March 2020

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

Executive Summary

About the study

The Department of Transport and Main Roads (TMR) has undertaken a Multi-Modal Corridor Study between Burleigh Heads and Tugun to review all previous planning and develop an updated transport strategy for this corridor. The study considered all transport modes including walking, cycling, private vehicles and public transport to determine the preferred function of the Gold Coast Highway (GCH) for the next 20 years.

Considerations

Government planning goals

Planning for the future of the transport network is critical to achieving local (Gold Coast City Transport Strategy 2031), state (the Queensland Government's ShapingSEQ Regional Plan and Regional Transport Plan) and federal (the Australian Government's Smart Cities Plan) planning targets and policies. Current urban policy is focused on creating more sustainable and liveable urban areas by consolidating land uses within existing urban areas (reducing urban sprawl) in particular around town centres and high capacity public transport nodes.

Of these, Shaping SEQ is the most recent and preeminent state planning instrument of relevance to the Gold Coast Highway corridor. Shaping SEQ is a statutory regional plan for the South East Queensland (SEQ) region given effect by the Planning Act 2016 and provides a framework to manage growth, change, land use and development across the region. It sets a 50-year vision for the region, as well as setting out goals, elements and directions. It provides clear direction for the future planning of the Gold Coast Highway corridor by setting the expectation for a light rail extension south to Gold Coast Airport and Coolangatta. This is intended to support the growth and development of jobs (through Regional Economic Clusters) as well as encourage urban consolidation to meet regional growth projections.

Existing planning

TMR has approved corridor planning in place for the upgrade of the Gold Coast Highway through Palm Beach. Since 2003, TMR has been protecting the corridor against encroachment of development by conditioning building setbacks to allow for a future upgrade. Much of the corridor has already been protected under this scheme.

The study has investigated whether the existing planning will be adequate to accommodate the objectives of ShapingSEQ and the Gold Coast City Transport Strategy 2031 while balancing other considerations including current and future transport demands and the benefits and capacity gained from the fully funded M1 (Varsity Lakes to Tugun) upgrade.

Study findings and opportunities

The study found the Gold Coast Highway from Burleigh Heads to Tugun could be transformed into a high amenity community focused boulevard with priority given to walking, cycling and a world class light rail system that enhances the liveability and character of the southern coastal suburbs.



Light rail

Shaping SEQ identifies the strategic need for Light Rail from Broadbeach South to Coolangatta via Burleigh Heads and the Gold Coast Airport. This was initially assessed in the Gold Coast Southern and Central Area Transport Strategy (GCSCATS) 2012. The GCSCATS assessed the specific transport benefits of Light Rail on the Gold Coast Highway relative to continuing frequent bus services.

Light Rail between Broadbeach and Coolangatta was shown to increase daily public transport trips by 22% (from 220k to 270k) relative to buses and 12% compared to LRT to Burleigh Heads (241k to 270k). As such, light rail between Broadbeach and Coolangatta via Burleigh Heads and Gold Coast Airport became one of the critical 2031 network components recommended in the study. Therefore, based on ShapingSEQ and GCSCATS, Light rail between Broadbeach South and Coolangatta is a key assumption and therefore must be accommodated in any road corridor planning.

Various configuration 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 atgrade option was deemed most appropriate as it was consistent with the look and feel and functionality of stages 1, 2 and the planned future extension to Burleigh Heads. It also delivers appropriate speed, reliability and capacity, at a reasonable cost and level of property impact, provided that other transport functions are considered and designed sensitively.

Light rail on the Gold Coast Highway

The study investigated several alternate routes parallel to the Gold Coast Highway and concluded a future southern extension of the light rail should follow the existing highway alignment. This would allow the light rail to service important cultural and urban attractors including the Burleigh Heads Village Centre, Palm Beach village centre, Currumbin Wildlife Sanctuary, Southern Cross University, the beaches and importantly the Gold Coast Airport.

The Gold Coast Highway route was found to be the most direct and fastest of the corridors investigated. It also has the greatest potential for mode shift to public transport as it is close to where people already live, follows the alignment of the existing frequent trunk bus route (700), as well as providing the potential to transform the Gold Coast Highway into the Gold Coast Boulevard through careful design and treatment.

Providing a light rail extension down the Gold Coast Highway also means the heavy rail corridor adjacent to the M1 will remain protected for a future extension of the Gold Coast line passenger railway which is intended to fulfil a longer distance regional transport function.

Buses

Buses currently 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 shortened or replaced (such as the current route 700 and 777 buses along the Gold Coast Highway), while other services would be maintained and potentially enhanced to offer better connectivity overall. The Study has identified the need for buses to continue to connect communities to the west of the Gold Coast Highway to key centres and interchanges with Light Rail. Connections between bus and light rail will be designed to be safe, convenient and accessible. Further work between TMR, TransLink and City of Gold Coast will confirm the design of transport interchanges and the network of services that use them to ensure it aligns with their future planning.

Property impacts

TMR has approved planning for the Gold Coast Highway through Palm Beach and has been protecting the corridor for future upgrades (including conditioning setbacks as part of the development process). Setbacks are the distance between the kerb and the building. They are intended to be wide enough to accommodate a corridor that allows for pedestrians paths, landscaping, traffic lanes and light rail.

The study has confirmed the current planning is generally adequate for future requirements, however it will need further refinement as the level of design becomes more detailed.

Traffic analysis

A detailed traffic analysis process was undertaken to determine the number of traffic lanes, intersection configuration and performance of the Gold Coast Highway now and into the future. The analysis confirmed that the nearby M1 (Varsity Lakes to Tugun) upgrade will perform a critical transport function on the southern Gold Coast providing the opportunity to:

- Accommodate a significant increase in vehicle demands including both local demands on service roads and regional demands on the motorway itself. and
- improve local connections to the M1 and service roads including a new connection between the M1 and 19th Avenue

This significant increase in capacity will provide through traffic with a viable alternative, reducing demand on the Gold Coast Highway. This provides an opportunity to redesign the Gold Coast Highway as a more multi-modal and pedestrian friendly corridor. Through careful analysis of travel demands and traffic movements throughout the wider southern Gold Coast network, this study has identified the opportunity for some sections of the Gold Coast Highway to be reduced from four to two through lanes, in parts of Palm Beach and Currumbin without detrimental impacts on travel time and traffic capacity. This will involve the rationalisation of intersections and relocation of some right turns to ensure that traffic flow and property access is maintained without significant additional property resumptions. This will be further explored through consultation with the local community.

Future opportunities

The study has identified the following opportunities that could be considered in future upgrade projects:

Improved Palm Beach Avenue precinct

There is the potential to provide alternatives for through traffic so the intersection of Palm Beach Avenue, Gold Coast Highway and Cypress Avenue can be transformed into a pedestrian friendly precinct with the opportunity for street front dining, shopping and urban renewal.

Improved connectivity to the M1

The improved connectivity for northern Palm Beach to the M1 and its new service roads through a widened M1 overpass at 19th Avenue proposed as part of the M1 (Varsity Lakes to Tugun) Upgrade significantly improves accessibility to and from Palm Beach.

Active transport

There is the opportunity to provide new dedicated bridge crossings for bikes and pedestrians across Tallebudgera and Currumbin Creeks.

Oceanway

There is the opportunity to develop a beachfront Oceanway path along the full length of Palm Beach to provide high standard bike riding and walking tracks.

Toolona Street

Associated projects could improve the safety and efficiency of the Gold Coast Highway and Toolona Street intersection by providing alternative access points and reducing the number of traffic movements.

Burleigh Heads National Park

The proposed design preserves the existing Burleigh Heads National Park and improves access to the southern entrance via active travel, light rail, bus and car options.

Connectivity to Burleigh Ridge Park

In order to help protect wildlife and to improve active transport and bushwalking connectivity between Burleigh Heads National Park and Burleigh Ridge Park, a land bridge could be provided, protecting biodiversity by reconnecting ecological corridors.