The Gold Coast is a linear city and the spread of urban development northwards has seen the urban fringes of Brisbane, Logan and the Gold Coast grow increasingly closer together. Much of the urban development in the western parts of the city is low density, with the major employment and activity centres dispersed across the city.

There has been considerable development of higher density urban development along the Coast since the 1950s. However, the prominent form of development – suburban and rural residential communities that are separated from services and employment – is still in practice and is based on very high levels of car dependency. In many communities, walking and cycling connectivity is poor. Public transport operations are made less efficient by canal networks, and long dead-end streets.

The Gold Coast City Transport Strategy 2031: Technical Report

Cross-border transport issues

The linear and multi-centred form of urban development on the Gold Coast also continues south across the New South Wales border into the Tweed Shire. Tweed is forecast to grow from a population of 74,000 in 2011 to 120,000 in 2020, creating further transport challenges for the Gold Coast.

Currently, bus services in Tweed are unable to link into the go card electronic ticketing system and Gold Coast commuters are unable to use their go cards south of the border. This lack of coordination discourages people from using public transport for cross-border trips. In addition, integrated cross-border cycle links are needed to improve cycle connectivity.

There are also difficulties with cross-border taxi travel, due to regulatory restrictions. This creates higher costs for users and makes the area less attractive for taxi drivers to service, decreasing the availability of taxis for the local community.

Accessibility

The Gold Coast faces significant transport challenges that must be identified and mitigated where possible, by careful and integrated transport planning. The lineal and multi-centred form of urban development on the Gold Coast also continues south across the New South Wales border into the Tweed Shire. Tweed is forecast to grow from a population of 74,000 in 2011 to 120,000 in 2020, creating further transport challenges for the Gold Coast.

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Planning an inclusive transport system

Accessibility is imperative for everyone in the community, including young people, older people, people pushing prams, people who use wheelchairs, people who have a disability, and those who cannot afford a car. Census figures show that in 2011, 16.2% of Gold Coast City’s population had a disability (compared to 17.9% of Queensland’s population). In addition, the Gold Coast has a growing ageing population and Council recognises, and is responding to, the needs of older people. In 2011, seniors (over 65 years of age) comprised 14.4% of the total Gold Coast City population. By 2031, the number of residents aged 65 years or over is set to account for over 20% of Gold Coast City’s population.

An accessible transport system enables people of all abilities to connect with family and friends, creating a sense of belonging and social inclusion which are fundamental aspects of everyday Australian life. An accessible and connected transport network must meet the needs of these groups, which includes designing for appropriate gradients, seating, kerb ramps and accessible signage.

Transport networks, and encourage development of road networks and urban forms that support more sustainable cross-border travel options.

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Figure 13 Population growth and forecast

Figure 14 Population growth areas

Legend
- GCCC boundary
- Pacific Motorway
- Multi-modal arterial
- Train station
- Train line
- 2011 population
- 2031 population

Physical inactivity
Almost one in two Gold Coast adults are overweight or obese and obesity in our children is increasing. A lack of walkable urban environments, increased dependency on cars and concerns about safety (for example, traffic safety or personal safety) have reduced opportunities for incidental exercise and increased physical inactivity. Incidental exercise associated with the use of public transport is often under-reported. One Australian study has shown that walking to and from public transport adds up to 2 kilometres per day for an average Brisbane commuter7 and, according to medical experts, exercising for 30 minutes each day can improve health and assist with weight loss (see Figure 16 Average time spent walking or cycling as part of daily travel).

Funding availability
Keeping pace with demands for funding to provide new infrastructure and maintain existing facilities and services is becoming increasingly difficult for all levels of government. The fast-growing regions of Australia are particularly exposed to transport funding challenges due to the high cost of new facilities and community expectations of world-class services that are free or cheap to use. Competing demands from the health, education, law enforcement and welfare sectors could lead to less government funding being available for transport infrastructure.

Tourism and events
Tourism is a vital component of the Gold Coast’s economy, contributing almost one dollar in every five generated within the city. Transport infrastructure must support the increasing numbers of visitors with transport services that are easy to use, reliable and frequent, and take people where they want to go in order to maintain the Gold Coast’s appeal as a prime tourist destination. South East Queensland regional population growth will result in increases in visitor numbers to the Gold Coast, as beaches will remain a key regional attractor for day trippers. The potential for a Gold Coast cruise ship terminal will also have implications on the transport network. Council will need to consider the transport infrastructure required to support such a facility.

Events also play a significant role in the economy and image of the Gold Coast (see Figure 17 Expected attendance at 2012 Gold Coast major events). The Gold Coast hosts major sporting events, music festivals, expos and other public events which attract large numbers of domestic and international visitors and contribute to the Gold Coast’s economic prosperity. Major events are generally concentrated in major activity centres like Southport, Surfers Paradise and Broadbeach. Events also take place in Doug Jennings Park at The Spit, Skilled Stadium at Robina, Metricon Stadium at Carrara and Parklands Showgrounds at Southport.

Events have specific transport needs, requiring high numbers of people to be moved, often to a single location, within a small window of time. This often means special public transport services are needed to cater for events.

Australia’s fastest-growing airport
Gold Coast Airport is Australia’s fastest-growing airport. In 2011, it had more than five million passenger movements. By 2021, this could more than triple to 16.3 million passenger movements (14 million domestic and 2.3 million international). The airport is a significant economic generator for communities in the South East Queensland and northern New South Wales regions. Its fee structure makes it suitable for low-cost air carriers, meaning it is likely to have continued strong growth in the budget tourism market.

To ensure the airport continues to play a strong role in the local economy, it is essential to provide an integrated ground transport system that considers the surrounding road network, parking, public transport and pedestrian and cycling access. It is particularly important to connect the airport to the major beachside accommodation precincts at the northern end of the coastal strip.

### KEY TOURISM FACTS

- In the year ended March 2012, 10.5 million people visited the Gold Coast.
- 6.5 million were domestic day trip visitors and 4 million were overnight visitors.
- These visitors contributed $4.3 billion to the local economy.
- There are 2500 tourism-related businesses on the Gold Coast. These create 28,000 jobs, which is equivalent to 8000 full-time employees.

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Gold Coast City Transport Strategy 2031: Technical Report

Gold Coast 2018 – It’s our time to shine

One of the Gold Coast’s most immediate challenges is ensuring that the transport network is well-prepared for the 2018 Commonwealth Games. Hosting the Games is a fantastic opportunity to raise the profile of the Gold Coast, inspire the community and attract investment to the region.

All permanent or temporary Games-related transport infrastructure must be aligned with the objectives of the Gold Coast City Transport Strategy 2031 so that investments are optimised and leave a positive and enduring legacy for the city.

During the Games, the city’s transport network will cater for around 110,000 spectators, as well as 50,000 Games workers and volunteers who will be travelling predominantly on public transport. In addition, there will be approximately 6000 athletes and team officials and 8400 associated media, guests and other officials travelling throughout the city on a dedicated Games fleet. At the same time, the transport system will need to meet the continuing travel needs of Gold Coast residents in a safe, efficient and reliable manner.

The public and active transport experience during the Games must be positive, easy, convenient, inexpensive and sustainable to reduce its car use and to embrace new ways of moving around the city after the Games.

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The public and active transport experience during the Games must be positive, easy, convenient, inexpensive and sustainable to reduce its car use and to embrace new ways of moving around the city after the Games.
4. Options for meeting the challenges

Our city’s transport challenges are increasing as we develop into a mature city. Currently, 2.6 million trips are made on the Gold Coast every day. By 2031, this will reach 3.7 million trips – an increase of 1.1 million trips per day, or a 44 per cent increase.

How we manage these increased trips will define our success as a sustainable city.

A new approach – prioritising people, not cars

In the future, the car will remain the dominant mode of transport for most trips. But the growth pressures we are facing mean we need a better balance. Successful cities have balanced transport systems, with the right mix of car use and public transport, walking and cycling. They have achieved this balance by finding ways to prioritise for people, rather than cars (refer to Table 4.1: The benefits of prioritising people over cars).
Developing the strategy

In developing the Gold Coast City Transport Strategy 2031, Council worked closely with the Queensland Department of Transport and Main Roads and other government agencies to undertake transport planning, option assessment and project evaluation. Contributions included the results of the phase one public consultation (undertaken between 1 September 2011 and 14 October 2011), as well as the results of the technical work undertaken by the Department of Transport and Main Roads including the Gold Coast Southern and Central Area Transport Study (December 2011). The results are summarised below.

Gold Coast City Transport Strategy 2031 phase one consultation

Council undertook a six-week consultation program between 1 September 2011 and 14 October 2011 to gather community and stakeholder responses to Council’s discussion paper “Our Transport Future: connecting people and places.”

The discussion paper encouraged residents and stakeholders to consider a 20-year vision for the city. It posed a series of propositions to residents which asked if they agreed that the Gold Coast should transition from its current road network to an improved public transport system.

These tests involved:

- a range of performance and policy-related measures could influence transport system performance in 2031. These tests involved:

  - increasing the price and reduction in the supply of parking in major activity centres, to review the effects on public transport demand
  - increasing the cost of car travel to simulate the effects of increases in the price of oil, or the results of carbon pricing, to review the effects on public transport demand
  - increasing public transport service levels and reducing fares
  - re-allocating some of the population growth between 2011 and 2031 from newly-developed areas into corridors proposed for light rail, to test changes in land development resulting from the improved accessibility offered by light rail.

The tests confirmed that public transport patronage would increase further with these policy interventions or pricing changes. Building a good-quality public and active transport network will provide travel choice, reduce reliance on fossil fuels and supply transport network capacity that can adapt to external factors and accommodate the future transport task.

Investment scenario testing

To develop an effective transport strategy for 2031, a number of transport modelling analyses were undertaken as part of the Gold Coast Southern and Central Area Transport Study under a range of investment scenarios:

- 'do minimum' – essentially only 'committed' transport upgrades. This provides a basis for comparing individual project investments;

- tests of ten individual new transport links. This tested the benefits of individual corridor upgrades such as extensions to light rail, bus lanes and new or widened major roads;

- four ‘medium’ investment scenarios to understand the cumulative benefits of a moderate investment approach. These scenarios embedded various combinations of projects including extensions of light rail, the introduction of bus lanes and road upgrades;

- three ‘high’ investment scenarios to determine the potential ‘best case’ transport system performance under an idealised infrastructure-rich investment plan. The three scenarios centred on variations to an extensive network of new public transport infrastructure and road upgrades.

Key lessons from the investment scenario testing process:

- targeted investment in public transport could lead to a near three-fold increase in public transport mode share by 2031, equating to a four-fold increase in patronage compared with 2011;

- vehicle-kilometres travelled will increase at a lower rate than trip growth if there is a shift in infrastructure funding to public and active transport facilities;

- identification of the two areas where public transport is forecast to carry the most passengers are along the coastline and to/from Brisbane.

Better separation from cars for on-road cyclists (92 per cent).

Respondents understood the effects of traffic congestion, with 89 per cent disagreeing that the city should have more cars on the streets. This community and stakeholder feedback has helped shape the transport strategy.

Investment scenario testing

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- vehicle-kilometres travelled will increase at a lower rate than trip growth if there is a shift in infrastructure funding to public and active transport facilities;

- identification of the two areas where public transport is forecast to carry the most passengers are along the coastline and to/from Brisbane.

There is little benefit in duplicating major public transport infrastructure in parallel corridors, such as extending both regional rail and light rail south to Coolangatta.

The Pacific Motorway between Worongary and Tugun will be at capacity as six lanes in 2031, but the effects of this congestion will also make public transport more attractive.

The construction of a four-lane arterial road in the Intra-Regional Transport Corridor will draw approximately 15,000 vehicles per day from the Pacific Motorway at Nerang and Coomera, which is equivalent to approximately 2-3 years of traffic growth from the motorway.

The corridors that attract the most public transport usage are those with multiple, closely-spaced destinations. For example, the coastal area between Southport and Burleigh Heads, rather than those corridors with long sections of ‘dead running’ such as the areas west of the Pacific Motorway between Nerang and Mudgimba or in Coomera and Upper Coomera (with the exception of the Gold Coast – Brisbane rail line).

Formulating and testing transport strategy options

The findings of the above investment scenario testing revealed two public transport network options:

- 1. concentrating investments in the most contestable areas, or

- 2. diversifying the expenditure across the city.

On this basis, three transport strategy options were developed for testing, including:

- light rail focus

- bus priority focus

- balanced strategy.

Light rail-focused strategy option

The light rail-focused option made several assumptions:

- testing of light rail extension options from Griffith University Health and Knowledge Precinct to Parkwood, Harbour Town and Helensvale

- light rail extension from Broadbeach to the airport and Coolangatta

- light rail extension from Miami to Bond University and Robina

A balanced strategy option with both bus priority and light rail

A balanced strategy option made several assumptions:

- extension of the light rail from Broadbeach to Currumbin, then extending on to the Gold Coast Airport and Coolangatta

- light rail extending from the Gold Coast Health and Knowledge Precinct north to Harbour Town and west to link with the Gold Coast rail line at a new Parkinson rail station

- light rail extensions from Surfers Paradise to Bundall and from Main Beach to Sea World

- bus lanes from Nerang to Broadbeach, and Nerang to Southport

- a four-lane arterial road provided in the Intra-Regional Transport Corridor between Coomera and Helensvale.

Bus priority-focused strategy option

The bus priority-focused option made several assumptions:

- increased coverage and access to high-frequency public transport across the urbanised area

- bus lanes along Southport-Burleigh Road

- east-west bus lanes between Nerang and Southport, Nerang and Broadbeach, Robina and Miami, Varsity and Burleigh Heads, and Helensvale and Biggera Waters

- a four-lane arterial road provided in the Intra-Regional Transport Corridor between Coomera and Carrara

- Gold Coast railway not extended beyond its current Varsity station terminus

- no extension of the Gold Coast light rail beyond Broadbeach in the south or the Gold Coast Health and Knowledge Precinct in the north.

The preferred transport strategy for the Gold Coast

After reviewing the joint study work undertaken with the Department of Transport and Main Roads, a preferred strategy was identified and developed. The evaluation of the strategy options comprised a multi-criteria assessment at two levels:

- network level – to determine the best network and policy-related measures could influence transport system performance in 2031. These tests involved:

- increasing the price and reduction in the supply of parking in major activity centres, to review the effects on public transport demand

- increasing the cost of car travel to simulate the effects of increases in the price of oil, or the results of carbon pricing, to review the effects on public transport demand

- increasing public transport service levels and reducing fares

- re-allocating some of the population growth between 2011 and 2031 from newly-developed areas into corridors proposed for light rail, to test changes in land development resulting from the improved accessibility offered by light rail.

The tests confirmed that public transport patronage would increase further with these policy interventions or pricing changes. Building a good-quality public and active transport network will provide travel choice, reduce reliance on fossil fuels and supply transport network capacity that can adapt to external factors and accommodate the future transport task.

Light rail also offers greater attraction to infill and regeneration of urban areas due to its perceived more permanent nature and its ability to achieve full priority over general traffic when operating within a pre-existing road corridor.

This strategy delivers the optimum balance between road network improvements, better freight movements, a safe and connected cycleway network, and improvements to the bus network to complement the light rail.