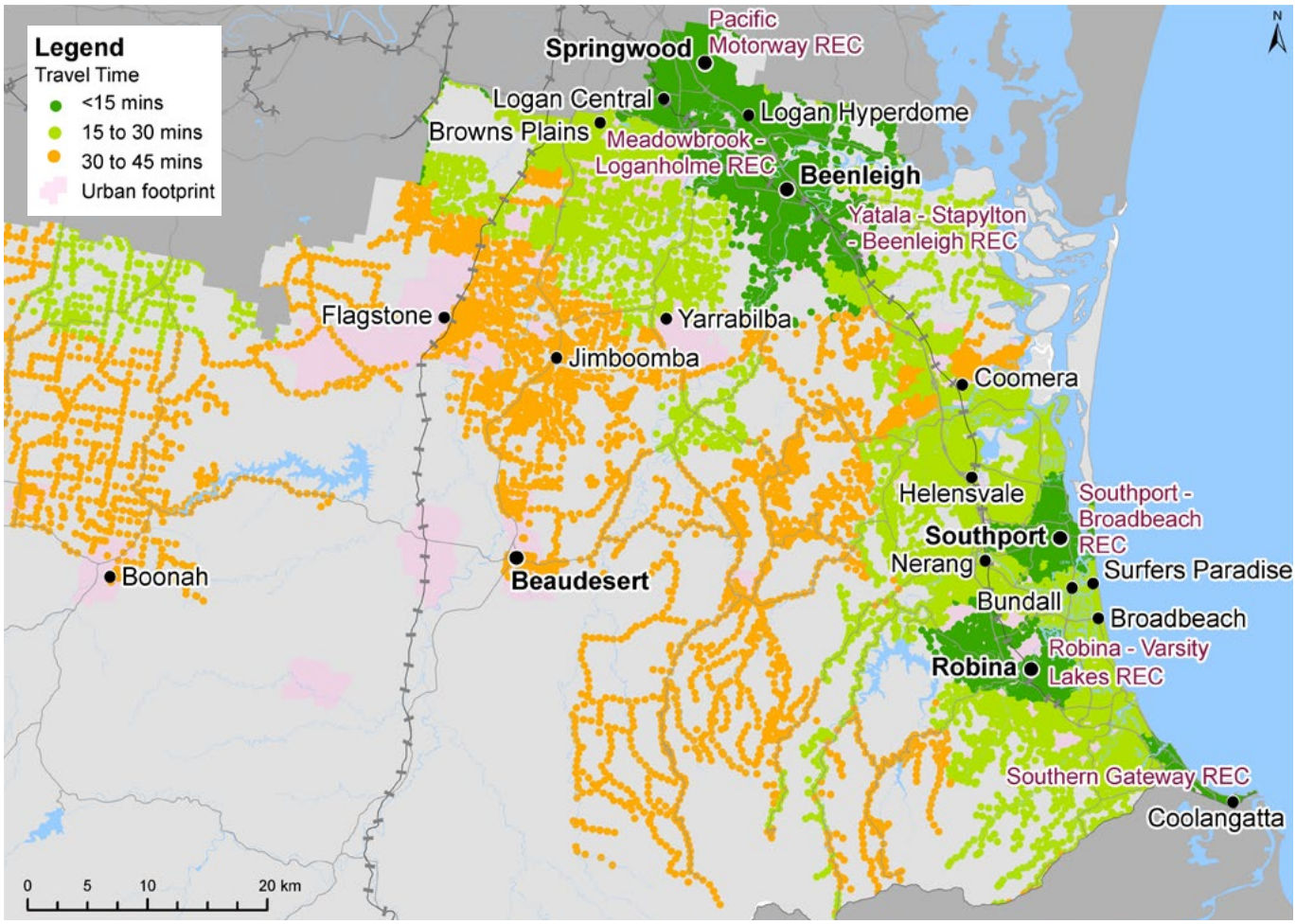


Figure 44: Car accessibility to the closest key centres in the South Coast region

Source: Department of Transport and Main Roads. (2019). *Output from the LUPTAI software, 2019*.

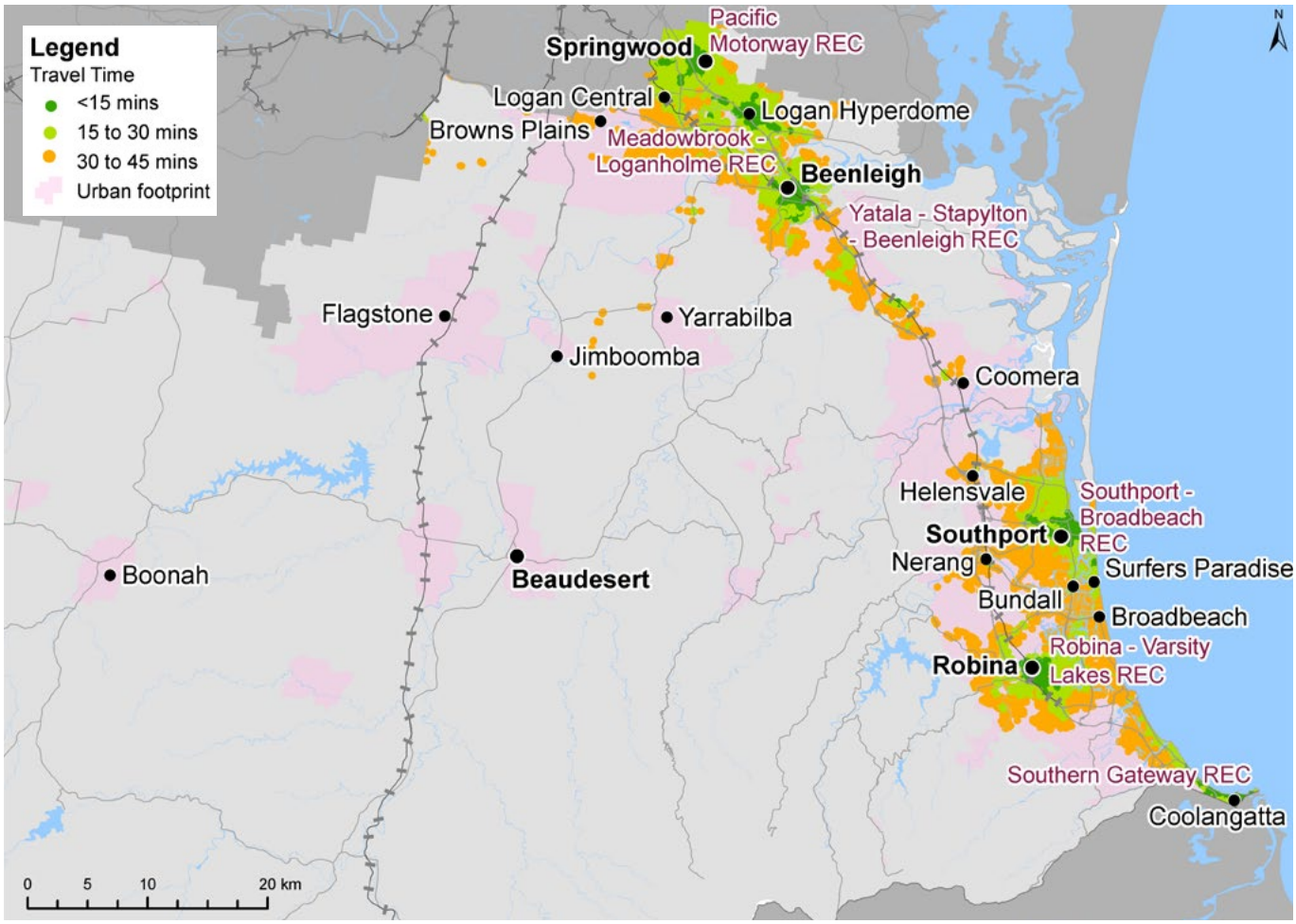


Figure 45: Public transport accessibility to the closest key centres in the South Coast region

Source: Department of Transport and Main Roads. (2019). *Output from the LUPTAI software, 2019*.

Cross-border transport connectivity

The Gold Coast continues to grow in a linear manner along the coast and across the border into the Tweed Shire in NSW. Tweed Shire was forecast to grow from a population of 88,450 in 2011 to 115,350 in 2020.[154] This will create further transport challenges due to challenging geography and differences in regulatory environments between Queensland and NSW.

The Queensland and NSW governments have agreed on key areas of focus for cross-border collaboration. These include regional economic development, aligning services and sharing information, local transport and issues of national significance. For transport, a specific aim is that 'public transport for people living in cross-border regions should be seamless' with priority areas to include greater efficiencies in delivering flexible border transport solutions, integrated border bus services and alignment of priority border road projects.[155]

There are inherent challenges to cross-border service integration with differing fare structures, policies, ticketing systems and taxi travel. The NSW Northern Rivers Regional Transport Plan has acknowledged the challenges of cross-border connectivity and the potential to improve cross-border connections.

Southern Gold Coast and airport access

Access along the narrow southern Gold Coast urban area, between Burleigh Heads and the NSW border, is currently constrained to the Pacific Motorway (M1) and Gold Coast Highway corridors. This area contains a string of small to major activity centres, including Coolangatta and the Gold Coast Airport.

The M1 is the primary gateway for road-based connections into Queensland from NSW, carrying regional, interstate and national freight and passenger trips to the Gold Coast, Brisbane and further north.

154 City of Gold Coast. (2013). *Gold Coast City Transport Strategy 2031: Technical Report.*
155 Queensland and NSW Government. (2016). *Statement of Principles and Priorities for Cross-border Collaboration 2016–2019.*

Coolangatta and the string of beachside settlements provide a more relaxed destination for domestic and international tourists, with regular influxes of surfers and day-trippers using the Gold Coast Highway to access world renowned beaches and holiday spots.

Gold Coast Airport is Australia's fastest growing airport and forecast passenger growth is expected to continue to exceed average growth rates of major Australian airports. With passenger growth requiring improvements to airport access, the Queensland Government has committed $6.5 million towards development of a new southern entryway to the airport. The Gold Coast Airport Master Plan 2017 also seeks to expand the airport's role as an economic generator, complementing the airport's primary aviation function with high-quality business, education and lifestyle offerings. Quality transport connections for employees, staff and recreational visitors to the precinct are critical.

Better road connections to the Gold Coast Highway as well as enhanced public transport and active transport facilities will be necessary considerations by both the state and local governments and Queensland Airports Limited, the owner and operator of the Gold Coast airport precinct. Three quarters of all passengers arriving at Gold Coast Airport are tourists.[156] Tourists often rely heavily on public transport, therefore good public transport options from the airport to major tourist destinations in the Gold Coast, SEQ and northern New South Wales are essential to ensure the continued competitiveness of the airport.

As planning progresses for extension of the light rail to Coolangatta, upgrades to the Pacific Motorway, the ongoing operation of the Gold Coast Highway and the eventual extension of the heavy rail line to the Gold Coast Airport, it is important to understand the individual roles and interdependencies of these corridors. Investment in the transport network will need to be carefully sequenced to minimise disruption and maximise the utility of each corridor.

Meeting the needs of freight and business traffic

By 2031, freight movement on the Gold Coast is projected to triple.[157] The mode type for freight movement in Queensland in 2016–17 is show in Figure 46. The major freight generating areas are Yatala, Nerang, Molendinar and Southport in the northern areas of the Gold Coast and Burleigh Heads and Tweed Heads (NSW) to the south. The most likely route for freight movements to and from these two areas is the Pacific Motorway. The Pacific Motorway is an important road corridor between Brisbane and southern states with 10 per cent of the daily traffic on this motorway made up of heavy vehicles. The road section with highest heavy vehicle ratio is between Gaven and Nerang which has approximately 18,500 heavy vehicles (14.6 per cent) of the 126,600 vehicles every day.[158]

In Logan and the Scenic Rim, the major north-south road corridors are the Cunningham Highway and the Mount Lindesay Highway, connecting through to the intermodal freight facility at Bromelton near Beaudesert. Freight movement is mainly between Logan and the industrial precincts in south-west Brisbane and the Australia Trade Coast/Port of Brisbane as well as freight transit through Logan between the Ipswich and Pacific motorways. Freight movements may also increase along northern sections of Beaudesert-Beenleigh Road to access the Yatala industrial precinct and Pacific Motorway from the south-west.

The key interstate rail corridor which connects Brisbane with southern states runs through Logan and Scenic Rim. The track is shared by a daily interstate passenger service and more frequent freight services. The planned Inland Rail freight project is proposed to connect with the existing line in Kagaru just north of the Bromelton SDA.[159]

Urban freight and goods delivery within the region also require adequate physical space for loading and deliveries. With the increasing movement and delivery of small goods due to electronic commerce, there will continue to be challenges in handling freight and goods in physically constrained urban spaces without affecting the operation of traffic, public transport, people who walk and ride bikes.

Delays in freight movement along the strategic freight corridors of the Pacific Motorway, Logan Motorway, Mount Lindesay Highway and to a lesser extent the Cunningham Highway could impact on the region and the state.

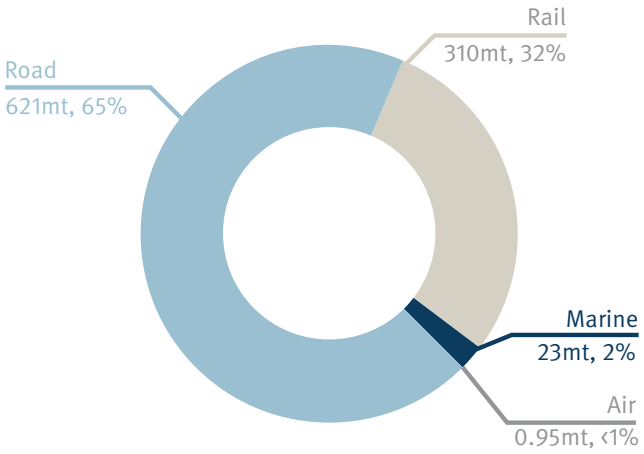


Figure 46: Queensland freight movement by mode 2016–2017

Source: Department of Transport and Main Roads. *Queensland Freight Strategy 2019*

156 Gold Coast Airport. (2017). *Master Plan.*
157 City of Gold Coast. (2013). *Gold Coast City Transport Strategy 2031: Technical Report.*
158 Queensland Government. (2019). *2018 traffic census data.*
159 Australian Rail Track Corporation. (2018). *Inland Rail Alignment.*

6.3 What do the priorities and objectives mean for the South Coast region?

TRANSPORT SYSTEM

The safety of all transport system customers is our primary priority as we create a single integrated transport network accessible to everyone.

Priority 1: Grow	Priority 2: Prosper	Priority 3: Sustain	Priority 4: Live
Transport objectives			
1.1 Current and future transport networks shape sustainable growth and development of communities. 1.2 Communities in growth (expansion) areas have access to reliable, efficient and sustainable travel options. 1.3 People and goods move safely and efficiently.	2.1 Goods and services move efficiently and reliablly along supply chains to and between key economic areas and markets . 2.2 Activity centres are connected by a reliable and high-frequency public transport network. 2.3 Transport planning and investment is informed by current and accurate information.	3.1 The transport system is safe, resilient and connected during and after extreme weather, events and incidents. 3.2 Walking, bicycle riding and other sustainable travel options are accessible, convenient and safe. 3.3 The transport system is sustainable and supports the region's environmental and lifestyle values.	4.1 Communities and public places are walkable and well-connected by integrated and sustainable transport options. 4.2 The transport system provides safe, fair and equitable travel options.
What it means for the South Coast region			
■ Urban consolidation and integrated design, particularly in and around activity centres along existing and planned public transport corridors and the light rail urban renewal corridor. ■ Connecting expansion areas such as Flagstone, Yarrabilba, Park Ridge, Flinders, Bahrs Scrub, Coomera, Pimpama and Upper Coomera to the public transport network. ■ Improving safety and key connections in and to rural areas.	■ Improved freight routes, such as to the Bromelton State Development Area, Pacific Motorway, Logan Motorway and interstate rail line. ■ Increased public transport connecting activity centres (e.g. Springwood, Beenleigh, Southport, Robina, Beaudesert and regional economic clusters). ■ Improving data accuracy and usage through smart infrastructure, real-time data and artificial intelligence.	■ Infrastructure is improved and built to minimise the impacts of weather and other disruptive incidents, including on the Pacific Motorway, Mount Lindesay Highway and Gold Coast rail line. ■ Network and incident management is improved to minimise impacts of closures and disruptions. ■ Prioritisation of active transport. ■ Provision of low and zero emission vehicle infrastructure. ■ Infrastructure and services that minimise impacts on scenic landscapes, and significant ecological areas.	■ Safe walking and bike riding is prioritised within local neighbourhoods and activity centres. ■ Transport choice is improved via options appropriate for the demand and land-use, including community and school transport. ■ Transport options for people across all demographics ■ Personalised transport such as ride share.
Measures of success			
■ Commute time. ■ Commute distance. ■ Road network reliability.	■ Road network productivity. ■ Road network congestion. ■ Public transport accessibility.	■ Road closures. ■ Public and active transport mode share. ■ Transport greenhouse gas emissions.	■ Active transport accessibility. ■ Public transport disadvantage. ■ Public transport patronage. ■ Road safety.

The priorities and objectives for SEQ are outlined in Chapter 3. This section outlines how the priorities and objectives will be achieved in the South Coast region.

6.3.1 Priority 1: Grow – A transport system that supports a consolidated and sustainable urban structure

What does this mean for the South Coast region?

Objective 1.1: Current and future transport networks shape sustainable growth and development of communities.

Sustainable transport plays a role in the sustainable growth and development of communities. In particular, providing mass transit together with active transport options is critical in enabling urban consolidation and increased densities. Increased density in mixed-use principal regional activity centres is forecast at Beenleigh, Southport and Robina and major activity centres at Logan Central, Logan Hyperdome, Yarrabilba, Flagstone, Coomera, Helensvale, Nerang, Bundall, Surfers Paradise, Broadbeach and Coolangatta. In addition, urban consolidation is planned across the region's urban footprint, with a particular focus on the Gold Coast.

This objective will support and enable sustainable growth through:

- providing a variety of active, public and private transport options that fit the purpose of existing and growing communities
- enabling urban consolidation and increased densities through access to mass transit and active transport
- incorporating high-quality urban design into all transport projects and supporting urban amenity along active streetscapes
- integrating land use planning as part of all strategic transport planning.

Objective 1.2: Communities in growth (expansion) areas have access to reliable, efficient and sustainable travel options

While urban consolidation is planned to cater for the majority of growth in the Gold Coast, urban expansion is planned to provide for the majority of growth in Logan and Scenic Rim. Like consolidated growth, expansion will provide a mix of densities and housing types. However, expansion is expected to provide more lower density and detached housing stock, which means fit-for-purpose transport options need to be provided.

Across the region, significant expansion is planned to occur in Park Ridge, Flagstone, Yarrabilba, Coomera and around Beaudesert.

Reliable, efficient and sustainable travel options will be provided in the South Coast region through:

- providing residents with transport options, including mass transit where appropriate, rather than private cars for a range of trips
- enabling residents to connect to existing and planned mass transit
- encouraging innovative service delivery models, such as ride sharing, peer-to-peer mobility and demand-responsive transit
- transit services and connections that meet the needs of new and established communities as they grow
- encouraging bike riding and walkability in existing and growing neighbourhoods.

Objective 1.3: People and goods move safely and efficiently in rural communities

Rural communities have a higher reliance on private vehicle use and also experience high volumes of freight movement. This means road corridor management and safety is paramount. However, it is also important to enable rural customers to connect appropriately to the urban transport network when needed.

This objective can be achieved for the South Coast region through:

- transport options that match the region's varied land use patterns and complex trip patterns, including longer or indirect trips
- planning to ensure transport disadvantage of rural settlements is minimised
- safe access to essential services, local employment, social support and interaction to enhance amenity
- improving the road network, managing speeds, and reducing potential conflicts between modes and users of the road network, particularly along key routes in Scenic Rim such as the Mount Lindesay Highway.

Table 15: Priority 1 actions for the South Coast region

PRIORITY 1: GROW A transport system that supports a consolidated and sustainable urban structure.	**OBJECTIVES**		
Objective 1.1: Current and future transport networks shape sustainable growth and development of communities.			
Objective 1.2: Communities in growth (expansion) areas have access to reliable, efficient and sustainable travel options.			
Objective 1.3: People and goods move safely and efficiently in rural communities.			
Actions – short-term	**1.1**	**1.2**	**1.3**
A4.01 Browns Plains to South East Busway bus priority planning Undertake planning to develop options for providing bus priority on the Mains Road corridor between the South-East Busway and Browns Plains.	✓	✓	
A4.02 Cross-border passenger transport connectivity In partnership with Transport for NSW investigate opportunites for improved cross-border passenger transport connectivity.	✓	✓	
A4.03 Gold Coast and Beenleigh rail line (Kuraby to Beenleigh) planning Undertake planning to develop and assess options to improve the capacity and reliability of the Gold Coast and Beenleigh lines, including identified capacity constraints between Kuraby and Beenleigh.	✓	✓	
A4.04 Gold Coast rail line (Beenleigh to Varsity Lakes) station planning Finalise business case planning for three infill stations on the Gold Coast line at Pimpama, Helensvale North and Merrimac.	✓	✓	
A4.05 Infrastructure coordination plans Collaborate with Queensland Treasury, other state government agencies and local governments on infrastructure coordination plans within the South Coast region to improve the alignment of infrastructure planning with local and regional priorities and coordination within and between state and local government.		✓	
A4.06 Logan (south-west) and Scenic Rim (north-east) transport strategy Review the Mount Lindesay Beaudesert Strategic Transport Network Investigation and other strategic planning to ensure the transport strategy meets the needs of south-west Logan, Bromelton and Beaudesert areas.	✓	✓	✓
A4.07 Northern Gold Coast strategic transport planning Undertake strategic network planning in the northern Gold Coast area to provide direction for future development of the transport system east and west of the M1. The plan will also identify likely sequencing needs to guide future investment decisions.	✓	✓	
A4.08 Park 'n' ride capacity expansion planning Undertake strategic planning to identify locations suitable for major park 'n' ride capacity expansion at key locations on the South Coast region public transport network.	✓	✓	
A4.09 Planning for major developments Undertake planning required to inform Transport and Main Roads' input into future transport networks serving major development areas such as Coomera, Ormeau, Flagstone/Flinders, Park Ridge and Yarrabilba. Participate in master planning activities and development of infrastructure agreements, in partnership with the Department of State Development, Infrastructure, Local Government and Planning, local government and the private sector, to ensure that state transport interests are protected and to maximise benefits from a 'one network' approach.	✓	✓	

PRIORITY 1: GROW

A transport system that supports a consolidated and sustainable urban structure.

OBJECTIVES

Objective 1.1: Current and future transport networks shape sustainable growth and development of communities.

Objective 1.2: Communities in growth (expansion) areas have access to reliable, efficient and sustainable travel options.

Objective 1.3: People and goods move safely and efficiently in rural communities.

Actions – short-term (cont.)	1.1	1.2	1.3
A4.10 Public transport interchange and bus station upgrade planning Undertake planning for public transport interchanges including bus and rail interchanges, bus stations, and bus stop upgrades in the region to improve network performance and connectivity at activity centres and interchange locations, including future rail and infill stations. Early priorities include the Gold Coast Passenger Transport Access Study to investigate bus network and infrastructure options to support the extension of the Gold Coast Light Rail.	✓	✓	
A4.11 Public transport network planning Undertake regular public transport network planning to ensure route structures are meeting current and future needs. For the South Coast Region, planning will focus on expansion areas in Logan and Northern Gold Coast as well as consolidation areas such as the Gold Coast light rail corridor.	✓	✓	
A4.12 Rail station accessibility and capacity upgrades Identify areas of most need, prioritise and progressively undertake the detailed planning investigations required to guide investment decisions for rail station upgrades to improve accessibility and capacity within the South Coast region.	✓	✓	
A4.13 Safety and amenity impacts for rural townships Work with local governments to mitigate safety and amenity issues caused by traffic volumes and heavy vehicles, where relevant, for rural townships and subject to statewide priorities.			✓
A4.14 Salisbury to Beaudesert rail corridor planning Undertake planning for the Salisbury to Beaudesert rail corridor to determine and preserve corridor land, including planning to inform investment decisions for the staged delivery of passenger rail in this corridor.	✓	✓	✓
A4.15 Southwest growth areas public transport planning Progress planning to investigate provision of frequent public transport services to major expansion growth areas including Yarrabilba, and Greater Flagstone.	✓	✓	
Actions – medium/long-term	**1.1**	**1.2**	**1.3**
A4.16 Gateway Motorway southern extension planning Review and update planning for road corridor options extending from the Gateway Motorway to Park Ridge.		✓	
A4.17 Gold Coast rail line (Varsity Lakes to Brisbane) service planning Undertake planning to provide high-frequency rail services from Varsity Lakes to Brisbane and consider opportunities to reduce travel times.	✓	✓	

6.3.2 Priority 2: Prosper – A transport system that supports the economic competitiveness of the region

What does this mean for the South Coast region?

Objective 2.1: Goods and services move efficiently and reliably along supply chains to and between key economic areas and markets

Key to the economic competitiveness of the region is the ability for freight to be transported as efficiently as possible. This means distributing goods produced within the region, but also allowing for goods to move efficiently through and to the region. The Pacific Motorway, Mount Lindesay Highway, Logan Motorway and interstate rail line are all current key freight corridors that enable this movement. Additional road corridors, which will support efficient freight movement, are planned to bypass Beaudesert, Yarrabilba to Logan Central and Molendinar to Beenleigh.

These connections support holistic freight movement, but also supply chain efficiencies from the region's major distribution areas such as in Meadowbrook-Loganholme, Yatala-Stapylton-Beenleigh, Crestmead-Berrinba, Park Ridge, North Maclean and Bromelton.

This objective can be achieved for the South Coast region through:

- infrastructure upgrades on existing freight routes and working with industry to prioritise freight movement in off-peak periods
- providing new road and rail freight connections
- improvements through mechanisms such as vehicle types, connective vehicle technologies, route optimisation and data sharing
- minimising conflicts of freight and passenger vehicles on highways and in inter-town connections.

Objective 2.2: Activity centres are connected by a reliable and high-frequency public transport network.

In support of both population and economic growth, reliable and high-frequency public transport will be needed to connect all activity centres across the region. This includes services to existing and emerging regional economic clusters, and knowledge and technology precincts.

The network will connect activity centres and knowledge and technology precincts at Springwood, Logan Central, Browns Plains, Logan Hyperdome, Beenleigh, Flagstone, Yarrabilba, Coomera, Helensvale, Nerang, Southport, Bundall, Broadbeach, Robina and Coolangatta.

Objective 2.3: Transport planning and investment is informed by current and accurate information

Technological advancements have increased the availability of high-quality data about the transport system and its users. This data can inform transport improvements and how they are planned for and implemented. This data can be used by customers to inform their journey planning and use of the network.

This objective can be achieved for the South Coast region by:

- collaborating with industry to enable shared data capability
- using accurate, real-time data to understand both current and future customer mobility opportunities
- connecting and engaging with customers in two-way communication
- collecting and using real-time infrastructure data for appropriate infrastructure upgrades.

Industrial estate, Crestmead

Table 16: Priority 2 actions for the South Coast region

PRIORITY 2: PROSPER

A transport system that supports the economic competitiveness of the region.

OBJECTIVES

Objective 2.1: Goods and services move efficiently and reliably along supply chains to and between key economic areas and markets.

Objective 2.2: Activity centres are connected by a reliable and high-frequency public transport network.

Objective 2.3: Transport planning and investment is informed by current and accurate information.

Actions – short-term	2.1	2.2	2.3
A4.18 Brisbane-Beenleigh Road upgrade planning Undertake planning to develop and assess options for the long-term upgrade of Brisbane-Beenleigh Road between Underwood Road and Waterford-Tamborine Road.	✓		
A4.19 Broadbeach to Robina bus priority planning Undertake planning to improve bus priority between Broadbeach to Robina via Bond University.		✓	
A4.20 Bromelton State Development Area access planning Undertake planning for a freight access road connecting the Bromelton State Development Area to the Mount Lindesay Highway at Woodhill.	✓		
A4.21 Burleigh to Coolangatta light rail planning Undertake planning to determine a preferred alignment, feasibility and potential timing for staged extension of light rail from Burleigh to Coolangatta, and explore future possibilities to work in partnership with Transport for NSW to undertake strategic planning for a light rail connection between Coolangatta and Tweed Heads.		✓	
A4.22 Cross-border planning Continue to work with Transport for NSW to prioritise planning for cross-border connections.	✓		
A4.23 Intersection upgrades Undertake planning to inform options to upgrade intersections across the region to reduce congestion and improve safety on the state-controlled road network. Priorities include intersections along Brisbane-Beenleigh Road, Beenleigh Connection Road, Gold Coast Highway (Helensvale to Labrador), Hope Island Road, Southport-Burleigh Road (Clear Island Waters – West Burleigh), and Southport-Nerang Road.	✓		
A4.24 Mount Lindesay Highway (Park Ridge South to Woodhill) upgrade planning Undertake planning to inform options for upgrading the Mount Lindesay Highway between Park Ridge South and Woodhill.	✓	✓	
A4.25 Northern Gold Coast Coomera Connector planning Undertake investigations and planning to inform subsequent investment decisions for the Coomera Connector to provide additional north-south multi-modal capacity east of the Pacific Motorway.	✓	✓	
A4.26 Pacific Motorway smart motorways planning Undertake planning to inform investment decisions for upgrading the smart motorways system on the Pacific Motorway between Beenleigh and Mudgeeraba to reduce congestion and improve safety.	✓		

(continued next page)

PRIORITY 2: PROSPER

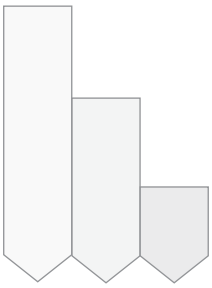
A transport system that supports the economic competitiveness of the region.

OBJECTIVES

Objective 2.1: Goods and services move efficiently and reliably along supply chains to and between key economic areas and markets.

Objective 2.2: Activity centres are connected by a reliable and high-frequency public transport network.

Objective 2.3: Transport planning and investment is informed by current and accurate information.



Actions – short-term (cont.)	2.1	2.2	2.3
A4.27 Pacific Motorway upgrade planning Continue planning to inform investment decisions for the upgrade of the Pacific Motorway to reduce congestion and improve safety outcomes including: ■ Daisy Hill to Loganholme upgrade planning ■ Loganholme to Nerang upgrade planning.	✓	✓	
A4.28 Springwood to Browns Plains bus priority planning Undertake planning to improve bus reliability and support high-frequency services between Springwood and Browns Plains.		✓	
A4.29 Varsity Lakes to Gold Coast Airport public transport planning Continue to undertake planning for the Varsity Lakes to Gold Coast Airport heavy rail investigation corridor to determine and preserve corridor land.		✓	
Actions – medium/long-term	**2.1**	**2.2**	**2.3**
A4.30 Greater Flagstone and Yarrabilba corridor planning Undertake planning to identify and preserve road corridors that connect Greater Flagstone and Yarrabilba Priority Development Areas to the regional road network.	✓	✓	
A4.31 Logan River crossing capacity planning Undertake planning to increase Logan River crossing capacity between Carbrook and Waterford.	✓		
A4.32 Nerang to Broadbeach bus priority planning Undertake planning to improve bus priority between Nerang and Broadbeach.		✓	
A4.33 Pacific Motorway (Worongary to Mudgeeraba) interchanges upgrade planning Undertake planning to inform options for upgrading Pacific Motorway interchanges at Worongary and Mudgeeraba to address safety issues and improve traffic flow.	✓		

6.3.3 Priority 3: Sustain – A transport system that contributes to the environmental sustainability and resilience of the region

What does this mean for the South Coast region?

Objective 3.1: The transport system is safe, resilient and connected during and after extreme weather, events and incidents.

Areas of the South Coast region are susceptible to flooding during extreme rain events, particularly in the Logan and Albert river catchments. Hinterland roads are also highly susceptible to slips impacting on accessibility to many hinterland townships. These weather events, as well as traffic incidents and events, cause disruption to the transport network.

Safety, resilience and connectivity will be supported through infrastructure upgrades as appropriate, but also through providing customers with the information they need to keep them safe and moving in real-time, as events or incidents occur. Through the use of real-time data and real-time information, infrastructure upgrades can be focused on the key links where they are most needed.

This objective can be achieved for the South Coast region through:

- management plans that minimise the impacts of known closures and disruptions to the transport network
- effective and reliable communication, such as the coverage of early warning systems and real-time information
- innovation in traffic incident management and response across all modes
- physical upgrades such as flood and weather resilient roads, bridges, rail lines and public transport infrastructure.

Children bicycle riding along Berrinba bikeway

Objective 3.2: Walking, bicycle riding and other sustainable travel options are accessible, convenient and safe.

Transitioning our transport system to reduce car dependence and encourage the greater use of more sustainable mobility options, such as walking, bike riding, and low and zero emission vehicles will significantly improve the safety, quality of life, environmental health and resource needs of future generations.

Active transport will play a critical role in the region's transport network. In the urban context, bicycle and walking infrastructure will provide options for customers to commute, access local mass transit stops and a variety of recreational activities. Where possible, these options will be separated from vehicle traffic to increase safety.

In rural areas, due to distances, road safety and speeds, active transport will be mostly relevant to short distance trips within the local neighbourhood.

This objective can be achieved for the South Coast region through:

- provision of accessible, convenient and safe walking and bicycle infrastructure for a range of trips across the region
- policies and interventions to prioritise the needs of people walking and bicycle riding.

Objective 3.3: The transport system is sustainable and supports the region's environmental and lifestyle values.

The South Coast region is one of the most biodiverse in Australia with several national parks, Southern Moreton Bay islands and wetlands and coastal and hinterland environments. Not only do these areas support high-quality lifestyle options, but they support the overall liveability and attractiveness of the region. These environmental values need to be protected, enhanced and leveraged through a sustainable transport system for both locals and visitors.

This objective can be achieved for the South Coast region through:

- transport investments implemented in a manner that supports a range of lifestyles from urban to hinterland
- planning for the integration of low and zero emission vehicles
- minimising impacts on existing habitats and areas of biodiversity
- reducing dependency on private motor vehicles, which is a significant contributor to the region's emissions
- providing sustainable transport options for visitors, including those who arrive by car.

Table 17: Priority 3 actions for the South Coast region

PRIORITY 3: SUSTAIN A transport system that contributes to the environmental sustainability and resilience of the region.	**OBJECTIVES**		
Objective 3.1: The transport system is safe, resilient and connected during and after extreme weather, events and incidents.			
Objective 3.2: Walking, bicycle riding and other sustainable travel options are accessible, convenient and safe.			
Objective 3.3: The transport system is sustainable and supports the region's environmental and lifestyle values.			
Actions – short-term	**3.1**	**3.2**	**3.3**
A4.34 Helensvale to Southport bicycle route planning Undertake planning to inform options for an improved priority cycle route between Helensvale rail station and Gold Coast health and knowledge precinct.		✓	✓
A4.35 Principal cycle network implementation Undertake planning to deliver the principal cycle network in the South Coast region to support more cycling, more often on safe, direct and connected routes via: ■ standalone options analysis and business case development for bike riding infrastructure on highest priority routes ■ provision for bike riding infrastructure as part of planning for other Transport and Main Roads funded projects on all principal routes, pursuant to cycle infrastructure policy.		✓	✓
A4.36 Southport, Parklands and Griffith University bicycle route planning Undertake planning to inform options for priority cycle routes linking the Southport and Parklands Priority Development Areas and Griffith University.		✓	✓
Actions – medium/long-term	**3.1**	**3.2**	**3.3**
A4.37 Beaudesert-Boonah Road flood immunity planning Progress planning to inform the investment decision for improving the flood immunity of the Beaudesert-Boonah Road at Coulson.	✓		
A4.38 Bus layover planning Progress planning for optimal use of layover and other operations to improve efficient service operations and prepare for a move towards a connected network.		✓	
A4.39 Flood immunity upgrades Undertake planning to identify and prioritise flood immunity upgrades to the transport network in the South Coast region.	✓		
A4.40 Green bridge and link planning Work with local governments to undertake planning to identify and review the need for green bridge/link opportunities to connect strategic active or public transport links.		✓	✓

6.3.4 Priority 4: Live – A transport system that supports safe, healthy and liveable communities for everyone

What does this mean for the South Coast region?

Objective 4.1: Communities and public places are walkable and well-connected by integrated and sustainable transport options.

Walkability plays a significant role in both amenity and people movement. For the South Coast, the dispersed settlement patterns of rural hinterland and urban coastal and bayside living means walking is limited to the local neighbourhood and within activity centres.

Transport planning will support the retention of this varied and distinct South Coast lifestyle. This includes providing walkable neighbourhoods in both existing and planned growth areas, but also providing connections to the passenger transport network.

This objective can be achieved for the South Coast region through:

- prioritising the movement of people within activity centres across the region
- prioritising people walking and riding bikes and public transport users over private vehicles, where moving people is the primary aim
- providing safe and connected walking environments
- integrating walking and bike riding as part of the passenger transport system.

TransLink ticket station, Logan

Objective 4.2: The transport system provides safe, fair and equitable travel options.

The South Coast requires diverse transport options that cater for a range of rural, semi-rural and urban lifestyle choices. Safe and fair mobility options need to be provided for everyone, including the most vulnerable. This means providing a variety of transport options as well as relevant upgrades that increase and support safety.

This objective can be achieved for the South Coast region through:

- transport that encourages social inclusion and supports diverse lifestyles
- transport options for people across all demographics, including the elderly, children and those with disability
- a transport system that provides the connections that allow residents to choose to live in rural and hinterland areas as well as mobility options that enable people to move around the region
- targeted infrastructure upgrades to improve safety
- continued rollout of varied safety initiatives to reduce serious accidents and fatalities.

Safer Roads Sooner

Transport and Main Roads' has committed $154 million from 2019–20 to 2022–23 to the Safer Roads Sooner program. The Safer Roads Sooner program is a capital works program. It aims to improve the safety of the state-controlled road network through the implementation of high benefit cost-effective road engineering treatments targeting crash sites with high severity risk (fatalities and serious injuries).

The program has been a significant component of the Queensland Government's commitment to addressing the road toll and reducing the number of people who sustain serious injuries on the state-controlled road network. The program is primarily funded from the Camera Detected Offence Program consisting of red light and speed camera fines.

Table 18: Priority 4 actions for the South Coast region

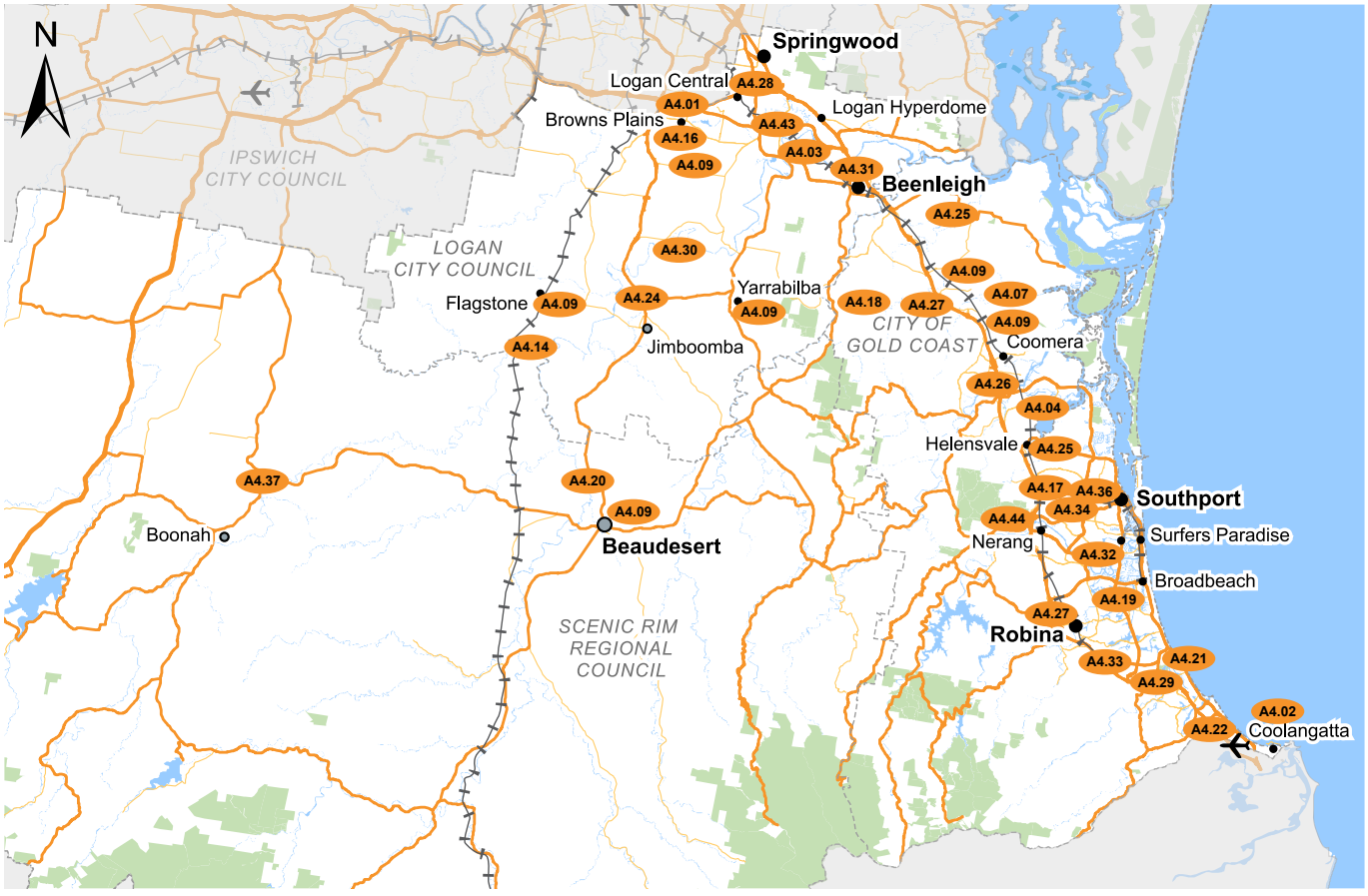
PRIORITY 4: LIVE A transport system that supports safe, healthy and liveable communities for everyone.	**OBJECTIVES**	
Objective 4.1: Communities and public places are walkable and well-connected by integrated and sustainable transport options.		
Objective 4.2: The transport system provides safe, healthy, fair and equitable travel options.		
Actions – short-term	**4.1**	**4.2**
A4.41 Active transport tourism Provide advice to local government, other state agencies, and tourism bodies to support planning, design and construction of rail trails and tourism routes to support active transport tourism in the South Coast region such as a marked bicycle route from Brisbane to Gold Coast.	✓	
A4.42 Boating infrastructure In consultation with the Gold Coast Waterways Authority, prioritise investment in boating infrastructure across the South Coast region based on an assessment of demand and input from the community and stakeholders including through tools such as the *Recreational Boating Facilities Demand Forecasting Study*.		✓
A4.43 Meadowbrook mobility planning Investigate options to improve local connectivity to and between education, health and public transport hubs in the Meadowbrook (health and education) knowledge and technology precinct.	✓	✓
A4.44 Northern Gold Coast area mobility study Undertake a mobility study for the Northern Gold Coast area to assess passenger transport access and mobility opportunities in the areas of Nerang, Helensvale and Oxenford. Outputs of the study will directly inform Transport and Main Roads' broader transport strategy for the Northern Gold Coast area.	✓	✓
A4.45 Public transport wayfinding signage Identify opportunities to improve wayfinding signage for public transport facilities in the South Coast region.	✓	
A4.46 Rest areas in South Coast region Determine investment priorities for new or upgraded rest areas in the region to address driver fatigue risks, encourage safe travel and to provide sufficient capacity and amenities in line with existing guidelines.		✓
A4.47 Road safety projects As part of the High Risk Roads process, undertake planning to inform options for safety related improvements across the South Coast region.		✓
A4.48 Transit oriented developments Identify opportunities to develop and encourage transit oriented developments within the South Coast region. Collaborate with local governments, infrastructure project teams and other state agencies to support increased public transport mode share, residential and employment density at appropriate transport hubs. In particular investigate opportunities associated with rail and bus nodes at, for example, Varsity Lakes in the short-term and Coomera and Helensvale in the medium/long-term.	✓	

PRIORITY 4: LIVE

A transport system that supports safe, healthy and liveable communities for everyone.

OBJECTIVES
Objective 4.1: Communities and public places are walkable and well-connected by integrated and sustainable transport options.
Objective 4.2: The transport system provides safe, healthy, fair and equitable travel options.

Actions – medium/long-term	4.1	4.1
A4.49 Bicycle parking at public transport nodes Work with local governments in South Coast region to assess the feasibility and options to help facilitate progressive provision of increased bike parking at public transport nodes.	✓	✓
A4.50 Principal cycle network implementation Support local government to to deliver the highest priority routes on the principal cycle network within the South Coast region.	✓	✓



Legend

- National roads
- State-controlled roads
- Local roads of regional significance
- Strategic airport
- Rail line
- Local government boundary
- Actions

Regional activity centres

- Principal
- Major
- Principal rural
- Major rural

Figure 47: Actions for the South Coast region

Family on bike path, Burleigh

7. Implementation

7.1 Taking action

Delivering the *South East Queensland Regional Transport Plans* 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.

The Regional Transport Plans will be used to inform transport planning priorities and investment decision-making for the region. The Plans will ensure that future investments address priorities that matter to customers, stakeholders and the community.

Figure 48 shows the importance of the Regional Transport Plans in the Transport and Main Roads investment life cycle.

Opportunities will be provided for customers to provide input into planning actions outlined in the Plans 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 these Plans are realised. They will be delivered by:

- **Delivering the *Transport System Planning Program* (TSPP)**
  The TSPP is a rolling program of planning projects across all modes and all regions with projects ranging from network to link level and to investment proposal activities. Demonstrated alignment with Regional Transport Plans is essential for planning projects to be eligible for funding under the TSPP.
- **Informing the *Queensland Transport and Roads Investment Program* (QTRIP)**
  QTRIP is released annually. It is a funded program of work that will be delivered over the upcoming four years. Projects are listed on QTRIP after having gone through an investment prioritisation process that will be informed by the Regional Transport Plans.
- **Aligning with the *State Infrastructure Plan***
  Regional Transport Plans will inform the program of work within the *State Infrastructure Plan*. QTRIP informs the *State Infrastructure Plan's* construction pipeline. Regional Transport Plans align planning and investment frameworks with the region's challenges and opportunities.
- **Being considered in local and federal government investment decisions and plans**
  These Plans have been prepared in consultation with other levels of government and considers their strategic planning and policy documents.

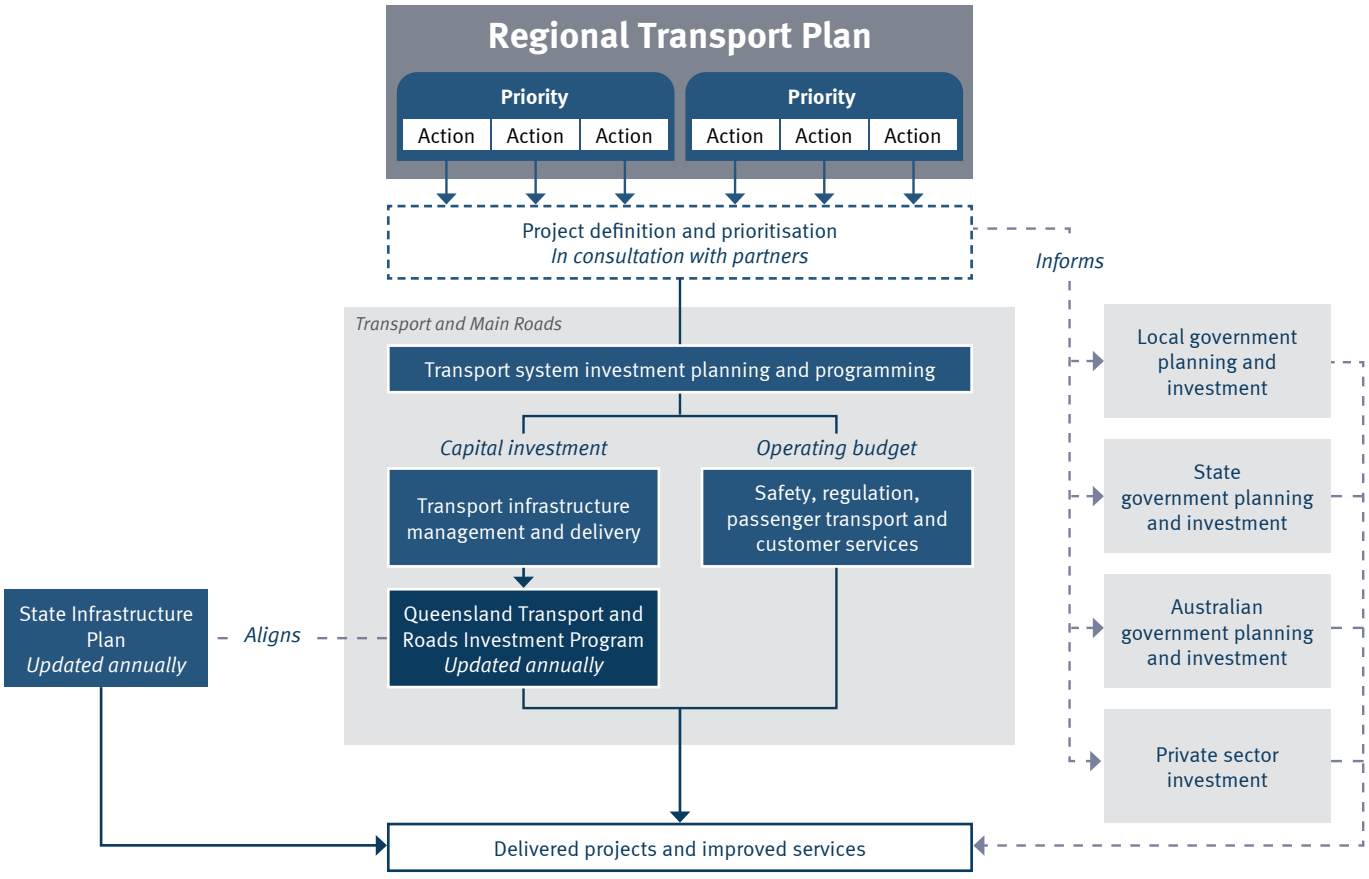


Figure 48: Regional Transport Plans are a critical step in Transport and Main Roads investment lifecycle

7.2 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 *South East Queensland Regional Transport Plans,* Transport and Main Roads has built relationships with stakeholders from all levels of government, business and industry. These relationships will be maintained and built upon to deliver the actions outlined in the Plans. Opportunities for partnering include:

- co-development of knowledge by working closely with researchers, universities and education providers
- inviting project development support from individuals or organisations with an interest in the implementation of an initiative or action
- support and encourage private sector investment through project facilitation to accelerate action delivery and realise economic or commercial benefits, for example, through investment facilitation or public-private partnerships
- providing resource support such as human resources, equipment or material.

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

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

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

Toowoomba Bypass viaduct

7.3 Measuring success

Overall, the effectiveness of this Plan within the region will be measured against the measures of success outlined for each priority. These align to the Transport and Main Roads' *Transport Coordination Plan 2017-2027* and the *South East Queensland Regional Plan 2017 (ShapingSEQ)*, 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. In addition, some measures of success may be relevant to multiple priorities and objectives.

PRIORITY 1: GROW
A TRANSPORT SYSTEM THAT SUPPORTS A CONSOLIDATED AND SUSTAINABLE URBAN STRUCTURE

MEASURE OF SUCCESS	INDICATOR	OBJECTIVE
Commute time	Average commute time (work and education trips) for all modes of transport	1.1, 1.2, 1.3
Commute distance	Average commute distance (work and education trips) for all modes of transport	1.1, 1.2, 1.3
Road network reliability	Proportion of the road network with reliable travel times during peak and off-peak periods	1.3

PRIORITY 2: PROSPER
A TRANSPORT SYSTEM THAT SUPPORTS THE ECONOMIC COMPETITIVENESS OF THE REGION

MEASURE OF SUCCESS	INDICATOR	OBJECTIVE
Road network productivity	Proportion of the road network with good productivity during peak and off-peak periods	2.1
Road network congestion	Total cost of excessive congestion for peak and off-peak periods	2.1, 2.2
Public transport accessibility	Proportion of population with good accessibility to activity centres using public transport	2.2

PRIORITY 3: SUSTAIN
A TRANSPORT SYSTEM THAT CONTRIBUTES TO THE ENVIRONMENTAL SUSTAINABILITY AND RESILIENCE OF THE REGION

MEASURE OF SUCCESS	INDICATOR	OBJECTIVE
Road closures	Frequency and duration of unplanned closures on the state-controlled transport network (other than flooding) Frequency and duration of unplanned closures on the state-controlled network due to flooding	3.1
Public transport and active transport mode share	Proportion of public transport mode share for all trips Proportion of bike riding and walking mode share for all trips	3.2, 3.3
Transport greenhouse gas emissions	Estimate of greenhouse gas emissions from motor vehicles (includes passenger vehicles, motorcycles, buses, light commercial vehicles, rigid trucks, articulated, and other trucks)	3.3

PRIORITY 4: LIVE
A TRANSPORT SYSTEM THAT SUPPORTS SAFE, HEALTHY AND LIVEABLE COMMUNITIES FOR EVERYONE

MEASURE OF SUCCESS	INDICATOR	OBJECTIVE
Active transport accessibility	Proportion of population with good accessibility to a range of essential services by walking and bicycles	4.1, 4.2
Public transport disadvantage	Proportion of population in areas of unmet transport need	4.1, 4.2
Public transport patronage	Number of public transport trips per capita per year	4.1, 4.2
Road safety	Number of fatal and hospitalisation crashes per 100 million vehicle kilometres travelled on state-controlled roads	4.2

Table 19: Measures of success and indicators

Couple on City Cat

7.4 Monitoring and review

These Plans will be monitored, periodically reviewed and updated to ensure they remain 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 Plans mature and planning and delivery is completed, monitoring will focus on tracking progress against objectives and measures of success (Figure 49).

It is intended that a review of the Plans 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.

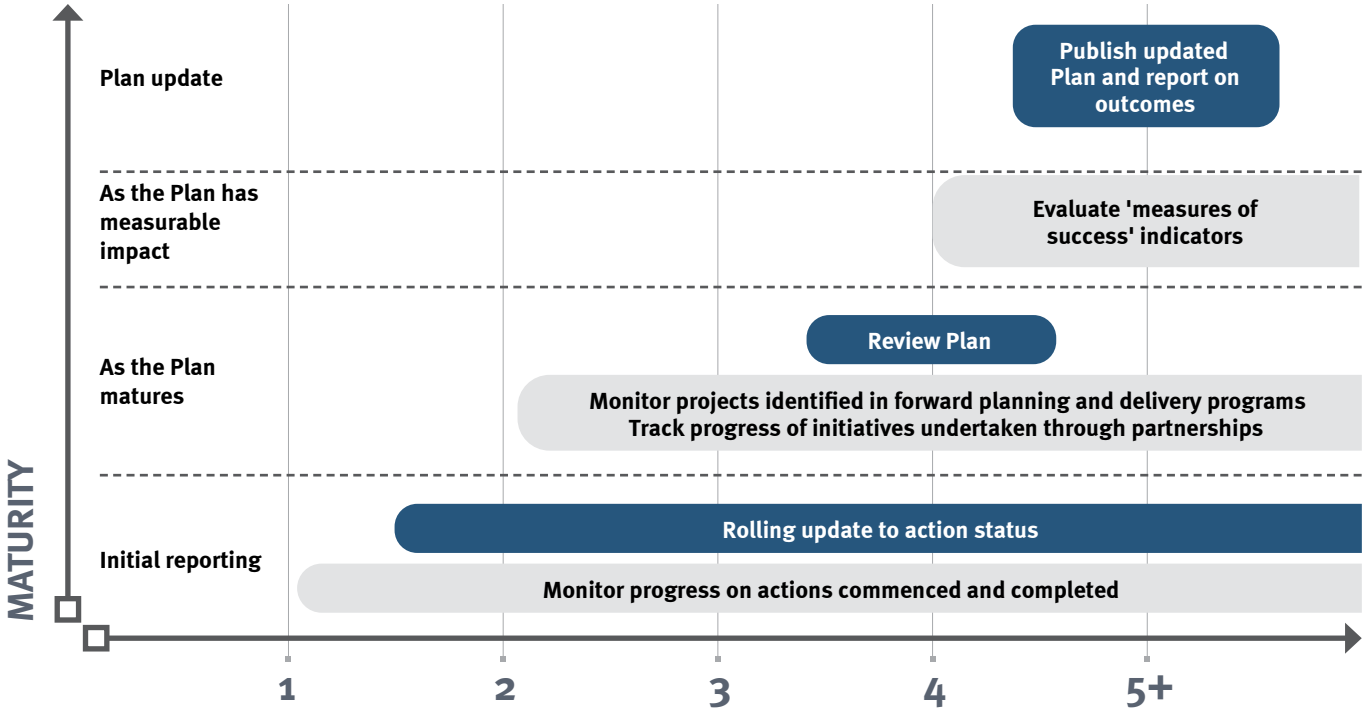


Figure 49: Monitoring, reporting and review as the Plans mature

Further information:

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

PHOTO CREDITS

Cover, Noosa Beach, Tourism and Events Queensland.

Page 7, Port of Brisbane, Port of Brisbane.

Page 10, Brisbane Airport, Brisbane Airport Corporation.

Page 25, Cross River Rail, Cross River Rail Delivery Authority

Page 59, Hasting Street, Noosa, Tourism and Events Queensland.

Page 59, Sunshine Coast, Tourism and Events Queensland.

Page 62, Moreton Bay, Tourism and Events Queensland.

Page 63, Noosa, Tourism and Events Queensland.

Page 64, Somerset, Tourism and Events Queensland.

Page 65, Sunshine Coast, Tourism and Events Queensland.

Page 84, Shopping in Noosa, Tourism and Events Queensland.

Pages 88-89 Brisbane, Tourism and Events Queensland.

Page 89, Cleveland lighthouse, Tourism and Events Queensland.

Page 92, Brisbane City, Tourism and Events Queensland.

Page 94, Raby Bay, Redland City Council.

Page 103, Bike riders in South Bank, Tourism and Events Queensland.

Page 105, Albert Street Station Precinct, Cross River Rail Delivery Authority.

Page 112, Cleveland Aerial, Redland City Council.

Page 122, Entertainment precinct, Brisbane, Tourism and Events Queensland.

Pages 124-125, Surfers Paradise, Tourism and Events Queensland.

Page 125, Gold Coast hinterland, Tourism and Events Queensland.

Page 125, Scenic Rim, Scenic Rim Regional Council.

Page 128,Gold Coast, Tourism and Events Queensland.

Page 129, Logan, Logan City Council.

Page 130, Scenic Rim, Tourism and Events Queensland.

Page 154, Burleigh, Tourism and Events Queensland

The rights to all images not listed are owned by the Department of Transport and Main Roads.

13 QGOV (13 74 68)
www.tmr.qld.gov.au | www.qld.gov.au