# Part A: Setting the scene



### How Connecting SEQ 2031 is structured

The figure below shows how to navigate this draft plan.

#### Part A: Setting the scene

- About Connecting SEQ 2031
- Transport challenges
- Our plan for the future
  - transport vision
  - our strategy for the future
  - transport policy goals
  - targeting success

# Part B: Priorities for taking action

- Creating compact and connected communities
- 2. Changing travel behaviour
- Improving transport system efficiency
- Supporting economic vitality
- 5. Protecting environmental
- Delivering an integrated transport network

# Part C: Detailed network strategies for 2031

- Public transport network
- Strategic road network
- Active transport network
- Freight network

# Part D: What it means for your community

- 2031 transport networks for the region's cities
  - Brisbane city
- Ipswich
- Moreton Bay
- Logan
- o Redland
- Gold Coast
- Sunshine Coast
- Rural communities
- Somerset, Lockyer and Scenic Rim

# Part E: Putting the plan into action

- Implementing Connecting SEQ 2031
  - Cost estimates
  - Deciding investment priorities
  - Reviewing the plan

# 1. About Connecting SEQ 2031

The draft *Connecting SEQ 2031* establishes a long-term plan to develop a sustainable transport system in south east Queensland. The plan adopts an integrated approach that considers land use planning and the various modes of transport.

This draft *Connecting SEQ 2031* comprises part of the Queensland Government's response to the Queensland Growth Management Summit held in March 2010.

This plan supports the delivery of well-designed and well-connected communities where people can work, attend schools, shop or recreate all within 15 minutes travel by a sustainable transport mode.

#### What is the role of Connecting SEQ 2031?

The draft Connecting SEQ 2031 has been developed as the guiding transport planning and policy document to support the desired outcomes of the SEQ Regional Plan 2009 to 2031<sup>1</sup>.

The SEQ Regional Plan 2009-2031, through Desired Regional Outcome 8, establishes a clear policy and legislative platform to move to a more compact settlement pattern and a better mix of urban development. This will support a greater use of public transport, walking and cycling.

The draft *Connecting SEQ 2031* builds on the *SEQ Regional Plan*'s land use framework by seeking to optimise the location of land use groups in relation to the transport network, in particular identifying:

- optimal areas to locate employment in terms of transport accessibility
- centres and corridors where a good standard of public transport service will maximise the opportunities for higherdensity residential and office development.

The draft *Connecting SEQ 2031* includes a multi-modal plan and policy response for public transport, private vehicles, active transport and freight. This plan will guide the prioritisation of available funds to deliver maximum benefits across the transport system.

The draft Connecting SEQ 2031 will inform the development and annual revisions of the Queensland Infrastructure Plan (scheduled for release in 2011 to replace SEQIPP). The Queensland Infrastructure Plan will give momentum to transport infrastructure delivery in the region in the context of state-wide funding contestability spanning geographical and sectoral boundaries.

The draft *Connecting SEQ 2031* will also inform other state government plans as well as local government planning schemes and transport plans.

It will also support the achievement of key targets in the government's state-wide plan *Toward Q2: Tomorrow's Queensland* that focus on:

- providing essential transport infrastructure to make Queensland Australia's strongest economy
- making Queensland greener by cutting car use
- making Queenslanders healthier by reducing obesity<sup>2</sup>.

Connecting SEQ 2031 also aims to reduce greenhouse gas emissions from transport, supporting ClimateQ: toward a greener Queensland<sup>3</sup>.

The integrated approach of the draft *Connecting SEQ 2031* is also intended to ensure Brisbane is aligned with the Council of Australian Government's national criteria for capital city strategic planning.

# What is a sustainable transport system?

Many cities across the world are facing challenges from unsustainable travel patterns. These include growing traffic congestion, overcrowding on public transport, pollution, increasing dependence on oil based fuels and ageing transport infrastructure. This has impacts on quality of life, health and economic vitality.

A sustainable transport system is resilient and capable of being continued over the longer term with minimal effect on the environment. It will:

- meet the access and equity needs of individuals, businesses and the community
- be affordable to construct, operate and maintain
- offer choice, convenience and supports economic activity
- reduce pollution and waste
- limit consumption of resources to sustainable levels4.

Evidence of a sustainable transport system would be seen through managed levels of congestion and system crowding, reducing levels of pollution and carbon emissions, and cost effective infrastructure and operating costs.



- The South East Queensland Regional Plan covers the local government areas of Brisbane City Council, Moreton Bay Regional Council, Ipswich City Council, Logan City Council, Redlands City Council, Gold Coast City Council, Sunshine Coast Regional Council, Scenic Rim Regional Council, Somerset Regional Council, Lockyer Valley Regional Council and part of Toowoomba Regional Council. The draft Connecting SEQ 2031 covers almost the same local government areas as the South East Queensland Regional Plan, with the exception of Toowoomba city, which will be included in transport planning for the eastern Darling Downs. While Toowoomba is not directly included, the draft Connecting SEQ 2031 does consider strategic transport links to Toowoomba city.
- 2 Queensland Government 2008 Toward Q2: Tomorrow's Queensland
- 3 Queensland Government 2009 ClimateQ: toward a greener Queensland
- 4 MVA 2005 World Cities Research: Summary Report.

## Major transport network enhancements since 1997

The previous *Integrated Regional Transport Plan for South East Queensland* (IRTP) was released in 1997. This plan established a strong platform for a shift to more sustainable transport and a move away from the car-dominated transport planning culture that had prevailed since the 1960s. Many improvements have been made to the transport network since 1999 – some of the major highlights are provided below.





### Public transport

#### **TransLink Transit Authority**

TransLink was established in 2004 and has provided a platform for integration of the public transport system.

Since TransLink was formed in 2004, patronage on public transport has increased by 45% – from 124 million annual boardings in 2003–04 to 180 million annual boardings in 2008–09.

## Improvements to public transport services

- establishing integrated fares and ticketing for all of SEQ, including introduction of the go card
- roll out of Bus Upgrade Zone (BUZ) services providing frequent, all-day services on key routes (in partnership with Brisbane City Council)
- enhancing passenger information with 'stop-specific' timetables posted at more than 70% of bus stops
- upgrading bus and rail stations, including widespread roll out of new bus shelters and expansion of park 'n' ride facilities

- introducing NightLink services between 1am and 5am from Brisbane CBD and Fortitude Valley on Friday and Saturday nights
- upgrading the standard of the fleet, with nearly 50% of the bus fleet now wheelchair accessible and significant improvements in disability access compliance for new and existing trains
- continuing support of combined entry and public transport tickets to events at The Gabba (Woolloongabba) and Suncorp Stadium (Milton), as well as Skilled Park Stadium (Robina). TransLink carried almost 2.5 million people to events in 2008–09.

Figure 1.1 - patronage on public transport in SEQ

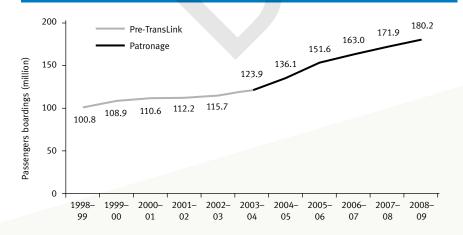
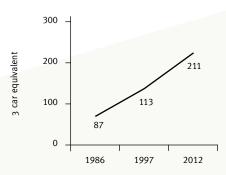
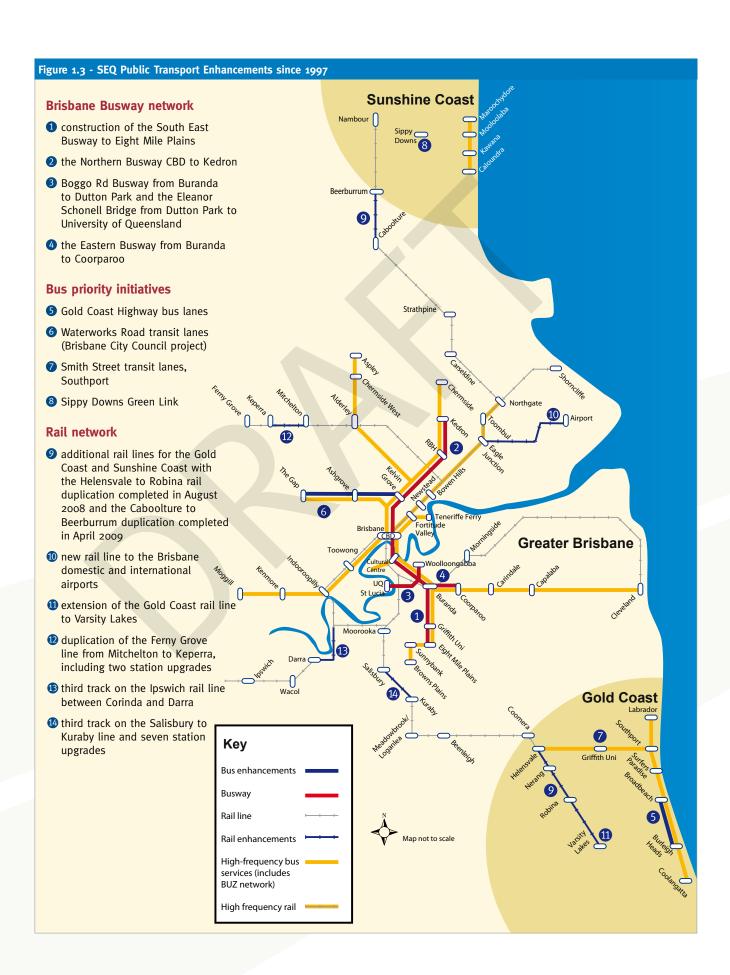


Figure 1.2 - Citytrain electric fleet









### Motorways and highways







### Active transport and Travelsmart



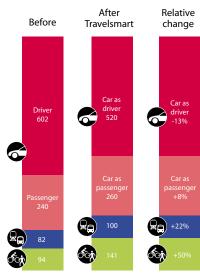
#### **Active transport network**

- Goodwill Bridge, Gardens Point to Southbank
- Kurilpa pedestrian and cycle bridge from North Quay to South Brisbane
- Toowong pedestrian and cycle link across the Centenary Motorway
- · Normanby cycle and pedestrian facility
- Sir Leo Hielscher bridge pedestrian and cycle facility
- Ted Smout Memorial Bridge pedestrian and cycle facility
- Princess Alexandra Hospital cycleway beside the Boggo Road busway
- Bicentennial Bikeway upgrade from Park Road to Little Cribb Street
- Eenie Creek Bridge and cycleways in Noosa
- River Walk along the Brisbane River between Brisbane CBD to New Farm
- cycle centres at King George Square and Royal Brisbane Women's Hospital busway stations

- progressive delivery of V1 veloway from Brisbane CBD to Eight Mile Plains
- pedestrian and cycle crossings of Brisbane River at Jindalee and Indooroopilly
- inclusion of cycling facilities in the upgrade or delivery of state controlled road projects
- provision of active transport facilities in major developments (for example, providing bicycle parking and showers in office buildings).

#### **TravelSmart**

Improvements to transport infrastructure and services have been supported with travel behaviour campaigns, through TravelSmart in homes, schools and workplaces. A TravelSmart project completed in Brisbane's north in 2007 targeted 74 500 households and achieved a 13% reduction in vehicle kilometres travelled, proving how individuals acting together can ease the burden on the transport system.



Trips per person per year

Figure 1.5 - North Brisbane



# 2. Transport challenges facing the SEQ region

The strong population growth experienced in the region during the past 30 years is forecast to continue at similar levels during the next 20 years. With population forecast to grow from 3.1 million in 2009 to 4.4 million in 2031, current travel habits and the type of low density lifestyle currently prevalent in the region are simply not sustainable.

Action is necessary to avoid the consequences of unsustainable transport outcomes like air pollution, congestion, excessive reliance on oil-based fuels and reduced access to essential goods and services.

Understanding the challenges is an important first step in gaining community support for long-term improvements that will place the region's transport system on a sustainable path. This chapter summarises the challenges which are then addressed in subsequent sections of the draft *Connecting SEQ 2031* plan.

#### **Population growth**

For every 10 residents currently in the region, forecasts suggest there will be another six by 2031 and another 11 by 2056.

Each new resident makes between three and four trips per day, with most of these trips currently made by car. Forecast population growth will increase trips from 10 million trips per day in 2006 to 15 million by 2031. Freight and commercial traffic is forecast to more than double in the next 20 years, driven by lifestyle choices and business needing access to goods and materials on demand.

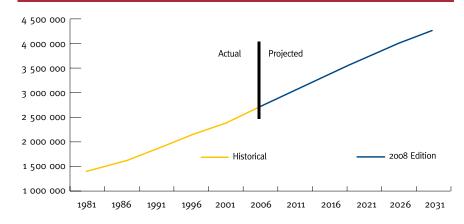
Accommodating the forecast growth in travel by continuing current travel patterns would have significant negative impacts on the quality of life for residents of and visitors to the region (for example, excessive congestion, traffic noise and air pollution). It would also reduce the region's competitiveness in the pursuit of modern business and industry growth.

#### Table 2.2 – forecast population growth in SEQ

SEQ facts	In 2006	ln 2031	Increase
Total dwellings	1 051 000	1 744 000	66%
Total persons	2 706 000	4 244 000	57%
Lone persons and couples without children	512 000	957 000	87%
Population over 65	327 000	854 000	161%

Note: population numbers differ slightly to SEQ Regional Plan due to exclusion of Toowoomba city from Connecting SEQ 2031 analysis

#### Figure 2.1 - population projections for SEQ, medium series



#### **Growth Summit Outcomes**

The government held the Queensland Growth Management Summit in March 2010 and published its response in May.

The growth summit outcomes include policies to encourage growth in regional Queensland and work with local governments in SEQ to confirm the distribution of dwelling targets in the region.

Other growth management outcomes reflected in the draft *Connecting SEQ* 2031 include:

- setting ambitious targets for a swing to public and active transport
- supporting 'decentralisation' of jobs to centres outside of the Brisbane CBD
- timely provision of infrastructure for new growth areas
- supporting considerable infill development oriented around public transport corridors.

It is important to note that the population of SEQ region grew by more than 80 000 people in 2008-09. This is much larger in population terms than the rest of Queensland combined, which added about 36 000 residents.

Sound planning for improved transport infrastructure and services and careful management of growth will still be essential.



#### Low density development

Between 1991 and 2006 the urbanised areas of the region grew at a faster rate than resident population, suggesting a decrease in the density of urban development. This means people are driving longer distances to work. Ongoing development of low density suburbs based on car use would work against achieving higher levels of sustainable transport.

#### Car dependency

Cars currently dominate the way people travel, with more than 80% of all trips by private car<sup>6</sup>. During the past 10 years there has been a steady decline in average vehicle occupancy with most cars now having only one occupant in peak periods. While the car provides major benefits to lifestyles, unrestrained growth of private car use has the potential to incur huge costs in infrastructure.

Continued growth in car travel will increase congestion and impact on freight and commercial movements.

A transport system heavily dominated by car travel can also mean quality alternatives are not readily available, making it difficult for people who are unable to drive or afford a car to access employment, services and recreation opportunities.

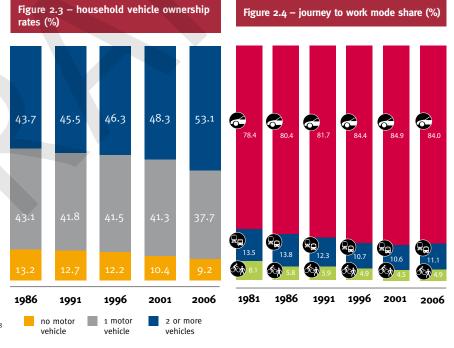
Table 2.1 – population growth and urban form in SEQ

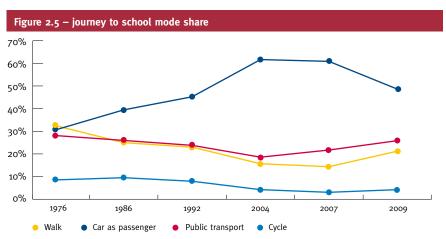
	Population	Urban area
1991	1.9 million	1708 km²
2006	2.8 million	2801 km²
Growth	47%	64%

Figure 2.2 – Brisbane vehicle occupancy (AM peak)



Source: Department of Transport and Main Roads 2008 Vehicle Occupancy Survey





<sup>6</sup> Department of Transport and Main Roads 2009 South East Queensland Household Travel Survey 2004-2008



#### Congestion

Congestion caused by unplanned incidents or by excessive demand relative to capacity is increasing.

The region's road, rail and bus networks all experience congestion in weekday peak hours. More time spent travelling means less business and leisure time, impacting on the region's economy and lifestyle.

While the busiest motorways often seem to be clogged with trucks, evidence shows the vast majority of traffic on the roads is actually small private and commercial vehicles.

Trips that have the greatest effect on peakperiod travel are:

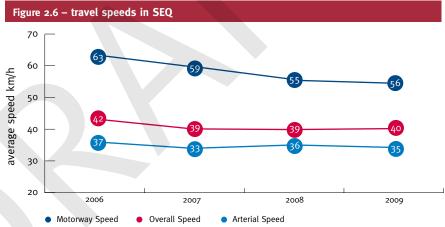
- trips to and from work and education
- car trips serving passengers, such as dropping a child at school.

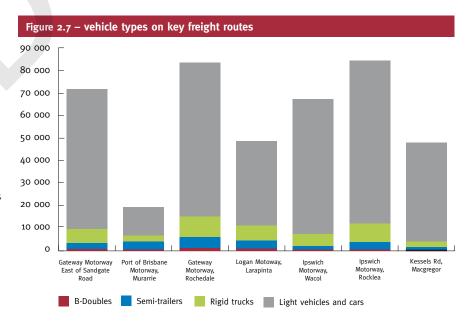
#### **Economic health**

Transport plays an essential role in bringing together raw materials, production and labour activities. Most freight is moved by road.

If freight vehicles are consistently caught in traffic congestion the region will lose its ability to attract and retain industry.

The majority of freight and commercial vehicle movements take place in off-peak periods. Maintaining traffic flows during off-peak periods will be important in ensuring the future economic vitality of the region. There is also a need to develop rail networks so more freight can be moved by rail.







#### **Physical inactivity**

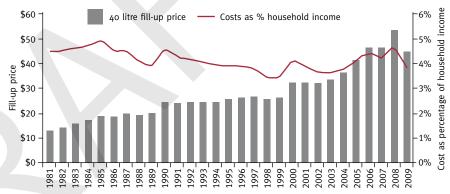
Excessive weight gain and physical inactivity is a major concern in Australia. In Queensland, six in 10 men, and four in 10 women are overweight or obese, and seven in 10 people exercise very little or not at all<sup>7</sup>. Making it easy to be active as part of daily travel allows people to incorporate physical activity into their daily routine.

Australian Government Physical Activity Guidelines recommend at least 30 minutes of physical activity on most, preferably all, days<sup>8</sup>. This can be easily achieved by using active transport for short trips. It takes just 12 minutes to walk one kilometre and nine minutes to cycle three kilometres. In SEQ about 35% of trips taken are less than three kilometres.

#### Energy

Nearly 95% of Queensland's transport energy consumption in 2006–07 used petroleum products<sup>11</sup>. Any sustained increase in oil prices or chronic shortages of oil would reduce the state's quality of life, undermine economic competitiveness and increase the cost of living. This increase could also impact disproportionately on urban fringe communities and low income earners.

Figure 2.8 – cost of a weekly petrol fill-up: comparison in dollars and as a percentage of income



Source: Australian Bureau of Statistics 2009 Austroads 2008 and 2009

#### **Emissions**

Transport is responsible for 10.4% of total greenhouse gas emissions in Queensland, with 85% from road transport8. However, in SEQ, transport accounts for a much larger 22% of the region's total greenhouse gas emissions9. If current transport trends continue, by 2031 road transport greenhouse gas emissions will increase by more than 150% on 1990 levels. As a major population centre, the region will need to play its part in achieving the Commonwealth Government's target of reducing national greenhouse gas emissions by a minimum of 5% and up to 25% (depending on national and international developments) of 2000 levels by 202010.

Other environmental factors that need to be managed include air pollution from transport activity which retains the potential to be a major concern.

#### **System efficiency**

The region already has an extensive transport system. New technology, lower scale infrastructure improvements (for example bus lanes) and travel demand management policies can be used to optimise the performance of the existing system.



Some parts of our busway network are carrying about 12 400 passengers per hour (in one direction). For comparison, a typical motorway lane can carry about 2000 people per hour.

#### Safety and security

A growing population means more transport activity and therefore the potential for more crashes. The annual cost of road crashes from fatalities, injuries and damage to property in SEQ is estimated to be more than \$3 billion<sup>12</sup>.

Road safety improvements to existing roads and intersections must be a high investment priority. Ensuring safety for vulnerable road users such as pedestrians and cyclists will become increasingly important as more people choose these transport options.

- Australian Government 2009 Physical activity guidelines (www.measureup.gov.au)
- 8 Australian Government (Department of Climate Change) 2009 Australian national greenhouse accounts, state territory greenhouse gas inventory 2007
- 9 ICLEI Local Government for sustainability 2009 SEQ Regional Plan climate change project: Phase 2 emissions analysis
- 10 Queensland Government 2009 Climate Q: Towards a Greener Queensland p 165
- 11 Queensland Government 2008 Toward Q2: Tomorrow's Queensland
- 12 Queensland Government (Department of Transport and Main Roads) 2009 Queensland transport facts

# 3. An overview of our plan for the future

# A vision of sustainable transport

The draft *Connecting SEQ 2031* aims to tackle the transport challenges and set the region on a path to a sustainable transport system. This journey begins by establishing a transport vision that builds on the vision of the *SEQ Regional Plan*.

#### South East Queensland Regional Plan vision

The vision for south east Queensland is a region of interconnected communities with excellent accessibility and an extensive system of efficient public transport that contributes to reducing greenhouse gas emissions<sup>13</sup>.

## The draft Connecting SEQ 2031 transport vision

South east Queensland's transport system supports the lifestyle enjoyed by residents and visitors, enhances the state's economic vitality and protects the natural environment.

Achieving this transport vision would mean:

- residents in urban communities would have easy access to jobs, shops, recreation and lifestyle opportunities, with a range of travel choices available for the majority of trips
- freight, business and commercial traffic would enjoy reliable travel times, with reliable access to key destinations within the region and quality links to other places
- rural communities would have safe access to local services and other parts of the region. Though private transport would still meet the majority of rural transport needs, options for those who do not own a car or are unable to drive would be available.

### Our key transport policy goals

To deliver the 2031 transport vision, the draft *Connecting SEQ 2031* has established nine key transport policy goals. These support the government's strategic directions as conveyed in *Toward Q2*, the *Transport Coordination Plan* and the *SEQ Regional Plan*. Achieving these goals by 2031 would meet future travel and economic development needs while supporting the desired lifestyle of SEQ residents. The goals are:

#### Protecting amenity and livability

The transport system contributes to making the region a better place to be and enhances amenity in SEQ communities.

#### **Ensuring equity and accessibility**

People can easily access goods, services, facilities and jobs, with many residents having these available locally or able to easily access them without using a car.

#### Supporting economic prosperity and employment growth

Freight and business traffic can move efficiently and reliably.

#### **Delivering transport efficiently**

Transport investment and land use patterns maximise the efficiency of the system, with a focus on getting the best use out of the network.

#### Managing congestion

Travel times are reliable and the cost of congestion is stabilised or reduced.

#### Creating a low carbon and environmentally responsible transport system

Greenhouse gas and other environmental emissions are reduced by increasing public and active transport use, reducing overall transport demand, using transport more efficiently and increasing the proportion of fuel-efficient and alternative fuel vehicles in the fleet.

#### Encouraging individual physical activity as a part of daily travel

Active transport (walking and cycling) is a convenient, safe and an attractive option for many trips.

#### Developing a resilient system

The transport network has alternative routes available when major incidents or events occur and the vulnerability to reduced oil supply, rising oil prices and climate change impacts is minimised.

#### **Delivering safety and security**

People feel safe and secure using the transport system and there is a steady reduction in the occurrence of crashes on the road and rail network.

### Our strategy for the future

The draft *Connecting SEQ 2031* supports the long-term achievement of the key transport policy goals by:

- · expanding and modernising the rail network
- · continuing to transform bus networks
- · completing and better managing a network of motorways and highways
- · completing and managing a network of strategic bikeways
- · targeting freight investment to support the economy
- encouraging voluntary travel behaviour change.

### Highlights of the plan

Key initiatives include:

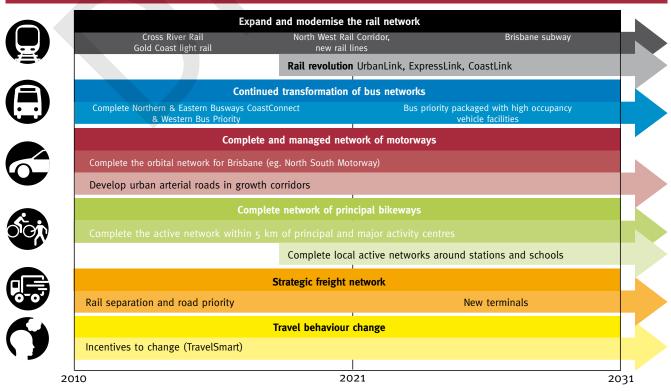
- Cross River Rail is a proposed rail line in the inner city, including a north-south tunnel under the Brisbane River and four new underground inner city stations.
  Cross River Rail will make a rail services revolution possible, including:
  - UrbanLink services with more frequent services and higher capacity trains operating inbound of Darra, Strathpine, Loganlea, Ferny Grove, Manly, Springfield, Shorncliffe and the Airport
  - ExpressLink services from Ipswich, Cleveland, Beenleigh, Caboolture and Kippa-Ring
  - CoastLink from Brisbane to the Gold Coast and Sunshine Coast.
- constructing an additional rail line between Alderley and Strathpine using the predominantly government-owned North West Transport Corridor
- expanding the reach of the rail network with extensions to Maroochydore, Coolangatta, Kippa-Ring, Springfield, Ripley and Flagstone

- extending the proposed light rail on the Gold Coast to Coolangatta
- a separate Brisbane subway from Toowong to West End to Newstead/ Bowen Hills, with extensions to Hamilton Northshore/Airport Village and Bulimba possible in the longer term
- continuing the busway network with the Northern Busway to Bracken Ridge and the Eastern Busway to Capalaba
- a high-frequency bus service with on-road priority from Kenmore to the city
- additional bus infrastructure investment through packaging of high-frequency bus services with bus priority measures (High Occupancy Vehicle Network Plan)
- active transport (such as walking and cycling) improvements on strategic corridors linking centres and within five kilometres of centres
- major freight investment to support the economy, including:
  - full development of Acacia Ridge freight terminal

- dedicated dual gauge freight line from Acacia Ridge to Port of Brisbane
- connected and managed motorways to ensure efficient 24-hour operation of freight vehicles.
- completing the strategic road network including:
  - completion of the orbital motorway network for Brisbane, including the new north-south motorway from Toowong to Everton Park
  - strategic arterial roads supporting motorways/highways through Moreton Bay Regional Council and Gold Coast City Council.
- introducing new technology to better manage road and public transport movements (for example, through better information on travel options, real time management of motorway flows and improved rail signalling).

Figure 3.1 summarises the key initiatives proposed by the draft *Connecting SEQ 2031*.

#### Figure 3.1 - highlights of the plan





### Targeting success

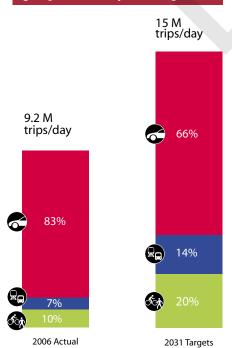
The draft Connecting SEQ 2031 adopts regional targets as a measure of broadly tracking progress towards achieving the key transport policy goals. The mode share targets have been established through a combination of transport modelling and analysis of local behavioural data such as the Queensland Government Household Travel Survey and the Census Journey to Work.

The plan establishes ambitions to change the way the region moves by:

- doubling the share of active transport trips (such as walking and cycling) from 10% to 20% of all trips
- doubling the share of public transport from 7% to 14% of all trips
- reducing the share of trips taken in private motor vehicles from 83% to 66%.

Across the region this would mean the average person changing just five trips (2.5 return trips) out of a total of 25 per week to public transport, cycling or walking to achieve the 2031 mode share targets.

Figure 3.2 - SEQ daily travel targets



The SEQ region is diverse and contains many variations in urban settlement and availability of transport choices. To give a clearer indication of local area priorities, targets have been established for the seven local government areas where the majority of the population is located, with details included in Part D.

#### Journey to school targets

Connecting SEQ 2031 also establishes journey to school transport targets, as an important part of encouraging a long-term cultural shift in travel behaviours.

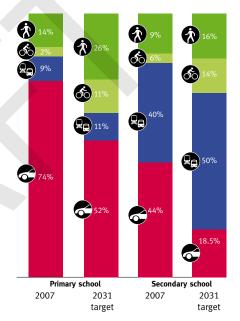
Shifting some of these shorter trips to cycling and walking will have flow on effects in terms of managing congestion, as well as delivering health outcomes as school students increase physical activity.

A complex range of factors influence changes in the way students travel to school, resulting in a decline in the share of trips by public transport, cycling and walking. These include:

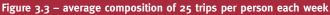
- concerns about safety and security
- more parents travelling directly to employment after the school drop-off
- a trend towards a higher proportion of private school enrolments, increasing the distance from home to school
- more before and after school extracurricular activities, eliminating access to school bus services
- increasing size of schools, meaning students come from a wider catchment.

Figure 3.3 shows the daily journey to school transport targets for both primary

Figure 3.4 – 2031 journey to school transport targets



Source: 2007 mode share figures from SEQ Household Travel Survey





To achieve the targets the weekly travel patterns of the average SEQ resident would need to change only incrementally.