

# Why Light Rail?

## Factsheet



Artist's impression: Miles Street, Coolangatta.

The Gold Coast is unlike any other city in Australia. Our growing population, vibrant tourism industry and multiple centres make our transport challenges unique. This means, everything we do in transport in the city is to ensure the Gold Coast enjoys smart growth and is a connected city where people regularly make sustainable travel choices.

The Gold Coast Light Rail has proven to be a public transport system that has transformed the Gold Coast into a modern, accessible city. With the success of Stages 1 and 2, construction is now underway on Stage 3 which will expand the tram network from Helensvale to Burleigh Heads. The key to ensuring an integrated and sustainable transport network now, and into the future, is to connect communities to jobs, businesses, hospitals, medical facilities, education, shopping, dining, entertainment and sporting centres.

Stage 4 is an essential link in the transport network and will further connect communities to essential services as well as cultural and urban attractions and avoid passengers having to shift modes.

Gold Coast Light Rail Stage 4 will deliver a 13 kilometre extension south of Light Rail Stage 3, linking Burleigh Heads to Coolangatta, via the Gold Coast Airport. It will provide 14 stations between Burleigh Heads and Coolangatta as identified through the Burleigh Heads to Tugun and Tugun to Coolangatta Multi-modal Corridor Studies.

The Queensland Government has committed \$3.7 million to undertake a preliminary business case for Gold Coast Light Rail Stage 4, along with City of Gold Coast's financial contribution of \$670,000. An additional \$1.83 million has been committed by City of Gold Coast, bringing the City's total commitment to the preliminary business case to \$2.5 million and the total project investment to \$6.2 million.

## Benefits of Light Rail



Light Rail has the highest rating for overall customer experience in the SEQ public transport network

**63**  
million

Since 2014, Gold Coast Light Rail has moved more than 63 million passengers (as at June 2022)



Light Rail provides opportunities to change how we move around our city

over  
**99%**  
reliability

Light Rail is frequent, reliable and can move large volumes of passengers



Light Rail supports passengers with accessibility needs and continues to work with the sector to identify improvements

Source: Translink PT performance dashboard.

Mode	Details	Capacity per vehicle (approx.)	Right of way	✓	✗
Heavy Rail	<p>Heavy rail is used for longer trips between regions (for example, from Gold Coast to Brisbane, or Logan). On the Gold Coast most stations have park'n'ride and bus interchange to extend the catchment beyond pedestrians and bike riders.</p> <p>The station size typically means it is separated from its destinations and therefore has to travel at high speeds to make travel times competitive.</p> <p>Electrically powered by overhead wiring.</p>	1000 passengers	Fully separated where only heavy rail vehicles operate with controlled intersections	<ul style="list-style-type: none"> <li>• Speed (up to 160km/h)</li> <li>• Capacity</li> <li>• Accessibility</li> <li>• Reliability</li> <li>• Ride comfort</li> </ul>	<ul style="list-style-type: none"> <li>• Cost</li> <li>• Station spacings</li> <li>• Corridor separation</li> <li>• Route flexibility</li> </ul>
Light Rail	<p>The current Gold Coast Light Rail operates between Helensvale and Broadbeach with an extension being constructed further south to Burleigh Heads. It is typically used for short-medium trips to major destinations like Helensvale Town Centre, Gold Coast University Hospital, Griffith University and Pacific Fair Shopping Centre.</p> <p>Electrically powered by overhead wiring.</p>	300 passengers	Partially separated tracks/lanes in street median or adjacent to street	<ul style="list-style-type: none"> <li>• Corridor separation</li> <li>• Station spacings</li> <li>• Capacity</li> <li>• Accessibility</li> <li>• Reliability</li> <li>• Ride comfort</li> </ul>	<ul style="list-style-type: none"> <li>• Cost</li> <li>• Route flexibility</li> </ul>
Monorail	<p>A monorail is a form of above ground mass transit where vehicles ride on or are suspended from a single rail.</p> <p>The Gold Coast monorail operated from 1989 to January 2017, connecting two stations between Oasis Shopping Centre and Casino. There are other examples where monorail is used similar to Light Rail and bus outside of Australia however there is currently no public transport monorail system operating in Australia.</p> <p>Electrically powered by third rail (live/electric rail).</p>	40 passengers	Fully separated where only monorail vehicles operate	<ul style="list-style-type: none"> <li>• Corridor separation</li> <li>• Station spacings</li> <li>• Reliability</li> <li>• Ride comfort</li> </ul>	<ul style="list-style-type: none"> <li>• Cost</li> <li>• Route flexibility</li> <li>• Visual impacts</li> <li>• Fully separated corridor</li> <li>• Accessibility</li> <li>• Capacity</li> </ul>
Bus	<p>The current Gold Coast buses operate across the entire Gold Coast with around 56 separate routes. Buses travel on the existing road network and are manually controlled by drivers. Bus stops are located where needed and require little infrastructure. Due to their network reach buses are used for a variety of reasons.</p> <p>Buses have a low infrastructure cost but can have a higher overall operational cost when there are a large number of buses.</p> <p>Various fuel sources are used including petrol, diesel, gas, ethanol and battery. Recently hydrogen powered electric has been trialled.</p>	65 passengers	Urban streets with mixed traffic	<ul style="list-style-type: none"> <li>• Corridor separation</li> <li>• Station spacings</li> <li>• Route flexibility</li> <li>• Cost</li> </ul>	<ul style="list-style-type: none"> <li>• Reliability</li> <li>• Capacity</li> <li>• Accessibility</li> <li>• Ride comfort</li> </ul>
Bus Rapid Transit (BRT)	<p>BRT is similar to Light Rail in that it operates on a separate corridor. It can use existing buses but can also use higher capacity, bi-articulated buses. An example is the South East Busway which operates from Brisbane City to Eight Mile Plains. This also includes the new Brisbane Metro which is an electric bus with three passenger compartments. Importantly, the Brisbane Metro buses are not yet proven in commercial operation.</p> <p>The separate corridor means the station can be designed for improved accessibility.</p>	170 passengers	Partially separated tracks/lanes in street median or adjacent to street	<ul style="list-style-type: none"> <li>• Corridor separation</li> <li>• Station spacings</li> <li>• Accessibility</li> <li>• Reliability</li> <li>• Capacity</li> </ul>	<ul style="list-style-type: none"> <li>• Cost</li> <li>• Route flexibility</li> <li>• Ride comfort</li> </ul>

Mode	Details	Capacity per vehicle (approx.)	Right of way	✓	✗
Trackless Tram	<p>Similar to Light Rail in that it operates on a separate corridor. Trackless tram is a specific type of BRT. Trackless trams are primarily manufactured by China Railway Rolling Stock Corporation (CRRC).</p> <p>Trackless trams look similar to Light Rail vehicles, however, use rubber tyres. Due to the weight of the vehicle stronger pavements are needed similar to Light Rail. They are either manually controlled by a driver or partially guided by a system that follows markers on the road.</p> <p>Current legislation does not allow this vehicle to operate on Queensland roads due to the size and weight, therefore a special permit is needed.</p> <p>There are no trackless trams operating in Australia.</p>	300 passengers	Partially separated tracks / lanes in street median or adjacent to street	<ul style="list-style-type: none"> <li>• Corridor separation</li> <li>• Station spacings</li> <li>• Accessibility</li> <li>• Reliability</li> <li>• Capacity</li> </ul>	<ul style="list-style-type: none"> <li>• Cost</li> <li>• Route flexibility</li> <li>• Ride comfort</li> </ul>

## Light Rail south of Burleigh Heads

The *Gold Coast Highway (Burleigh Heads to Tugun) Multi-modal Corridor Study* and the *Gold Coast Highway (Tugun to Coolangatta) Multi-modal Corridor Study* analysed future traffic volumes and passenger movements to inform the scale of change and growth in transport demands on the southern Gold Coast.

The studies found:

- without Light Rail, traffic will increase by 14 per cent on the Gold Coast Highway, Tallebudgera Creek
- Light Rail will provide a noticeable reduction in vehicle traffic on the Gold Coast Highway of around 1000 to 2000 vehicles per day due to increased public transport usage
- the current M1 Varsity Lakes to Tugun upgrade works when complete will cater for the majority of traffic growth on the southern Gold Coast for the next 25 years carrying 70 per cent more traffic than current volumes, in peak periods
- Light Rail is expected to provide a significant increase in public transport patronage in the corridor with 30 per cent more passenger trips across Tallebudgera Creek
- it is forecasted around 2000 passengers will travel on Light Rail during the two hour morning peak equating to 1700 less cars on the roads
- without Light Rail there will be significant traffic growth on the Gold Coast Highway, south of Stewart Road with increases between 85 per cent and 156 per cent along this stretch
- stage 4 of Light Rail sees a significant increase of over 40 per cent more boardings per day, up to 112,000
- the busiest stations within the stage 4 corridor would be Coolangatta, Gold Coast Airport, Thrower Drive, Tomewin Street and Boyd Street
- with Light Rail south of Burleigh Heads, traffic volumes in Kirra are expected to reduce by almost half, down by 11,000 to 12,000 vehicles a day on average.

## Buses

Unlike buses, trams travel down their own dedicated corridor and carry 300 people compared to buses which can carry 65 people.

In 2012, the *Gold Coast Southern and Central Area Transport Strategy* assessed the specific transport benefits of Light Rail on the Gold Coast Highway relative to continuing frequent bus services and found that:

- Light Rail between Broadbeach and Coolangatta was shown to increase daily public transport trips by 22 per cent relative to buses
- Light Rail between Broadbeach and Burleigh Heads was shown to increase daily public transport trips by 12 per cent relative to buses.

Buses will continue to play a very important role in the movement of people along and beyond the Gold Coast Highway corridor to a wide range of destinations. Consistent with the approach adopted in the previous stages of the Light Rail, some bus routes will be changed or replaced (such as the current route 700 and 777 buses along the Gold Coast Highway), while other services will be maintained and potentially enhanced to offer better connectivity overall.

The corridor studies identified the need for buses to continue to connect communities to the west of the Gold Coast Highway with Light Rail. Bus services will be designed to ensure the community maintains access to existing heavy rail services and other key attractors such as The Pines Shopping Centre and Tweed Heads. Connections between bus and Light Rail will be designed to be safe, convenient and accessible.



**42%**  
increase in Light Rail trips following completion of Stage 4

## Popularity of Light Rail

Since 2014, the Light Rail has provided more than 63 million passengers (up to June 2022) with an alternative way to move around the city. It has encouraged a significant rise in people using public transport which has seen a growth of 50.1 per cent, pre-COVID-19.

Even though a significant year-on-year patronage growth has been a feature of the Light Rail system since it commenced operation, the last two years have seen a drop in total trips when compared to 2018–19. This is due to impacts from COVID-19 including a reduction in tourist-based travel and changes to how we work.

COVID-19 has impacted patronage across transport modes. However, with borders opening up, Light Rail compared to other types of public transport has become the best performing mode in South East Queensland with 93 per cent patronage (June 2022) of the same period pre COVID-19 as opposed to 76 per cent for buses and 72% for heavy rail.



Source: Building our city Light Rail corridor – City of Gold Coast

## Project timeline

2020

2023



## Get involved and have your say

We would like to hear your views and find out what is important to you. You are invited to participate in our community consultation program to find out more about planning for the Gold Coast Light Rail Stage 4 and provide your input.

### Provide your feedback online



Visit the interactive community consultation website to find out more about the project and provide your feedback.

Visit: [www.tmr.qld.gov.au/gclr4](http://www.tmr.qld.gov.au/gclr4)



### Talk to us in person

The project team will be holding community drop-in sessions to enable you to ask questions and provide face-to-face feedback on Gold Coast Light Rail Stage 4 planning.

Visit the website to find out drop-in session locations and times for community consultation for the Tugun to Coolangatta section.

Visit: [www.tmr.qld.gov.au/gclr4](http://www.tmr.qld.gov.au/gclr4)

## Contact us

If you would like further information about Gold Coast Light Rail Stage 4 or to register for updates, please contact the project team:

Phone: 1800 316 365\*  
Email: [gclr4@tmr.qld.gov.au](mailto:gclr4@tmr.qld.gov.au)

\*Check with your service provider for call costs.