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Economic Benefits

Congestion is predicted to be one of the biggest issues facing the Gold Coast in the future. If we ‘do nothing’ congestion will have a number of negative economic and social impacts for the Gold Coast including:

Economic

- higher fuel costs impacting on disposable income
- reduced growth in land values due to access difficulties
- loss of appeal as a desirable place to live, work or invest in
- reduced competitiveness in the tourist market.

Social

- reduced family/leisure time due to longer journey times
- increased stress from travelling in congestion
- increased probability of road accidents
- negative impact on the environment due to increased air and noise pollution.

The Gold Coast Rapid Transit project, as part of the TransLink 10 Year Network Plan for the Gold Coast region, is a key element in a wider plan to improve the public transport network across the Gold Coast and to address congestion.

Without the Gold Coast Rapid Transit system Gold Coast residents and visitors are likely to remain heavily reliant on cars and the only option would be to extend the existing road network to enable access to new developments and enhance the connectivity of existing roads. However there are limits to the benefits of continuing to invest in the road network and it’s not a long term solution as just building more roads will:

- have a negative impact on the natural environment of the Gold Coast and be visually unappealing
- not achieve a cost effective solution to easing congestion
- quickly reach capacity
- increase the dislocation of communities.

An economic analysis of the Gold Coast Rapid Transit project was undertaken by independent consultants. The economic analysis included both qualitative and quantitative analysis. It found that the Gold Coast Rapid Transit project was economically viable and would also achieve a number of positive social outcomes, in economic terms. Broadly the Gold Coast Rapid Transit project with light rail will achieve:

- a cost ratio of 2.3 (a figure higher than 1 indicates that the project is economically viable, that is the benefits are higher than the costs, in economic terms)
- a net present value of $535 million
- quantified benefits to the community exceeding $1.3 billion.

Policy context

The 2005 South East Queensland Regional Plan states that a key economic development planning principle is to “develop a diversified regional economy, characterised by knowledge-based high value-adding industries that build on existing regional and sub-regional competitive advantages and specialisations”.
Background information

As part of the background information the economic analysis found that:

<table>
<thead>
<tr>
<th>Population</th>
<th>Employment</th>
<th>Economic growth</th>
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<tbody>
<tr>
<td>The population of SEQ is forecast to increase from the current 2.6 million people to 3.7 million by 2026.</td>
<td>Predominant employment industries in the region are tourism, retail trade and construction.</td>
<td>Traditionally, the Gold Coast region has lagged behind the rest of Australia and Queensland in terms of employment growth and economic development.</td>
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<td>The Gold Coast has the highest growth rate in South East Queensland having grown from 215,000 in 1986 to 469,000 in 2004 (aggregate growth of 218 percent over the 18 year period).</td>
<td>In 2006 there were 143,000 jobs in the region.</td>
<td>Over the last decade, however, the proactive development of the tourism industry together with general economic growth and wealth creation has resulted in above average employment growth.</td>
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<tr>
<td>The Gold Coast's current population is approaching 560,000 and is increasing by 15,000 per annum; by 2026 it is expected to approach 800,000.</td>
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<td>The Gold Coast region's population is expected to continue to grow faster than the rest of SEQ.</td>
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What did the qualitative analysis consider?

The qualitative analysis included consideration of how the Gold Coast Rapid Transit project would:

- support sustainable industry growth
- create jobs
- impact on land values.

Supporting the sustainable growth of industry

The analysis found that the Gold Coast Rapid Transit project will directly support the economic industries of:

- **Tourism** – and its workforce continues to be a major economic generator for the Gold Coast, employing over 20 percent of the local workforce. The Gold Coast Rapid Transit system will improve access to the areas where tourist activities are focused – Surfers Paradise, Broadbeach and the Gold Coast beach front.

- **Retail trade** – the second largest economic activity on the Gold Coast employing 13 percent of the total workforce. The Gold Coast Rapid Transit will link a number of major retail centres such as Australia Fair, Pacific Fair and Surfers Paradise. It will also provide increased access to these areas from residential and holiday accommodation areas.

- **Construction** – the third largest employment segment on the Gold Coast employing 12 percent of the workforce. There is considerable research which supports the link between the increased transport and increases in property prices and construction activities.

- **Education** – The Gold Coast Rapid Transit will directly link and improve access to several education centres, such as the Griffith University, Southport TAFE and the Knowledge Precinct. Education centres are very large transport generators and without sufficient transport infrastructure, their growth is typically constrained.

- **Health** – The Gold Coast Rapid Transit will provide increased access to a number of health facilities including the new Gold Coast University Hospital and the medical facilities in the Southport area. Without the Gold Coast Rapid Transit system, the new Gold Coast Knowledge Precinct will not be able to achieve its full potential.

- **Environment** – The Gold Coast Rapid Transit will indirectly support the continued development of the environmental industry and sustainable eco tourism.

- **Sporting** – The Gold Coast Rapid Transit will directly support a number of sporting events such as Indy and the Gold Coast Marathon.
Direct job creation
The analysis estimated that the Gold Coast Rapid Transit project will require up to 320 full time employees over the construction and commissioning period. Once the Gold Coast Rapid Transit system is operational there will be an additional requirement for employees including drivers, maintenance and administration personnel. The workforce required is estimated to be 91 for the year 2011, increasing to 169 by the year 2041. This does not include contract staff for major repairs or maintenance.

Increases in land values
The analysis found that the Gold Coast Rapid Transit project is likely to increase land values in the vicinity of the route.

Land values are linked to supply and demand factors. Access to good public transport is considered desirable and therefore tends to increase land values.

Analysis of various studies into land value impacts was taken into consideration as well as consideration of the local residential and commercial property environments and consultation with industry experts. Research shows that the overall expected affect of transport projects on property values is extremely positive but the range of benefits is variable. For example, positive benefits for residential properties generally expands for a wider radius than for commercial properties. Depending on the project, residential impacts could extend up to 1km whilst for commercial properties impacts are more typically concentrated in a 400m radius.

In practice, there are issues with measuring land values due to differing methodology, data and how cause and effect are identified therefore the link to increased land values is not clear-cut.

However in terms of the Gold Coast Rapid Transit project the principles that support an increase in land values include:

- **Extent to which accessibility is increased** – Research indicates that major public transport projects, such as the Gold Coast Rapid Transit project, tend to increase accessibility the most and therefore have the most positive impact on local property values.

- **Mix of residential and commercial land users** – It was found that corridors with a large component of commercial occupiers were most likely to enjoy positive increases in land values. It’s likely that transit oriented development along the Gold Coast Rapid Transit corridor will have a high proportion of commercial occupants and therefore positive consequences for property values.

- **Capacity to connect local economies** – Transport projects that increase the connectivity between key business and activity centres have been found to have a positive effect on property values. The Gold Coast Rapid Transit will create stronger links between the key business centres and provide better connectivity to Brisbane.
What did the quantitative analysis consider?

The second part of the economic analysis (also known as a cost benefit analysis) quantified the benefits to the community from the Gold Coast Rapid Transit project.

The quantitative analysis followed current best practise methodology and transport economic theory. The evaluation took into account capital costs, maintenance costs and benefits to both car and public transport users (including changes in travel times, emissions, numbers of accidents etc)

Outputs from the transport model were used to calculate:

• a value on car and public transport user benefits
• a net present value figure
• the benefit cost ratio for the Gold Coast Rapid Transit project.

(All values in 2008 $)

Benefits to car and public transport users

• people who continue to use cars once the Gold Coast Rapid Transit system is operational will benefit from a decrease in congestion – value of around $76 million
• people who use the Gold Coast Rapid Transit system (including those that choose to use the system rather than drive) – value of around $428 million
• for those who transfer from using their car to now using public transport there are a number of values associated with this change in behaviour:
  - reduced cost of using a car – value of around $106 million
  - reduced need to own a car and for car parking facilities to be built – value of around $70 million
• commercial vehicles benefit from reduced congestion, allowing more direct routes to be taken and time savings made – value of around $31 million
• reduced environmental and social impacts (for example emissions, water pollution, urban separation etc) – value of around $19 million
• reduced number of road accidents – value of around $24 million.

In total the net present value of benefits gained by the community from the Gold Coast Rapid Transit project is around $1,346 million.

Benefit cost ratio

The benefit cost ratio for the Gold Coast Rapid Transit project is 2.3. In general terms a benefit cost ratio of higher than 1 indicates that the project benefits are higher than the costs and therefore is economically viable.
Other non-quantifiable economic benefits

The analysis found that there are an additional number of qualitative benefits that were not fully captured by the cost benefit analysis including:

- **Improved access to facilities and services** – The Gold Coast Rapid Transit will make access to local educational, service, retail and leisure facilities easier. It will improve access to these services for the proportion of the population who currently have poor access to public transport and/or don’t own a car.

- **Deterring drivers from ‘rat running’** – A consequence of congestion on major (primary and secondary) roads is ‘rat-running’ when drivers use tertiary roads to reach their destination. Because these smaller roads are not designed or built for high volumes of through traffic, rat-running creates problems including accidents and loss of suburban amenity. Transport modelling shows that the Gold Coast Rapid Transit will reduce congestion and therefore encourage commuter and commercial traffic back onto the secondary and primary roads.

- **Better environmental outcomes** – Congestion increases journey time which leads to an increase in the volume of greenhouse gas emissions. Apart from reducing congestion on the adjacent road network, the Gold Coast Rapid Transit system will reduce greenhouse gas emissions due to its efficiency as a ‘people mover,’ ie carrying a large number of people in a single vehicle produces less emissions per person, per kilometre than private vehicle use.

- **Encouraging concentration of commercial activity** – The Gold Coast Rapid Transit system is expected to attract businesses to relocate to near the route due to improved accessibility. In areas where related or complementary businesses cluster together economies can be achieved, for example workers are attracted to the area, there is more choice of suppliers and information can be shared more easily.

- **Enhancing the image of the Gold Coast** – Due to its look and feel, convenience and reliability, Gold Coast Rapid Transit has the potential to enhance the attractiveness of the Gold Coast as a residential and holiday destination. The Gold Coast Rapid Transit system could be used in promotions and advertising. Over time, the Gold Coast Rapid Transit system could become integral to the Gold Coast lifestyle.

- **Reduced reliance on cars and car parking** – Access to tourist and retail activity is currently largely dependent on the availability of car parking spaces. The Gold Coast Rapid Transit will reduce reliance on car parking by providing an alternative way of getting around.

- **Managing natural disasters/crisis situations** – Under exceptional circumstances, such as a natural disaster or fuel crisis the State might be called upon to provide transport services to a larger than usual proportion of the population. The Gold Coast Rapid Transit system, together with heavy rail and buses, would have the capacity to make a credible contribution to an emergency situation that calls for mass movements of population.
Which Act will the Gold Coast Rapid Transit project be delivered under?

The Queensland Government determined that this project would be best delivered principally under the Transport Infrastructure Act 1994. The Act ensures that projects such as the Gold Coast Rapid Transit project:

- contribute to overall transport effectiveness and efficiency
- are safely constructed, managed and operated
- are responsive to community needs
- address the challenges of future growth
- provides public transport infrastructure and passenger services at a reasonable cost to the community and government.

The Integrated Planning Act 1997 will also apply to any aspect of the project that might be defined by the act as ‘development’ (which includes building work, excavation, clearing vegetation etc).

The purpose of the Act is to ensure projects such as the Gold Coast Rapid Transit project achieve ecological sustainability.

For more information refer to the following chapters in the draft Concept Design and Impact Management Plan:

- Volume 2, Chapter 11: Economic Environment

See page 24 for details of how to access the full draft Concept Design and Impact Management Plan report.