

Part A – Setting the scene

1. About *Connecting SEQ 2031*

Connecting SEQ 2031 establishes a long-term plan to develop a sustainable transport system in south-east Queensland¹. The plan adopts an integrated approach that considers land use planning and the various modes of transport.

Connecting SEQ 2031 has been developed as the guiding transport planning and policy document to support the desired regional outcomes of the *South East Queensland Regional Plan 2009–2031*.

Connecting SEQ 2031 reinforces the SEQ Regional Plan's planning framework by seeking to optimise the location of activities 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 higher density residential and office development.

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

Connecting SEQ 2031 will inform the annual revisions of the *Queensland Infrastructure Plan*, which was released in 2011 to replace the *South East Queensland Infrastructure Plan and Program 2010–2031*.

The *Queensland Infrastructure Plan* will give momentum to transport infrastructure delivery across Queensland, including south-east Queensland, in the context of state-wide funding contestability spanning geographical and sectoral boundaries.

Connecting SEQ 2031 will inform other state and local government planning schemes and transport plans.

It will also support state-wide outcomes and policies established in the Queensland Government's *Toward Q2: Tomorrow's Queensland* and *ClimateQ: toward a greener Queensland*².

Specifically, it will support the achievement of key targets in *Toward Q2* that focus on:

- providing essential transport infrastructure to make Queensland the strongest economy in Australia
- making Queensland greener by cutting car use to reduce greenhouse emissions
- making Queenslanders healthier by reducing obesity³.

Connecting SEQ 2031 supports the principles and opportunities identified in the *Queensland Regionalisation Strategy*. The proposed 2031 transport system will support economic activity and growth in the region, including in areas of state and national significance. In the longer term, growth in other regions of Queensland will help to reduce pressure on the south-east Queensland transport system.

The integrated approach of *Connecting SEQ 2031* is also intended to ensure the region's capital city, Brisbane, is aligned with the Council of Australian Governments' 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, community health and economic vitality.

A sustainable transport system is resilient and capable of continuing to operate over the longer term with minimal effect on the environment. To be sustainable, a transport system must:

- meet the access and equity needs of individuals, businesses and the community
- be cost effective to construct, operate and maintain
- offer choice, convenience and support 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, carbon emissions and other environmental impacts
- resilience in the face of climate change impacts
- cost effective infrastructure and operating costs.



1 For the purposes of *Connecting SEQ 2031*, south-east Queensland covers the local government areas of Brisbane City Council, Moreton Bay Regional Council, Ipswich City Council, Logan City Council, Redland City Council, Gold Coast City Council, Sunshine Coast Regional Council, Scenic Rim Regional Council, Somerset Regional Council, and Lockyer Valley Regional Council, but excludes Toowoomba Regional Council, which will be included in transport planning for the Eastern Darling Downs region. While Toowoomba is not directly included, *Connecting SEQ 2031* does consider strategic transport links to Toowoomba city.

2 Queensland Government 2009 *ClimateQ: toward a greener Queensland*

3 Queensland Government 2008 *Toward Q2: Tomorrow's 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 was released in 1997. This plan established a strong platform for a shift to more sustainable transport options 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 system since 1997 – some of these major highlights are provided below.



Public transport

TransLink Transit Authority

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

Since TransLink was formed in 2004, patronage on public transport has increased by 45% – from 120 million annual boardings in 2003–04 to about 175 million annual boardings in 2009–10.

Some of TransLink's key initiatives include:

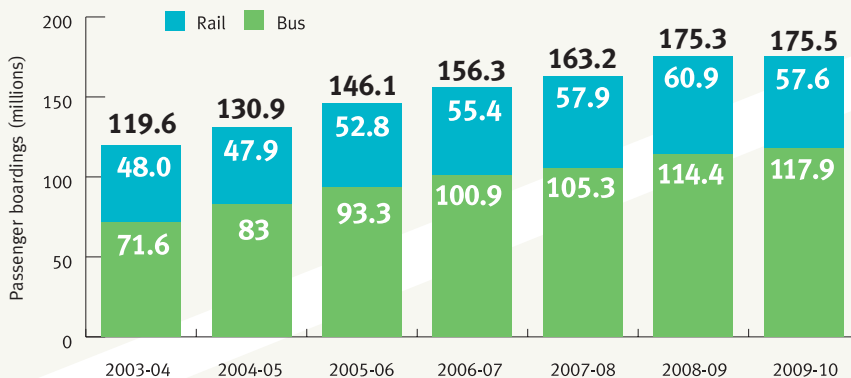
- establishing integrated fares and ticketing for the whole region, including introduction of the *go* card
- enhancing passenger information with 'stop-specific' timetables posted at more than 70% of bus stops
- continuing support of combined entry and public transport tickets to events at The Gabba (Woolloongabba), Suncorp Stadium (Milton) and Skilled Park Stadium (Robina). TransLink carried almost 2.5 million people to events in 2008–09.

Improvements to public transport services

There have been significant changes to the public transport system since 1997, including the following operational and service improvements:

- extension and upgrade of the rail network
- purchase of additional rollingstock for the rail network, from 113 (three car equivalent) in 1997 to a committed 211 (three car equivalent) by 2012
- delivery of the South East Busway and expansion of the busway network to include the Inner Northern, Northern and Boggo Road Busways
- roll-out of Bus Upgrade Zone (BUZ) services, providing frequent, all day services on key routes (in partnership with Brisbane City Council)
- upgrading bus and rail stations, including widespread roll-out of new bus shelters and expansion of park 'n' ride facilities
- introducing NightLink services between 1 am and 5 am from Brisbane CBD and Fortitude Valley on Friday and Saturday nights
- introducing NightLink services on the Gold Coast
- upgrading the standard of the bus fleet, with nearly 50% of the fleet now wheelchair accessible and significant improvements in disability access compliance for new and existing trains
- introducing a transport levy as part of local government rates (Gold Coast City Council, Sunshine Coast Regional Council) to fund improvements to the transport network, particularly public transport, cycling and walking
- commencement of construction for stage 1 of the Gold Coast light rail system (from Gold Coast Health and Knowledge Precinct to Broadbeach), with the preferred proponent to operate the light rail system announced in May 2011.

Figure 1.1 – annual public transport passengers 2003–04 to 2009–10



Source: TransLink Transit Authority public transport patronage data

Note: Excludes passenger boardings on ferry services

Figure 1.2 – public transport enhancements since 1997





Motorways and highways

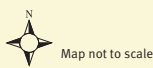
Figure 1.3 – upgrades to motorways and highways since 1997

- 1 Gateway Motorway upgrades, including the Gateway Bridge duplication (Sir Leo Hielscher) and new Gateway deviation
- 2 Nundah bypass on Sandgate Road
- 3 Ipswich Motorway upgrades
- 4 Clem7 tunnel providing a connection for motorists travelling between the north and south sides of the city (Brisbane City Council project)
- 5 Ted Smout Memorial Bridge (including bus lanes and active transport provision) providing a second bridge between Clontarf and Brighton
- 6 Port of Brisbane Motorway upgrade (Port Connect)
- 7 Bruce Highway upgrades between the Gateway Motorway and Caboolture
- 8 Centenary Highway extension from Darra to Yamanto, via Springfield and Ripley
- 9 Tugun Bypass
- 10 Pacific Motorway upgrade to eight lanes from Logan Motorway to Smith Street and six lanes from Smith Street to Worongary
- 11 Sunshine Motorway upgrades
- 12 Pacific Motorway transit lanes from Upper Mt Gravatt to Eight Mile Plains
- 13 Logan Motorway upgrade
- 14 Inner City Bypass (Brisbane City Council project)
- 15 Gateway Motorway extension from Pacific Motorway to Logan Motorway
- 16 Airport intersection upgrade



KEY

- Existing major strategic road/motorway/highway
- Motorway/highway improvements since 1997





Active transport and travel behaviour change



Improvements to the active transport network

Major additions to the active transport network since 1997 include:

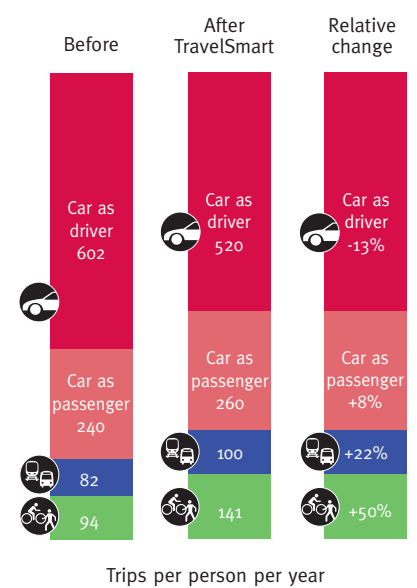
- Goodwill Bridge from Gardens Point to Southbank
- Kurilpa pedestrian and cycle bridge from North Quay to South Brisbane
- Go Between Bridge pedestrian and cycle facility
- Toowong pedestrian and cycle overpass of the Centenary Motorway
- Normanby cycle and pedestrian facility linking to the Roma Street Parklands
- Eleanor Schonell Bridge pedestrian and cycle 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
- cycle centres at King George Square and Royal Brisbane and Women's Hospital busway stations
- progressive delivery of V1 veloway from Brisbane CBD to Eight Mile Plains
- pedestrian and cycle crossings of the 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).

Travel behaviour change

Improvements to transport infrastructure and services have been supported with travel behaviour change campaigns, including TravelSmart programs in communities, schools and workplaces across the region.

For example, a TravelSmart project was completed in Brisbane's north in 2007 and targeted about 75 000 households. It achieved a 13% reduction in vehicle kilometres travelled, proving how small changes in how individuals travel can ease the burden on the transport system.

Figure 1.4 – Brisbane north TravelSmart project results





2. Transport challenges facing the region

The strong population growth experienced in south-east Queensland during the past 30 years is forecast to continue at similar levels during the next 20 years. With population forecast to grow from about 2.7 million in 2006 to over 4.24 million in 2031, the current high level of dependence on private vehicles is not sustainable.

Action is necessary to avoid the negative consequences of unsustainable transport patterns, like air pollution, congestion, excessive reliance on oil based fuels, increasing greenhouse gas emissions 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 *Connecting SEQ 2031*.

Population growth

Connecting SEQ 2031 is a companion document to the *South East Queensland Regional Plan 2009–2031* and therefore uses the population projections and dwelling targets of the plan as a basis for the future transport network.

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 an average of three to four trips per day, with most of these trips currently made by car. Forecast population growth will increase trips from about 9 million trips per day in 2006 to about 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 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.

Queensland Growth Management Summit outcomes

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

The Growth Management Summit outcomes included policies to encourage growth in regional Queensland. This will help reduce pressure on the south-east Queensland transport system.

Other outcomes from the growth summit reflected in *Connecting SEQ 2031* include:

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

The population of south-east Queensland grew by more than 80 000 people in 2008–09. This is much higher in population terms than the rest of Queensland combined, which grew by about 36 000 residents.

Although growth has slowed in the years since then, sound planning for improved transport infrastructure and services and careful management of growth is essential for the region.

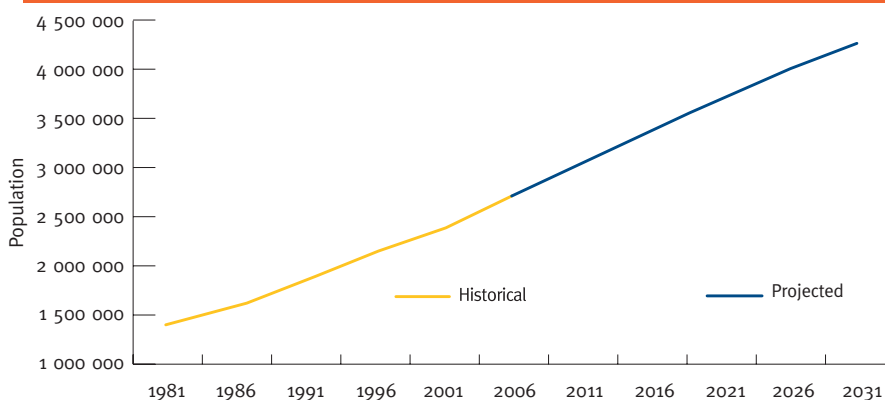
Table 2.1 – forecast population growth in south-east Queensland

South-east Queensland facts	In 2006	In 2031	Increase
Total dwellings	1 051 000	1 744 000	66%
Total persons	2 705 200	4 244 000	57%
Lone persons and couples without children	512 000	957 000	87%
Population over 65	327 000	854 000	161%

Source: Department of Local Government and Planning, *Queensland Population Projections, 2006*

Note: population numbers differ slightly to the SEQ Regional Plan due to exclusion of the Toowoomba Regional Council area from *Connecting SEQ 2031* analysis

Figure 2.1 – population projections for south-east Queensland



Source: Office of Economic and Statistical Research *population projections Queensland, 2008* edition, medium series by age and sex



Low density development

Over the past four decades, the urbanised areas of the region expanded considerably and also grew at a faster rate than resident population, suggesting an overall decline in urban densities.

Ongoing development of low density suburbs based on car use works against achieving higher levels of sustainable transport by dispersing passenger demand and increasing the separation between residential areas and major destinations.

There is some evidence of more compact urban development occurring on a large scale in Brisbane city and parts of the Gold Coast, particularly in more accessible locations. An ongoing trend towards a more compact, diverse form of urban development will be essential to the achievement of a sustainable transport system.

Table 2.2 – population growth and urban form in south-east Queensland

	Population	Urban area
1991	1.9 million	1708 km ²
2006	2.8 million	2801 km ²
Growth	47%	64%

Source: ABS Census of population and housing 1991–2006

Transport data sources

- The Department of Transport and Main Roads conducts regular surveys of travel movements in the region.
- TransLink gathers data on public transport use on a daily basis, and this is reported annually.
- The Australian Bureau of Statistics collects considerable information on vehicle ownership, living arrangements and journey to work by mode and distance in the national census every five years. At the time that *Connecting SEQ 2031* was prepared, the last year of available census information was 2006.

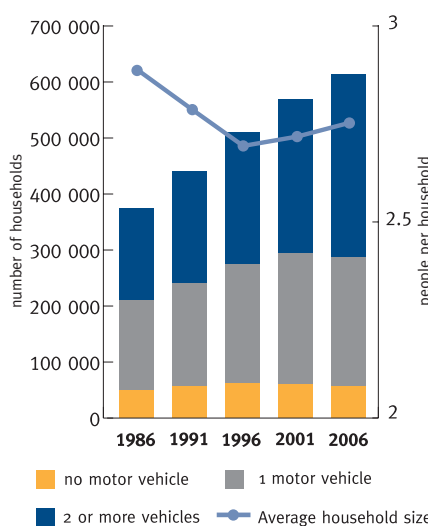
Car dependency

Cars currently dominate the way people travel in the region, with more than 80% of all trips made by private car⁵. 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 is a convenient transport option, unrestrained growth of private car use has the potential to incur huge costs in infrastructure and impact on economic activity.

Continued growth in car travel will increase congestion and impact on freight and commercial movements, thus increasing the cost of conducting business and transporting goods.

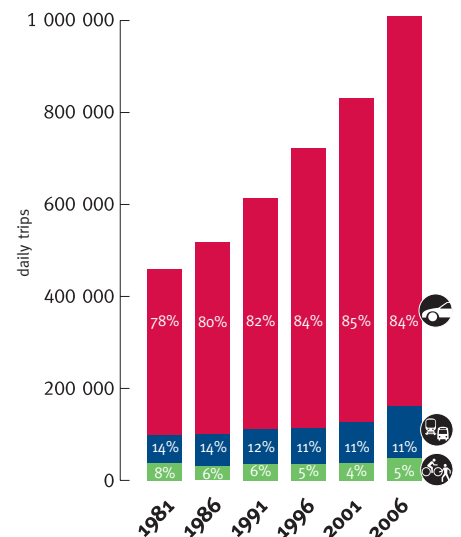
A transport system heavily dominated by car travel can also mean quality alternatives are not readily available, making it difficult for people who are unable to drive or afford a car to access employment, services and recreation opportunities.

Figure 2.2 – Brisbane household vehicle ownership rates and household size



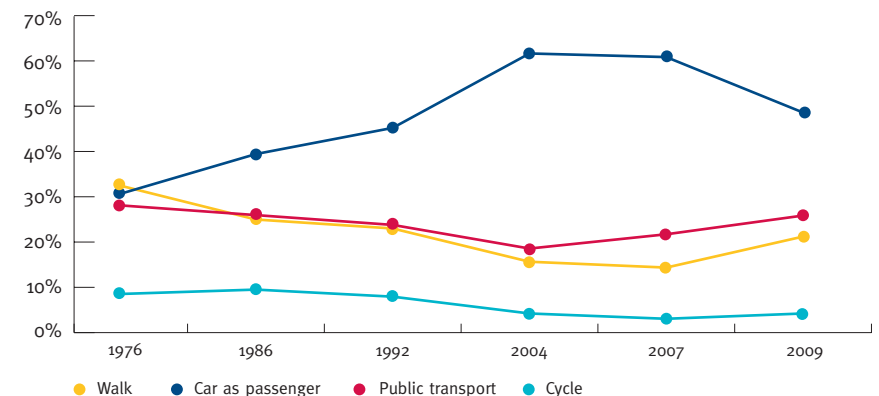
Source: ABS Census of population and housing 1986–2006

Figure 2.3 – south-east Queensland journey to work mode share



Source: ABS Census of population and housing 1986–2006

Figure 2.4 – Brisbane city journey to school mode share



Source: Department of Transport and Main Roads Household Travel Surveys

5 Department of Transport and Main Roads 2009 South East Queensland Household Travel Survey 2004–2008



Congestion

Traffic congestion caused by unplanned incidents or by excessive demand relative to road capacity is increasing.

The region's road, rail and bus networks all experience regular 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.

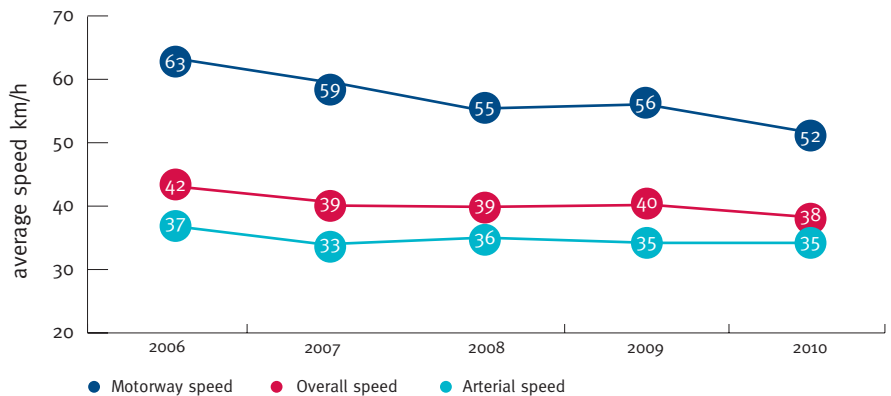
Trips that have the greatest effect on peak period travel are:

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

Some parts of the motorway network are not supported by realistic alternative routes in the event of a major incident.

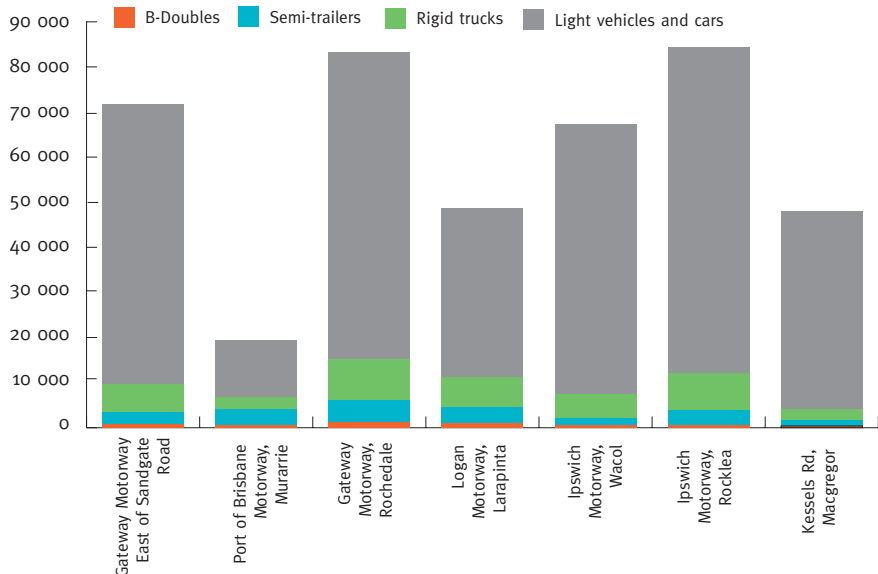
This results in expensive and frustrating delays which could be partially avoided by a more resilient network with alternative routes.

Figure 2.5 – average peak period travel speeds in south-east Queensland



Source: Department of Transport and Main Roads Travel Time Surveys

Figure 2.6 – vehicle types on key freight routes



Source: Brisbane City Council Vehicle Classification Survey 2008

Economic health

Transport plays an essential role in the economic health of the region, bringing together raw materials, production and labour activities.

Currently, 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.

There is also a need to develop rail networks so more freight can be moved by rail.

The majority of freight and commercial vehicle movements take place in off-peak periods to avoid congestion. Many business-to-business trips also take place in the day-time off-peak.

Maintaining traffic flows during off-peak periods will be important in ensuring the future economic vitality of the region.

The motorway network plays a critical role in the movement of freight, and getting goods to destinations across the region will become an increasing challenge in more congested conditions. This includes 'first and last mile' freight movements through urban areas, which are crucial to getting goods to market.

System efficiency

South-east Queensland already has an extensive transport system. It needs to be used more efficiently and the load shared around better. New technology, lower scale infrastructure improvements (for example bus lanes), travel behaviour change programs and travel demand management policies can be used to optimise the performance of the existing system.



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

Physical inactivity

Physical inactivity and excessive weight gain are major health concerns in Australia. Seven in 10 Queenslanders exercise very little or not at all, and six in 10 men, and four in 10 women are overweight or obese.

The Australian Government Physical Activity Guidelines recommend at least 30 minutes of physical activity on most, preferably all, days⁶. This can be easily achieved by using active transport for short trips. For the average person, it takes 12 minutes to walk one kilometre and three minutes to cycle one kilometre. In south-east Queensland, about 35% of all trips taken are less than three kilometres. A three kilometre walk would take 36 minutes to walk and nine minutes to cycle.

Making it easy to be active as a part of daily travel allows people to incorporate physical activity into their daily routine.

The active transport network in the region is incomplete. While there are many high quality walking and cycling facilities in place, they do not provide a connected network that allows people to safely walk and cycle between home and a range of destinations without mixing with heavy traffic.

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 the region is estimated to be more than \$2.5 billion⁷.

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.

Since most road accidents involve a breach of the road rules, ongoing improvements to enforcement, and increased awareness of the safety risks of poor driver behaviour also need to play their part.

Continuing to provide a safe public transport and active network will also be an important consideration for future planning. This includes ongoing improvement to security measures on public transport.

Climate change and the environment

Transport is responsible for 12.1% of total greenhouse gas emissions in Queensland, with 85% from road transport⁸. However, in south-east Queensland, 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 Australian 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 and impacts on land and water from transport activity.

In addition, the transport system will need to be planned, built and operated in a way that adapts to projected climate change impacts, such as sea level rise.

6 Australian Government 2009 *Physical activity guidelines* (www.measureup.gov.au)

7 Department of Transport and Main Roads road crash data, 2010; Bureau of Infrastructure, Transport and Regional Economics, 2009, *Cost of road crashes in Australia 2006*

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 *South East Queensland Regional Plan climate change project: Phase 2 emissions analysis*

10 Queensland Government 2009 *ClimateQ: toward a greener Queensland* p 165



Energy

Nearly 95% of Queensland's transport energy consumption in 2006–07 used petroleum products¹¹.

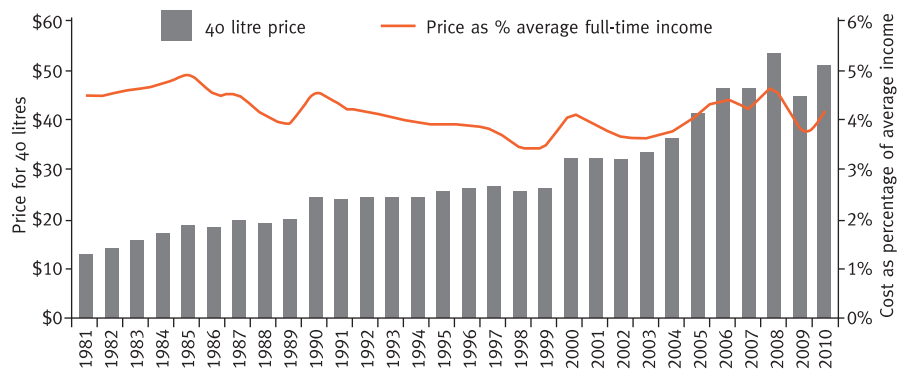
Any sustained increase in oil prices or chronic shortages of oil would increase the cost of living. This increase could also impact disproportionately on urban fringe communities and low income earners.

There are many opinions as to how and when oil shortages may impact lifestyles and how energy is used. For example, an increase in the cost of oil based fuels will not necessarily reduce car travel on a large scale.

The freedom of private car travel is very much a part of people's lifestyles and the community may respond in a variety of ways, such as purchasing smaller, more fuel efficient cars or cars that use alternative power sources.

Forecasting the extent of future change is very difficult. Accordingly, this plan is based on conventional forecasting methods which do not assume major increases in the relative cost of energy for motoring and no acute or sustained shortages of supply.

Figure 2.7 – 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

Within this context however, *Connecting SEQ 2031* establishes a very clear basis for urgently improving the viability, capacity and priority of modes which are not reliant on oil based fuels, especially electric passenger rail and non-motorised active transport.

In the event of dramatic increases in energy costs and/or sustained shortages of supply, these policy settings could be ramped up, so investment in electric rail and active transport would be given a higher priority, and provision of roads for general motor traffic is greatly reduced.

The discussion under 'Targeting success' in Chapter 3 provides more detail on the likely response in the event of energy shortages.

11 Queensland Government (Department of Transport and Main Roads) 2009 *Queensland transport facts*

3. An overview of our plan for the future

A vision for sustainable transport

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

SEQ 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 emissions¹².

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, is resilient 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 outside the region.
- 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 would be available for those who do not own a car or are unable to drive.

Our key transport policy goals

To deliver the 2031 transport vision, *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 desired regional outcomes of the *South East Queensland Regional Plan 2009–2031*. Achieving these goals by 2031 would meet future travel and economic development needs while supporting the desired lifestyle of south-east Queensland residents. The goals are:

Protecting amenity and liveability

The transport system contributes to making the region a better place to be and enhances amenity in the region's 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, environmental emissions and environmental impacts on land and water 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.

The transport system will adopt designs and technologies that minimise impacts on the region's biodiversity values, its habitat areas, waterways, wetlands and ecological corridors.

Encouraging individual physical activity as a part of daily travel

Active transport (walking and cycling) is a convenient, safe and 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, rail and active transport networks.

¹² Queensland Government (Department of Infrastructure and Planning) 2009 *South East Queensland Regional Plan 2009–2031* p 10



Our strategy for the future

As well as a clear vision and goals for the transport system, a sound strategy is needed that allows coordinated action, development of new projects and allocation of funding to where it will be most effective.

Coordinating land use and transport decisions

Transport systems shape cities. Integrated planning is required to achieve the regional priorities identified in the SEQ Regional Plan and *Connecting SEQ 2031*.

The highlights to achieve better integrated transport and land use planning include:

- early provision of public transport in major new urban communities
- identification of public transport hubs and 'priority transit corridors' where increased residential and commercial development densities should be encouraged
- creating '15-minute walkable neighbourhoods', particularly in major new growth communities
- protecting land close to priority freight routes for freight generating uses.

Expanding and modernising the rail network

Connecting SEQ 2031 sets in place a plan for a 'rail revolution', focusing on improving the passenger rail network in the region. Rail is the most efficient people-mover and is best placed to respond to the growing passenger transport task. The 'rail revolution' is based on expanding the rail network into major new growth areas and modernising its operation to ensure more efficient use of the existing infrastructure.

Rail highlights of *Connecting SEQ 2031* include:

- Cross River Rail – a proposed rail line in the inner city, including a north–south tunnel under the Brisbane River and four new underground inner city stations.
- sectorisation of rail services, including:
 - UrbanLink services with more frequent and higher capacity trains operating inbound of Darra, Strathpine, Loganlea, Ferny Grove, Cleveland, Redbank Plains, Shorncliffe and the Brisbane Airport
 - ExpressLink services from Ipswich, Rosewood, Ripley, Helensvale, Caboolture North, Kippa-Ring and Flagstone
 - CoastLink services from Brisbane to the Gold Coast and Sunshine Coast.
- constructing a new rail line between the North Coast Line at Strathpine and Cross River Rail at Roma Street, using the predominantly government-owned North West Transport Corridor
- expanding the reach of the rail network to new growth communities, including Maroochydore, Kippa-Ring, Springfield, Ripley and Flagstone
- extending the Gold Coast Line south to Gold Coast Airport
- extending the light rail on the Gold Coast to Coolangatta
- a new Brisbane subway system from Toowong to Newstead/Bowen Hills via West End and the CBD, with extensions to Northshore Hamilton/Airport Village and Bulimba possible beyond 2031.

Continuing to transform bus networks

Buses will continue to play a vital part of the transport network into the future, carrying over half of all public transport trips in 2031. Continuing to transform and upgrade bus networks across the region will therefore be important to respond to the region's transport challenges. *Connecting SEQ 2031* proposes a network of high frequency UrbanLink bus services be rolled out across the region, providing connections between local activity centres and connecting residential areas to the rail and busway network.

Highlights of the future bus network include:

- completion of the busway system, with extension of the Northern Busway to Bracken Ridge and the Eastern Busway (with interim on-road bus priority treatments likely to be used beyond Chermside and Carindale) and the South East Busway to Springwood
- a network of TransitWays across the region, providing priority for buses on arterial roads and ensuring the efficient use of the existing and future road network.

Completing and better managing a network of motorways and highways

Roads will remain the most extensive part of the transport network, allowing supplies to get to industry, goods to get to markets, and people to get to work, schools, shops and recreation activities. *Connecting SEQ 2031* proposes to fill the major gaps in the existing road network and to better manage roads as one network, providing improved connectivity and efficiency for all road users.

The highlights to better manage roads include:

- introducing new technology to better manage private vehicle and public transport movements on roads (for example, through better information on travel times and options, and real time management of motorway flows)
- adopting a 'one network' approach to the planning and management of roads
- extending the road network to major new growth communities
- completion of the orbital motorway network for Brisbane, including the new north-south motorway from Toowong to Everton Park
- working with local government and developers to provide strategic arterial roads supporting motorways/highways through growing communities in Moreton Bay, the Sunshine Coast and Gold Coast.

Completing and managing a network of strategic active transport corridors

Getting more people walking and cycling, more often, for more types of trips is an important part of achieving the transport policy goals of *Connecting SEQ 2031*. Increased active transport use in the community offers many benefits.

The highlights to get more people walking and cycling, more often include:

- completing an active transport network within a five kilometre catchment of activity centres that is safe, direct and connected
- providing priority principal cycle routes between activity centres and completing the principal cycle network
- improving integration with public transport stops and stations, including the provision of high quality end-of-trip facilities
- providing active transport connections to schools and tertiary education institutions
- providing pedestrian priority in activity centres through the development of bypass roads and 'community boulevards' where possible and appropriate
- ensuring end-of-trip facilities are provided in new developments.

Targeting freight investment to support the economy

Transport systems build economies. Providing an efficient freight network will support and enhance the region's economic stability and growth into the future. Significant economic growth in the region will place additional strain on the freight network, and *Connecting SEQ 2031* identifies a need to target investment in facilities that will support efficient freight movement.

The freight highlights of *Connecting SEQ 2031* include:

- development of the Acacia Ridge freight terminal to full capacity
- a dedicated dual gauge freight line from Acacia Ridge to the Port of Brisbane
- connected and managed motorways to ensure efficient freight operation.

Encouraging voluntary travel behaviour change

Investment in infrastructure alone will not be sufficient to meet the targets for more sustainable transport; a change in travel behaviours will also be required. *Connecting SEQ 2031* supports measures that encourage individuals to change their travel behaviour, including increased access to information and support networks.

The highlights to encourage a change in travel behaviour include:

- continuing TravelSmart activities at schools and workplaces to encourage travel behaviour change
- travel behaviour change programs sequenced with the delivery of major new transport infrastructure.





Targeting success

Connecting SEQ 2031 aims to change the way the region moves by increasing the role played by sustainable transport modes and reducing the dominance of private motor cars. To guide this process, it adopts regional mode share targets.

Mode share targets are not ends in themselves, but a way to assist decisions which will support continuous progress towards the key transport policy goals.

The targets are:

- increasing the mode share of active transport from 10% of all trips in the region in 2006, to 20% by 2031
- increasing the mode share of public transport from 7% in 2006, to 14% in 2031
- reducing the mode share of private motor cars by about one fifth. This would mean the share of trips taken by private motor vehicles would decline from 83% in 2006 to 66% in 2031.

To achieve these targets, the average resident in the region would need to change just three of their 17 weekday trips to walking, cycling or public transport.

The Connecting SEQ 2031 targets are regional level targets and actual mode shares will vary across the region, depending upon the characteristics of local areas. For example, high density communities with good access to high frequency public transport services might be expected to achieve higher public transport use than low density areas with less frequent services. More detailed planning conducted by state and local government will review the regional level targets and establish local targets based on local projects and policies.

Journey to school targets

Over time, a complex range of factors have changed 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 work after the school drop-off

Figure 3.1 – regional daily travel targets

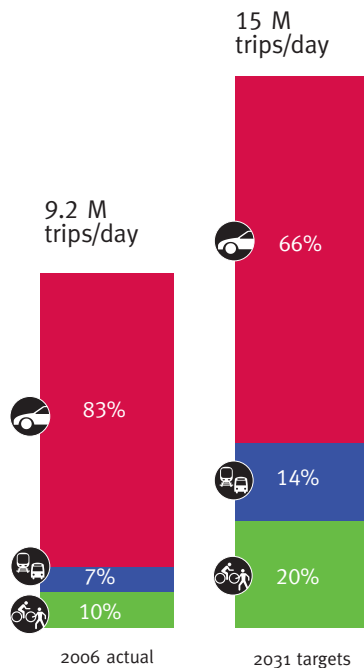
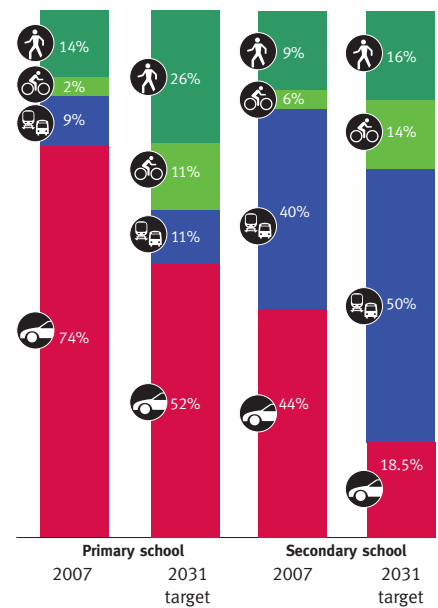


Figure 3.3 – 2031 journey to school travel targets



Source: 2007 mode share figures from South East Queensland Household Travel Survey

Figure 3.2 – average composition of 17 trips per person each week, Monday to Friday



To achieve the targets the weekly travel patterns of the average south-east Queensland resident would need to change only incrementally.

- 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.

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

Shifting some shorter school trips to cycling and walking will have flow-on effects in terms of managing congestion

around schools, as well as delivering health outcomes as school students increase their level of physical activity.

South-east Queensland travel survey results for 2009 show an increase in children using public transport and active transport modes to travel to school.

This indicates travel behaviour change programs targeted at schools, such as TravelSmart, Bicycle Education and Active School Travel (Brisbane City Council initiative) are beginning to influence travel behaviour for the journey to school.

Figure 3.3 shows the daily journey to school transport targets for primary and secondary school trips.

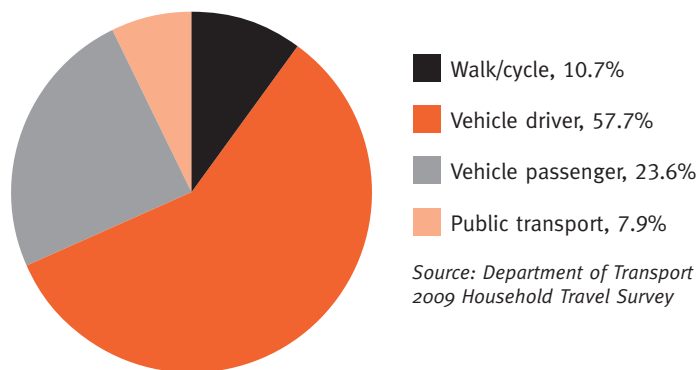


Recent progress

Recent surveys (see Figure 3.4) show a clear move towards increasing use of public and active transport in the region, with some areas achieving a greater shift than others.

Public and active transport have increased their market share by nearly 1% in just 3 years since 2006. These results reinforce the need to continually improve sustainable transport options at all levels of planning.

Figure 3.4 – south-east Queensland 2009 daily mode share



Source: Department of Transport and Main Roads 2009 Household Travel Survey

How the *Connecting SEQ 2031* targets were set

Establishing targets that are achievable, yet still stretch the community to change travel behaviour as soon as possible is an important element of integrated transport planning.

Inputs to the target setting process for *Connecting SEQ 2031* included:

- computer modelling of forecast public and private transport use in 2031
- analysis of travel behaviour data, such as Australian Bureau of Statistics Census 'Journey to Work' and the Department of Transport and Main Roads' South East Queensland Household Travel Survey
- results of TravelSmart programs from across the region.

Public transport mode share

The computer models predict a significant shift to at least 11% public transport mode share with the transport infrastructure and services proposed to be in place by 2031. The target for public transport is 14%.

There are other factors that have not been captured in the computer modelling process which will support a greater shift to public transport and active transport, including:

- probable changes in land use and development style that will occur in response to improved public transport, such as more compact urban form along major transit corridors
- the effects of an ageing population and changing lifestyle preferences which may see a reduction in the present demand for large suburban housing lifestyles
- the possibility of substantial rises in the cost of operating private vehicles.

It is therefore probable that the transport models underestimate the potential shift that could occur to public transport, hence a higher target has been established by *Connecting SEQ 2031*.

Active transport mode share

The current computer models are not yet capable of analysing change in travel choices to active transport due to the complex variables in decision making for this mode.

Targets for increased active transport use for each local government area were therefore established based on the possible amount of trips that an average resident may be expected to take by active transport instead of car. In most cases, this is only one or two trips in a working week.

Reviewing the targets

Taking these matters into account, the targets are considered to be ambitious, yet achievable.

The targets will guide transport policy and investment decisions taken each year by state and local government in the region. Further guidance on deciding investment priorities is provided in Part E.

Progress towards the targets will be monitored as part of the Department of Transport and Main Roads' South East Queensland Household Travel Survey and the Australian Bureau of Statistics Census 'Journey to Work'.

The appropriateness of the targets will be reviewed as part of the regular updates of *Connecting SEQ 2031* (planned to be every five years to coincide with the SEQ Regional Plan review). This review will take into account the changed circumstances in the region, including oil supply and fuel costs.