GCLR4

Review Report



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Introduction

The Queensland Government committed to conducting a review of the analysis by the Department of Transport and Main Roads (DTMR) and the City of Gold Coast (CoGC) that concluded the preferred solution to improving public transport options from Burleigh Heads to Coolangatta on the southern Gold Coast would be the proposed Gold Coast Light Rail – Stage 4 project (GCLR4).

The review was undertaken by Department of State Development, Infrastructure and Planning (DSDIP) to assess the robustness of existing planning work and cost estimate, the priority of the GCLR4, deliverability, alternative routes and modes, and community feedback. The output of the review is this review report which includes recommendations on the review of existing analysis, outcomes of consultation, and additional work proposed.

Overview

The Gold Coast is Australia's sixth largest city with a population of 633,794 in 2021, projected to increase to 915,611 by 2041¹. It is also a major tourist destination welcoming over 11 million visitors in 2024².

The Gold Coast will host Brisbane 2032 Olympic and Paralympic Games events and an Athlete Village at Royal Pines Resort. Gold Coast venues include the Gold Coast Hockey Centre at Labrador, CBUS Super Stadium at Robina, the Gold Coast convention and Exhibition Centre at Broadbeach, and the People First Stadium and the Gold Coast Sports and Leisure Centre both at Carrara.

Figure 1: Burleigh Heads to Coolangatta corridor



The Gold Coast has a wide range of public and private transport options covering buses, two stages of light rail with a further stage under construction, heavy passenger rail to Varsity Lakes and private hire vehicles, including taxi and rideshare.

This review is focused on the 13 kilometre coastal corridor on the southern Gold Coast between Burleigh Heads and Coolangatta (Figure 1) which comprises Palm Beach, Currumbin-Tugun and Coolangatta with a combined population of 35,640 in 2021, projected to increase to 48,175 by 2041³.

The corridor includes a mix of residential, leisure pursuits, businesses, education and commercial services – such as the Southern Cross Gold Coast University campus and Gold Coast Airport – and provides the core road transport and freight link from the New South Wales (NSW) border into Queensland, as well as linking to the tourist accommodation district of Surfers' Paradise.

The corridor is also recognised for its natural and environmental significance, including its biodiversity, fauna and flora, beaches, the Burleigh Head Natural Park, Tallebudgera and Currumbin Creeks and coastal marine ecosystems.

Findings

The review concludes that the SASR, MMCS and PE demonstrate the need for improved public transport for the southern Gold Coast, with the community requiring public transport that is flexible and responsive.

³ Queensland Government projected population (medium series), by statistical area level 2 (SA2), SA3 and SA4, Queensland, 2021 to 2046



¹Queensland Government population projections, 2023 edition: Local government areas snapshot

² Gold Coast Tourism Sector Highlights 2024

The construction-based public transport options proposed for the southern Gold Coast – predominantly light rail and bus rapid transit – would result in property resumptions and car parking loss, loss of greenspace and amenity, and impacts on businesses in the corridor.

Throughout engagement undertaken for the review, the community expressed the need for public transport that forms part of a well-connected network that integrates with other infrastructure and should not disrupt existing infrastructure in the process. Engagement found that buses were the most positively received public transport mode, with a marked divergence of views on light rail. While around a third of respondents expressed positive sentiment toward light rail, nearly two-thirds expressed negativity, showing a high degree of polarisation within the community.

The southern Gold Coast community has been engaged at multiple points throughout planning for future public transport planning, however, prior engagement despite having a broad coverage, did not adequately consider public transport options other than GCLR4. Engagement undertaken for the review found that the impacted community felt that they had not been 'heard' and wanted a flexible, reliable public transport option. When undertaking further detailed planning, engagement with the community will need to be transparent and ongoing.

Community views and experiences are an important determinant of the success and uptake of public transport. Significant public transport construction projects impact on the surrounding communities during the construction phase, can be disruptive to local businesses and can limit community access and movement through the construction area.

The review notes both Cross River Rail and the Gold Coast Light Rail – Stage 3 project are experiencing prolonged construction timeframes due to delays in project delivery. Concerns about the delays in construction for the Gold Coast Light Rail – Stage 3 project and impacts on local businesses were raised in consultation.

The review also notes that not only is the proposed GCLR4 one of the longest and more complex stages of the Gold Coast Light Rail, approvals and regulatory processes could also impact on project timeframes (e.g. if requirements under the EPBC Act are triggered).

The construction of Gold Coast Light Rail – Stage 3 project will take a minimum of four years. At 13 kilometres in length, GCLR4 is almost twice as long as Stage 3 (6.7 kilometres) and includes bridges over Tallebudgera and Currumbin Creeks and a fauna bridge over the Gold Coast Highway.

The project delivery timeline that supports the cost estimate in the PE proposes construction of GCLR4 from Quarter 3 of 2026 to Quarter 1 of 2031, less than five years (for comparison, the PE assumes construction of enhanced bus lanes would take about $2\frac{1}{2}$ years). When compared to the construction period for Stage 3 (four years) the estimation that GCLR4 can be completed in less than five years appears optimistic.

When considering market capacity and deliverability constraints, the review notes that the demand for skilled workers in construction and engineering is outpacing supply, creating bottlenecks in project delivery.

Project costs have also continued to be uncertain. Material costs have also increased by 4.3 per cent on average over the past twelve months and are now on average 30 per cent higher than they were three years ago. Since 2022–23, the estimated actual expenditures on capital projects in Queensland have been, on average, 15 per cent higher than budgeted⁴.

The cumulative cost overrun on the Queensland Transport and Roads Infrastructure Program was \$6.7 billion, with no projects under budget⁵. For example, in the 2025-26 Queensland Budget the capital budget for the Gold Coast Light Rail – Stage 3 project was \$1.549 billion, up from \$1.219 billion in 2022-23. The capital budget for the Cross River Rail project was \$7.839 billion, up from \$6.726 billion in 2022-23, and the project is still in negotiations with the total estimated cost expected to be more than \$17 billion.

The review considers that another significant public transport construction project is not deliverable in the near-term given the challenges of labour and material availability, without adversely impacting existing priorities, and certainly not prior to the 2032 Olympic and Paralympic Games – notwithstanding the GCLR4 not being advocated for in the 100 Day Review Report for the 2032 Games or the 2032 Delivery Plan it informed.

Resources are currently focused on ensuring delivery of projects in the 2025-25 Budget, including the program of works detailed in the Queensland Transport and Investment Program (QTRIP) 2025–26 to 2028–29, which represents a \$41.7 billion investment across local, state and national networks, as well as priorities in the 2032 Games Delivery Plan.

The review notes that even if a significant construction-based public transport option (i.e. light rail, bus rapid transit) was progressed, given lengthy construction timeframes it would not address the immediacy of need to improve public transport on the southern Gold Coast.

⁵ Estimates - State Development, Infrastructure and Works Committee - Transport and Main Roads



⁴ Queensland Audit Office Major projects 2024

Recommendations

1. The review recommends investigations be progressed for bus enhancements in the near-term.

Noting there remains a near-term need for improved public transport on the southern Gold Coast the review recommends that investigations be progressed on enhanced bus lanes (known as Bus service enhancements with minor upgrades one of the options recommended in the PE as bus enhancement provisions).

The enhanced bus lanes option does not include significant construction works and would have a more limited impact on the construction sector and market capacity. It can also be integrated into the existing system, utilise existing infrastructure, with minimal disruption and at lower constructability risk. Bus-based public transport options have the benefit of being able to be implemented faster than other public transport options, can improve southern Gold Coast public transport in the near-term, and buses are well-supported by the community based on consultation undertaken.

2. The review recommends that a Gold Coast regional transport planning exercise be undertaken by the Department of Transport and Main Roads and that further planning for a major light rail proposal along the current alignment not proceed.

There is limited additional rail construction sector capacity available in the near term to deliver a project should one be recommended. By the time existing priorities are delivered and the sector capacity for another major project/s becomes available – much of the current planning work will have become time-damaged.

Further planning will require greater certainty in relation to population levels and demographics which may influence the suitability of transport modes. Economic and financial analyses will need to be updated, as well as contemporary estimates of cost escalation, policy changes and quantification of benefits as part of further detailed planning to support investment consideration.

Cost uncertainty is likely to continue due to market constraints and inflationary pressures. The cost estimates developed for the PE followed best practice guidance, with a risk range of -30 per cent to +70 per cent applied to the costs of the projects. This means that cost of the most expensive option (GCLR4), with 70 per cent applied to the costs, could be as high as \$7.6 billion.

Further planning is required to achieve an efficient, interconnected public transport system on the southern Gold Coast. The southern Gold Coast has multiple public transport modes (light rail, heavy rail, buses) and alignments both along the coast and the M1 to the west. The review recommends the Department of Transport and Main Roads undertake a Gold Coast regional transport planning exercise that considers public transport modes, alignment, east-west linkages, connectivity to the Gold Coast Airport, other connectivity requirements including a potential spur line to Harbour Town, and the opportunity for further inter-modal interchanges.



Planning for infrastructure in Queensland

When considering investment in infrastructure, the Queensland Government requires departments, public service offices, statutory bodies, statutory authorities and corporations (collectively agencies) to have regard to Queensland's *Project Assessment Framework* (PAF)⁶.

The PAF provides tools and techniques for agencies to assess projects throughout the project lifecycle. At each stage of a project, the project's progress and quality is assessed to ensure that the project (and associated investment) meets strategic objectives and achieves value for money.

In this way government can ensure a common, rigorous approach to assessing projects at critical stages in their lifecycle, from the initial assessment of the service required through to delivery, and support development of a pipeline of work that is sustainable, able to be delivered within the constraints that exist and drive better value for money for the taxpayer.

In the planning phase there are three stages: Strategic assessment of service requirement (SASR), Preliminary evaluation (PE) and Business case development/Detailed business case (DBC).

- 1. A SASR is used to identify an issue and the outcome sought and to develop a range of options to achieve the outcome.
- 2. A PE assesses the priority and affordability of the project options and the strategic decision of whether to invest in fully developing a business case. It develops a list of potentially viable options to achieve the outcome. Once recommended options are identified and subject to government approval, these options progress into detailed planning through a DBC.
- 3. A DBC will determine which one of the previously recommended options should be progressed as an infrastructure proposal for government investment consideration. An investment decision by government is informed by the recommendations of a DBC in the context of whole-of-government capital program priorities.

This is the process followed for studies into public transport on the southern Gold Coast with the Queensland Government (through DTMR) and CoGC undertaking planning activities together and procuring individual contracts within a joint funding envelope of \$30 million. This work has been paused for the review.

The Strategic Assessment of Service Requirement

CoGC completed the *Public transport needs in the southern Gold Coast and northern Tweed region Strategic Assessment* (i.e. the SASR) in August 2021. In undertaking an SASR, a local government is well positioned to identify options with potential to deliver outcomes aligned with the desired city outcomes for growth and development as expressed in the City Plan. The SASR concluded that over the next 20 years, the increasing demand on the transport network, combined with the very high car dependence in the southern Gold Coast is forecast to result in major road capacity constraints and congestion.

The Preliminary Evaluation

Following development of the SASR, DTMR completed two Multi-Modal Corridor studies (MMCS) for the Burleigh Heads to Coolangatta corridor (in 2021 and 2022), and then the *Burleigh Heads to Coolangatta Public Transport Preliminary Evaluation* (i.e. the PE) in June 2023⁷.

The PE confirmed public transport across the southern part of the Gold Coast needed to be improved between Burleigh Heads and Coolangatta and assessed six options (and one sub-option):

- Bus service enhancements. This would involve improving the existing bus routes and services.
- Bus service enhancements with opportunistic infrastructure (enhanced bus lanes). This would involve improving
 existing bus stops, pedestrian and active access along the route, as well as introducing bus priority at intersections
 and other infrastructure upgrades to facilitate bus transit on the existing road network.

⁷ Burleigh Heads to Coolangatta Public Transport Preliminary Evaluation, June 2023



⁶ Queensland's Project Assessment Framework

- Bus lanes on Gold Coast Highway. This would involve introducing dedicated bus lanes on the existing road network, either:
 - With bridge widening note this would require bridge widening on the Tallebudgera and Currumbin Creeks;
 or
 - Without bridge widening.
- Road upgrades on Gold Coast Highway.
- Bus rapid transit. This would involve construction of dedicated busways for use by metro-style buses, as well
 as construction of new bridges over the Tallebudgera and Currumbin Creeks and an interchange at Burleigh
 Heads
- Light rail. This would be GCLR4 and extend the existing light rail network from Burleigh Heads to Coolangatta
 via the Gold Coast Airport. It would involve construction of dedicated tracks for the light rail and bridges over
 the Tallebudgera and Currumbin Creeks.

The PE assessed these options against five criteria (transport outcomes, land use, employment and economic activity, public amenity and acceptance, and operational integration) and recommended:

- Light rail from Burleigh Heads to Coolangatta (i.e. GCLR4), is the preferred option and decision makers should approve the project proceeding to DBC for further assessment
- Enhanced bus lanes was the second highest performing option and should be progressed to the DBC as a comparator option to light rail.

Table 1: Construction Costs for the recommended options in the PE

Recommended options	Construction Cost (billions)		
Light rail transport	\$4.467 (P90)		
Enhanced bus lanes	\$0.482 (P90)		

A summary⁸ of the PE was publicly released on DTMR's website in March 2024, and concluded:

"Based on the analysis undertaken in the Preliminary Evaluation, it was recommended that Light Rail Transit and Bus Service Enhancements with Minor Upgrades (subsequently called Bus Enhancement Provisions) proceed to the Business Case stage."

Note: a redacted version of the PE has also been publicly released on DSDIP's website during this review.

Achievability of the PE cost estimates was considered including a scenario extending the program by 12 months compared to the PE, due to uncertainty about deliverability timeframes. Applying escalation at 5 per cent, a revised P90 cost estimate may be in the order of \$5.792 billion and with a high range of \$9.85 billion, compared to the PE range of \$4.467 billion to \$7.6 billion.

The Detailed Business Case

DTMR commenced work on the DBC in early 2024 following completion of the PE but paused work pending this review. The DBC is not complete and no investment decision has been made, nor has there been any commitment to fund GCLR4 (or other options) beyond DBC development.

Review scope and methodology

The Terms of Reference for the review required both a technical analysis and public consultation, including assessment of the prior public engagement, and ensuring community views inform the recommendations of the review. The Terms of Reference (Appendix 1) were published on the DSDIP website on 21 March 2025.

⁸ <u>Burleigh Heads to Coolangatta Public Transport Project Preliminary Evaluation Summary Report (also known as the Gold Coast Light Rail Stage 4 Preliminary Business Case)</u>



Public engagement commenced on 21 March 2025, and closed on 2 May 2025, following which the technical analysis was progressed. The outcomes from public engagement and the technical analysis have informed this review report.

DSDIP undertook community engagement activities to support and inform the technical analysis. This consultation sought community views of all public transport modes, gathering feedback on community views on an effective, local transport system in the southern Gold Coast area. After removing duplicates, there were 5,662 viable submissions received:

- 3,962 from southern Gold Coast and 1,700 from other suburbs (surrounding area/broader Gold Coast)
- most-represented suburbs Palm Beach (29.5 per cent), Elanora (7.8 per cent), Burleigh Heads (7.4 per cent) and Tugun (6.4 per cent)
- 94.4 per cent were from community members, 2.6 per cent from business, 0.6 per cent from community groups, and 2.4 per cent from others.
- 19 submissions were received outside of the formal (online) consultation platform.

The technical analysis involved assessment of the following documents:

- The CoGC SASR, Public Transport needs in the Southern Gold Coast and Northern Tweed Region (2021)
- The DTMR PE, Burleigh Heads to Coolangatta Public Transport Preliminary Evaluation, June 2023 and Summary Report - Burleigh Heads to Coolangatta Public Transport Project (also known as the Gold Coast Light Rail Stage 4 Preliminary Business Case (2024)
- The MMCS for the Gold Coast Highway (Burleigh Heads to Tugun in 2021, and Tugun to Coolangatta in 2022).

This review also drew on government expertise and frameworks, and considered other relevant matters including the current Queensland capital program of \$116.8 billion (including \$41.7billion for transport capital investments)⁹, transport related to the 2032 Olympic and Paralympic Games on the southern Gold Coast, market conditions and draft findings from the Queensland Productivity Commission's *Opportunities to Improve Productivity of the Construction Industry Interim report*, and community impacts such as land resumption, disruption from construction, car parking and population growth.

Assessment against the Terms of Reference

Assessing the robustness of the SASR, PE and the Gold Coast Highway Multimodal Corridor Studies and confirm that the process followed Queensland's Project Assessment Framework.

- The review concludes that the SASR and the PE, from a structural perspective, have complied with the core principles required by Queensland's PAF. Further, the review found no fundamental flaws in the SASR and/or PE analyses, from a compliance perspective.
- The review concludes that both MMCS were undertaken in accordance with the DTMR assessment framework and require no additional work. The MMCS provide robust, supporting assessment for the PE.

It should be noted:

- In reviewing the SASR an intrinsic bias towards light rail as a preferred mode was noted, evidenced by the identification of stakeholder support for an alternate mode as a process risk. This perception was reinforced in the next stage subtitling the published Summary Report Burleigh Heads to Coolangatta Public Transport Project Preliminary Evaluation (also known as the Gold Coast Light Rail Stage 4 Preliminary Business Case), in which multiple options were being assessed. Therefore, a future DBC needs to recognise this bias and examine options equitably and ensure objective assessment against a 'do minimal' option which is convention in DBC assessment.
- The review concludes that the PE has been undertaken in accordance with Queensland's PAF and that the document is a robust assessment of the options examined, noting that some of the processes, particularly community engagement, were focussed on light rail as the preferred option to the exclusion of other options.



⁹ Queensland Budget 2025-26 – Capital Budget Statement

The PE worked from a longlist of eleven options to a shortlist of six options (with a sub-option) down to an ultimate recommendation of two options to be examined in the DBC.

- The PE progressed analysis undertaken by the CoGC through the SASR and strongly favoured continuation of the light rail network, despite the complexity of the project being nearly double the length of prior stages, new bridges over Tallebudgera and Currumbin creeks and involving significant estimated land resumptions and high project cost. This position is considered to have influenced the public engagement conducted where engagement scope was limited to gauging support for or against light rail – no other options were presented despite two options being progressed for consideration in the DBC.
- The review agrees that the need for improved public transport on the southern Gold Coast has been demonstrated, and without improvements, congestion on the Gold Coast Highway and M1, both constrained corridors, will continue.

Assessing if the cost estimate is robust and its development has followed best practice guidance, as well as opportunities to access federal support.

- The review concludes that the cost estimates provided in the SASR and PE, from a procedural perspective, are sound.
- The review concludes that the suite of cost estimate analyses will need to be updated in any future DBC, considering changes in transport policy and patronage and the need to address any time damage to the prior assessments with the most recent cost estimate completed in January 2023. Updating cost estimates to a P90 level of cost confidence is a standard part of a DBC.
- The review finds inclusion of wider economic benefits analysis has limitations in terms of accuracy, and risks
 overestimating benefits. As part of updating the economic analysis in any future DBC, DTMR should confirm the
 quantification of the benefits listed.
- A future DBC should reassess the Benefit Cost Ratio (BCR) of all options, particularly due to the impacts of second-round benefits (additional benefits gained from the project beyond its initial benefits, i.e. from land use changes and urban development benefits) to ensure the benefit value is reasonable. Alternatively, second-round benefits should be presented as a 'sensitivity' outside the published BCR.

Assessing the priority of the project options considered and the robustness of the options analysis, as documented in the SASR and PE.

- The review finds that light rail, in regard to prioritisation and ability to meet population demand, is potentially the third placed option, as enhancement of the existing bus services and construction of enhanced bus lanes could be achieved in the stated desired timeframe (i.e. prior to the 2032 Brisbane Olympic and Paralympic Games, as stated in the PE).
- The review therefore concludes that the assessment of light rail in the SASR and PE, while strong, cannot be
 adequately compared to other options due to insufficient assessment of those options. Greater assessment of
 other options will be required in a future analysis to support the choice of a preferred option.
- The review further concludes that due to the absence in the PE of presented evidence underpinning the impacts listed in the Social Impact Evaluation (SIE), such as decreased network congestion and improved travel times, it is difficult to fully assess whether the benefits of the project options outweigh the anticipated negative impacts and/or whether the light rail is in public interest. The SIE assessment was undertaken on the light rail option only.
- Further the SIE narrative fails to respond to some of the more compelling statements presented in the PE Summary
 Report such as increased economic activity along the corridor and job creation; and does not address some key risks
 associated with impacts on public services and local businesses. The SIE would need to be updated to address the
 above matters as part of future analysis.

Assessing deliverability, current demand, timeframes, community support and market conditions, to support efficient and cost effective project delivery in comparison to alternative routes and modes including those not previously considered.



- The review concludes that construction sector capacity continues to be constrained with persistent workforce shortages and low productivity, exacerbated by the introduction of *Best Practice Industry Conditions* in 2018¹⁰. With ongoing workforce skills and availability constraints impacting both public and private infrastructure delivery capacity, a construction-based public transport proposal (e.g. light rail or bus rapid transit) would require a compelling case to be added to the capital pipeline for delivery in the short term.
- Given Queensland's significant capital program, there is the risk that another significant capital investment (e.g. light
 rail or bus rapid transit) could crowd out other committed priorities in the short term, including those necessary to
 be delivered in time for the 2032 Olympic and Paralympic Games. Committed rail priorities such as the Gold Coast
 Faster Rail would also face additional risk of having essential specialised design and construction expertise being
 diverted to the competing (light rail) project.
- There is no commitment to the extension of the light rail. Introducing another significant infrastructure project into the market would impact available capacity and could also lead to cost escalations and productivity impacts as the market attempts to deliver. The recently released Queensland Productivity Commission's Opportunities to Improve Productivity of the Construction Industry: Interim Report recommends that government prioritises its infrastructure spend to ensure projects are staged and prioritised commensurate with market capacity.
- Assessment of infrastructure projects should be conducted from a whole of government perspective, rather than a siloed or agency perspective, as recognised by the Queensland Productivity Commission. Any future analysis should:
 - Consider market capacity during planning to ensure projects are not just staged and prioritised within the transport portfolio but also more broadly across Government priorities, including investment in health services, education, water and energy security.
 - Include plans and strategies to address anticipated labour, materials and productivity challenges and consider ways of delivering infrastructure outcomes at lower cost or through non-infrastructure solutions (such as a greater focus on demand management).
- The review notes that the extension of heavy passenger rail from Varsity Lakes to the Gold Coast Airport is a complementary component of a mature transport network. DTMR advises in the PE that heavy rail extension is not an alternative to improving other public transport on the southern Gold Coast.
- In terms of demand associated with population growth, the PE indicated travel demand in the Burleigh Heads to Coolangatta corridor would increase by 32 per cent in the period 2019 to 2041, in part due to population growth including growth in NSW, which without intervention would place increasing pressure on the road network and likely result in negative economic, social and environmental consequences.
- Nonetheless, Queensland Government population projections (medium series) for Coolangatta, Currumbin-Tugun and Palm Beach suggest more modest population growth in the period to 2031 that gently accelerates out to 2041, with a total combined increase in population of 12,535.

Table 2: Projected combined population increase for Coolangatta, Currumbin-Tugun and Palm Beach¹¹

Year	Population	Increase
2021	35,640	-
2026	38,521	2,881
2031	41,643	3,122
2036	44,984	3,341
2041	48,175	3,191
	Total	12,535

¹¹ Queensland Government projected population (medium series), by statistical area level 2 (SA2), SA3 and SA4, Queensland, 2021 to 2046



¹⁰ Queensland Productivity Commission's Opportunities to Improve Productivity of the Construction Industry Interim report

- In considering the impacts of population growth from NSW on southern Gold Coast public transport needs, as at 2023, the resident population in the NSW portion of the GCLR4 study area had fallen 29 per cent against the base estimates used in the SASR. Population growth forecasts for the NSW component of growth appear to have been largely contingent on the NSW government progressing its proposed Cobaki Lakes development. There have been no updates to the Cobaki Lakes development since 2011.
- The review therefore concludes that the demand driven by population growth is anticipated in the latter part of the 2021-2041 period.

Assessing the robustness of the GCLR4 option for improved connecting services between the Gold Coast Airport and existing (in delivery) Gold Coast Light Rail – Stage 3 project in the context of projected demand and community support.

- The Gold Coast Airport is currently directly serviced by two bus routes (760 and 777) that provide approximately 100 journeys per day in each direction. Journeys arrive/depart the airport between 5:15am and 11:30pm every day (including weekends and public holidays) and directly connect the airport to light rail and heavy passenger rail on the Gold Coast.
- The PE notes that when Gold Coast Light Rail Stage 3 project is completed, the route of the 777 service will be truncated to connect with the light rail service at Burleigh Heads rather than at Broadbeach South. This is likely to increase capacity for additional bus services linking to the airport.
- The review concludes that while light rail is an option for connecting to the airport, is it not possible to assess the
 advantage of light rail in meeting passenger demand over other modes of transport given the PE assessments of
 other options. To reach a preferred position on this aspect, further assessment of options should be undertaken
 in future analysis.
- Predictions out to 2049-50 of increased passengers using the Gold Coast Airport will likely require additional
 public transport capacity to deal with demand. The review notes that heavy passenger rail extension from Varsity
 Lakes to the Gold Coast Airport remains part of the long-term vision for public transport on the southern Gold
 Coast and that a protected transport corridor has been identified.

Assessing if appropriate expert advice and community engagement has been obtained as necessary to identify and analysis all potential and preferred options, including mode and route choice and Assessing the prior public engagement and undertaking further engagement activities to seek community views on public transport availability and options that may be subject to further detailed analysis.

Given the interrelated nature of these two aspects of the Terms of Reference, they have been analysed jointly.

- The review found that adequate expert advice was accessed for technical aspects of SASR, MMC and PE development.
- However, the review concludes that the prior community engagement conducted for the SASR and PE was broad
 in reach but narrow in its focus. While a wide range of community members were engaged, the community was
 only engaged on light rail, not all public transport options.
- The consultation conducted as part of this review found approximately 60 per cent of respondents felt they were
 not properly consulted through the previous consultation. Residents of the southern Gold Coast particularly did
 not feel they were properly engaged or heard and that their feedback had not been acted on.
- The engagement asked about what makes a 'great' public transport network, and a common theme emerged around the importance of a well-connected network that seamlessly integrates with other infrastructure like roads and car parks. Many expressed that public transport should facilitate movement between key locations, while also not significantly disrupting existing infrastructure in the process. Public views on transportation modes were mixed, with buses eliciting the most positive sentiment (around 50 per cent), and some responses calling for the use of electric/zero emissions models.
- There was a marked divergence on light rail with around a third of respondents expressing positive sentiment toward light rail, but nearly two-thirds expressed negativity, showing a high degree of polarisation within the community. By contrast, heavy passenger rail (particularly connecting Varsity Lakes to the Gold Coast Airport)



and active transport (cycling, walking) received lower mentions but generally positive sentiment, indicating a general alignment in community thinking for these transport modes.

- Based on the most recent views provided by the Gold Coast community, future analysis should consider:
 - o integration with other infrastructure like roads and car parks
 - o limiting the disruption of existing infrastructure
 - facilitating movement between key locations
 - o parking/traffic, project cost, overdevelopment, and impacts to the environment and cultural spaces
 - o providing ongoing and transparent communication and engagement with the community.
- The consultation report Engagement Review: Gold Coast Light Rail Stage 4 Project has been separately released.

Assessing whether future investigations should consider more than one option and ensuring the protection of Burleigh Heads Bowls Club, and Memorial Park, Tallebudgera Creek and Burleigh Heads National Park.

- Based on the information included in the PE and the design work undertaken for the PE, the review concludes the protection of:
 - Burleigh Heads Bowls Club and Memorial Park precludes bus rapid transit as a feasible option because of the difficulty of turning the vehicles through 180 degrees without the resumption of significant areas of land;
 and
 - Burleigh Heads National Park precludes dedicated bus lanes as an option because of the need to resume land to accommodate the wide lanes required.
- The two options recommended by the PE for further consideration in the DBC (light rail and enhanced bus lanes)
 could meet the Terms of Reference requirements for the protection of notable sites (Burleigh Heads Bowls Club
 and Memorial Park).
- Noting the high-risk ratings of the light rail in the PE, the review considers that the removal of trees in the road
 reserve, installation of retaining walls, and the construction of new bridges over Tallebudgera and Currumbin
 Creeks associated with light rail may not meet the Terms of Reference requirement to ensure the protection of
 Tallebudgera Creek and Burleigh Head National Park.
- Further, where construction activity impacts on a species of national significance, requirements under the
 Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) are triggered. The EPBC Act
 processes require a joint assessment by the Federal and Queensland Governments and can be lengthy, which
 could impact on project timeframes.
- To ensure the protection of Burleigh Heads Bowls Club, Memorial Park, Tallebudgera Creek and Burleigh Head National Park, the analysis of options in future planning will need to integrate:
 - o Further detailed technical and environmental assessments to better understand the impacts of the options on the environment, including impacts to mapped State and Local biodiversity corridors.
 - Detailed analysis of the EPBC Act triggers, offset approvals and any other major environmental approvals from both a risk and deliverability perspective.

Other Considerations

The 2032 Olympic and Paralympic Games

 An efficient and functional public transport system will be required for the 2032 Olympic and Paralympic Games, but this does not predetermine a preferred mode of transport and the review does not conclude that transport requirements for the 2032 Games demonstrate the need for GCLR4 prior to 2032.



- There are no villages or venues for the 2032 Games proposed for the southern Gold Coast. All 2032 Games venues and villages are located to the north of the Corridor. Further the GCLR4 was not identified as critical in the 100 Day Review Report for Brisbane 2032 Olympic and Paralympic Games infrastructure delivered by the Games Independent Infrastructure Coordination Authority, or the 2032 Delivery Plan it informed.
- Enhancements to the southern Gold Coast public transport system will benefit overall network reliability and capacity during the 2032 Games but will only assist background movement and spectators travelling from the southern Gold Coast to venues. These movement requirements can be serviced by buses with less delivery risk.

Access and disruption

- The review concludes future analysis should consider each option's ability to meet universal access (access for people regardless of their abilities) as part of the selection process and how any disruption from construction can be properly assessed and managed through delivery (including stakeholder management plans).
- The light rail option was also estimated to result in the loss of over 1000 local car parks. Options that result in the loss of car parking due to construction (i.e. light rail and bus rapid transit) will need to employ the offset mechanisms identified in the PE to minimise overall losses, but updated analysis should also be considered to ensure potential losses of carparks are based on current information.
- The process of developing improved public transport does have an impact on adjoining and nearby properties.
 While the final composition of properties required to be resumed is not definitive until the final design has been reached, the PE identified some preliminary estimates of what the options being recommended to progress to DBC would require:

Table 3: Estimated property resumptions identified in the PE

Option	Full resumptions Partial resumptions		Total properties impacted	
Light rail	78	157	235	
Dedicated bus lanes	78	168	246	
Enhanced bus lanes	0	0	0	

Note: As bus rapid transit was not recommended for further detailed consideration, property resumption impacts are not known.

Public utilities and plant

- Construction of previous stages of the Gold Coast Light Rail has been an opportunity for authorities to work together to replace and upgrade aged and undersized public utilities and plant including power, gas, telecommunications, water supply, sewerage and stormwater.
- Scheduling replacement and upgrade of public utilities and plant during the construction of previous stages benefited residents as the disruption occurred only once, rather than both for new transport infrastructure and then again for public utilities and plant upgrades/replacements.
- As in-ground public utilities and plant ages and the population grows, the southern Gold Coast will require similar replacements and upgrades. The CoGC is responsible for many of the in-ground services including water supply, sewerage and stormwater, and collects infrastructure charges from developers to, in part, fund the necessary upgrades and replacements.
- The Local Government Infrastructure Plans (LGIP) produced for the period 2020-2041 for the CoGC shows the schedule for delivering trunk infrastructure on the Gold Coast.
- A review of the CoGC LGIP has confirmed that there is no scheduled replacement of existing public utilities and
 plant in the Burleigh Heads to Coolangatta corridor over the period, other than the replacement of a sewerage
 odour control unit at Burleigh Heads in 2026.
- Review of the LGIP further indicates that there is no proposed replacement of water supply infrastructure in the Coolangatta catchment prior to 2036, with water mains works costed into the period from 2036 to 2024.



•	The review concludes that as the timing and need for upgrades is driven by the obligations the CoGC has under its LGIP, replacement of in ground services should not be a justification for the immediate construction of the GCLR4 or another disruption intensive public transport proposal.



Appendix 1 – Terms of Reference

Gold Coast Light Rail Stage 4 (GCLR4) Review – Terms of Reference

Background

The Gold Coast Light Rail (GCLR) system is being delivered over a number of stages with Stage 3 currently in progress consisting of a 6.7km extension of the network from Broadbeach South to Burleigh Heads, due to be completed in 2026.

The Gold Coast Light Rail Stage 4 (GCLR4) Preliminary Business Case was completed in March 2024 and suggested public transport options for the southern part of the Gold Coast may need to be improved between Burleigh Heads and Coolangatta.

The Queensland Government has committed to conducting a review of the analysis that concluded the preferred solution to improving public transport options for the southern part of the Gold Coast would be the GCLR4 extension. This review is required to include both technical analysis and public engagement to ensure that community views of the proposed corridor inform the final review report.

This Terms of Reference details the scope of the review.

Engagement objectives and activities

This review will be conducted openly and transparently in partnership with community consultation to assess the robustness of existing planning work and cost estimate, the priority of the GCLR4 project, deliverability, alternate routes and modes, and community feedback. The scope of this review includes:

- Assessing the robustness of any previous studies and confirming that the process followed Queensland's Project Assessment Framework.
- Assessing if the cost estimate is robust and its development has followed best practice guidance, as well as opportunities to access federal support.
- Assessing the priority of the project options considered and the robustness of the options analysis.
- Assessing deliverability, current demand, timeframes, community support and market conditions, to support efficient and cost effectivity project delivery in comparison to alternate routes and modes including those not previously considered.
- Assessing the robustness of the GCLR4 option for improved connecting services between the Gold Coast Airport and existing (in delivery) GCLR3 in the context of projected demand and community support.

- Assessing if appropriate expert advice, and community engagement, has been obtained as necessary to identify and analyse all potential and preferred options including mode and route choice.
- Assessing whether future investigations should consider more than one option and ensuring the protection of Burleigh Heads Bowls Club, and Memorial Park, Tallebudgera Creek and Burleigh Head National Park.
- Assessing the prior public engagement and undertaking further engagement activities to seek community views on public transport availability and options that may be subject to further detailed analysis.

The review will primarily draw from results of community and stakeholder engagement to be undertaken, and consider existing analysis reports, including technical analysis, planning considerations, infrastructure demand and deliverability assessments.

The review will also involve consultation with stakeholders in relevant government departments and the City of Gold Coast Council.

Report

The output from the review is the final report. The report will include recommendations on review of existing analysis, outcomes of consultation, next steps, and additional work proposed.

The review report will be compiled for submission to the Deputy Premier, Minister for State Development, Infrastructure and Planning and Minister for Industrial Relations. Following approval, the final summary report may be published.

Public engagement

Community consultation and engagement will ensure transparency and that community views are representative of the local population. This will include a project webpage for written submissions and locally led community forum.

