

Light rail route selection

Factsheet



Artist's impression: Gold Coast Highway

The Gold Coast Light Rail is a world class public transport system that has transformed the Gold Coast into a modern, accessible city. 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.

Gold Coast Light Rail Stage 4 will deliver a 13km extension south of the Gold Coast Light Rail Stage 3, linking Burleigh Heads to Coolangatta, via the Gold Coast Airport. The Queensland Government has committed \$1.5 million to undertake the transport planning study *Gold Coast Highway (Tugun to Coolangatta) Multi-modal Corridor Study*. A further \$5 million jointly funded by the Queensland Government and City of Gold Coast has been committed to undertake a Preliminary Business Case for Gold Coast Light Rail Stage 4 from Burleigh Heads to Coolangatta, via the Gold Coast Airport.

The Gold Coast Highway (Burleigh Heads to Tugun) Multi-modal Corridor Study

In 2020, the Department of Transport and Main Roads (TMR) completed the *Gold Coast Highway (Burleigh Heads to Tugun) Multi-modal Corridor Study* to review all previous planning and develop an updated transport strategy for the Gold Coast Highway that considers all modes of transport including walking, cycling, public transport and private vehicles.

The study investigated several alternative routes parallel to the Gold Coast Highway and concluded a future southern extension of the light rail should follow the existing Gold Coast Highway alignment. This alignment:

- responds to population **growth**
- minimises **property impacts**
- minimises **travel time**
- provides best opportunity to improve **walking and cycling** connectivity and safety
- delivers greatest benefits for **cost**
- minimises impacts to the **environment and cultural heritage**
- maximises opportunities to enhance **sustainability** objectives
- protects the M1 corridor for **future heavy rail extension**.

Track options

Various track options were assessed for light rail including segregated at grade (on ground in its own lanes like Stage 1 through Broadbeach), shared running (on ground in lanes shared with other traffic), grade separated (elevated or underground) as well as single and dual tracks.

Overall, the segregated double track at-grade option was deemed most appropriate as it was consistent with the look, feel and functionality of Stages 1 and 2, and the current extension to Burleigh Heads (Stage 3).

It also delivers appropriate speed, reliability and capacity, at a reasonable cost and level of property impact.



Route selection

Five corridors were reviewed to determine the most appropriate route for light rail from Burleigh Heads to Coolangatta. The corridors examined were:

- Reedy Creek Road and M1 Corridor (Option 1)
- Gold Coast Highway/Mallawa Drive/Gold Coast Highway (Option 2)
- Gold Coast Highway/Townson Avenue/Gold Coast Highway (Option 3)
- Gold Coast Highway/Cypress Terrace/Gold Coast Highway (Option 4)
- Gold Coast Highway only (Option 5)

Decision making process

Best practice involves considering a variety of different criteria to arrive at a preferred option. This is referred to as a Multi-Criteria Assessment. This technique is widely adopted throughout Australia and across the globe.

The potential corridors were assessed against the SEQ Regional Plan (*Shaping SEQ*) themes of growth, prosperity, connectivity, sustainability (environment/social) and liveability.



* Station locations are indicative only and were used for comparison purposes

Corridor assessment summary

Theme	Outcome	Assessment
Growth		
Supports preferred urban growth pattern	- Option 5 (Gold Coast Highway) - Option 4 (Cypress Terrace)	Highest potential for rapid transit to serve areas of greater development intensity and consolidation as envisaged in SEQ Regional Plan (<i>ShapingSEQ</i>). There is more development intensity along the coast.
Prosperity		
Capital costs, property impacts and cost, operating costs	Option 5 (Gold Coast Highway)	Best capital and operating costs due to shortest overall length. Option 1 would still require bus services along the Gold Coast Highway to service residents, businesses and schools.
Connectivity		
Transport network resilience	- Option 1 (M1 corridor) - Option 5 (Gold Coast Highway)	Above the 1% AEP flood level therefore resilient to extreme weather events.
Public transport patronage	Option 5 (Gold Coast Highway)	Highest overall connectivity and patronage potential due to shortest journey time. Option 5 (Gold Coast Highway) has been estimated to be more than 8 minutes faster to the Gold Coast Airport than Option 1 (M1 corridor).
Bicycle network attractiveness	- Option 2 (Mallawa Drive) - Option 5 (Gold Coast Highway) - Option 4 (Cypress Terrace)	Could readily deliver high quality, direct bicycle upgrades as part of a future project.
Sustainability		
Natural environment and ecology	Nil	All five options were identified as having potential environmental impacts particularly around waterway crossings.
Cultural heritage	- Option 2 (Mallawa Drive) - Option 3 (Townson Avenue) - Option 4 (Cypress Terrace) - Option 5 (Gold Coast Highway)	Opportunities to enhance the Burleigh Head National Park Jellurgal heritage values through sensitive design and integration of heritage themes with the infrastructure design, particularly at stations.
Sustainability	Option 5 (Gold Coast Highway)	Short route distance (least construction resources) and shortest travel time (least operating resources).
Social impacts and benefits	Option 5 (Gold Coast Highway)	Aligns with community expectations of providing major transport infrastructure within existing major transport corridors, while directly serving places of community interest including beaches, schools, shopping, dining precincts and Surf Life Saving Clubs.
Liveability		
Amenity	- Option 1 (M1 corridor) - Option 5 (Gold Coast Highway)	Located in an already disturbed transport corridor environment.
Safety, health and wellbeing	Option 5 (Gold Coast Highway)	Potential to improve east-west connectivity across the existing transport barrier of the Gold Coast Highway.
Placemaking	Option 5 (Gold Coast Highway)	Opportunity to enhance existing places of activity along the Gold Coast 'boulevard' including Palm Beach activity centre. Alternative routes are in residential areas or the M1 corridor.

Other route options

Other route options have been proposed both prior to and after the completion of the study. Whilst not specifically assessed, these other options had similar characteristics to the 5 options assessed.

Conclusion

The Gold Coast Highway (Option 5) rated highest or equal highest across all outcome areas and individual criteria.

This confirmed the Gold Coast Highway as the preferred corridor for light rail.

Overall support for the *Gold Coast Highway (Burleigh Heads to Tugun) Multi-modal Corridor Study* as a potential solution to help improve the liveability and connectivity in and around the local communities is also strong, with 68% of residents and business operators indicating a level of positive support. The light rail extension along the Gold Coast Highway between Burleigh Heads and Tugun is a clear preference (58%) over bus lanes (25%), while a heavy rail extension to the airport from Varsity Lakes is highly regarded (87%).*

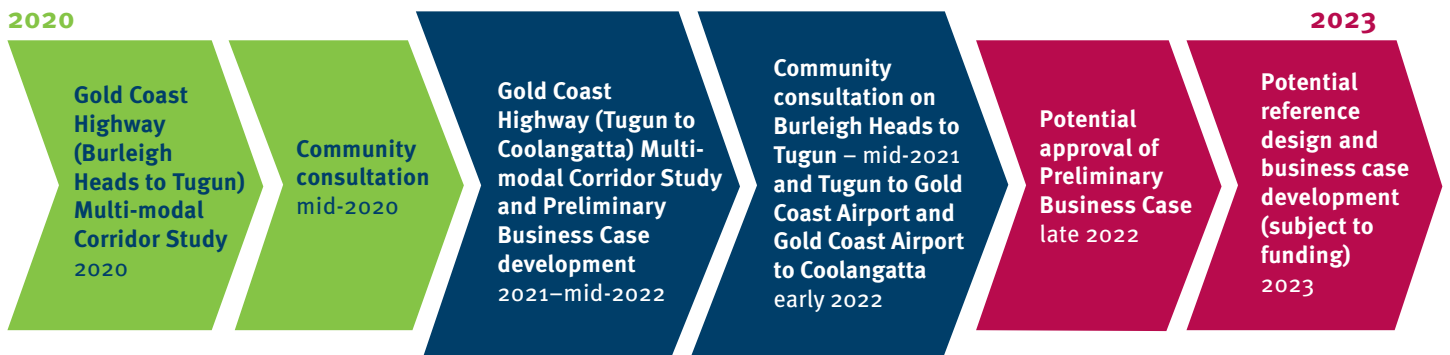
The next stage of the planning process is a Preliminary Business Case to support a decision on investing to construct light rail in the future.



Artist's impression: Burleigh Ridge Park

*Source: Department of Transport and Main Roads – Gold Coast Multi-modal Corridor Strategy Study – Insights Report prepared by Colmar Brunton April 2020.

Project timeline



Get involved and have your say

The Department of Transport and Main Roads will be consulting on the Gold Coast Light Rail Stage 4 planning from mid-2021 to mid-2022.

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



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 the first round of consultation for the Burleigh Heads to Tugun section.

Visit: 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*
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*Check with your service provider for call costs.

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