APPENDIX VI

Geleon Traffic Assessment

TECHNICAL NOTE

TO:	BNC Planning	
ATTENTION:	Benjamin Collings	
SUBJECT:	1-105 Racecourse Road, Cluden, Proposed Mixed Use Development Preliminary Traffic Analysis Findings	
DATE:	14 August 2024	**OUR REF:** 50890-TN01-Draft A

1. Introduction

1.1 Background

It is understood that MCK TSV Pty Ltd (the **Applicant**) is in the process of having a Development Application (**DA**) prepared, seeking a permit to establish a mixed use development at 1-105 Racecourse Road, Cluden. Provided below are the preliminary findings of a traffic impact assessment. A full Traffic Impact Assessment (TIA) report including SIDRA analysis will be submitted during the DA process to demonstrate compliance with the Department of State Development and Infrastructure *State Code 1: Development in a state-controlled road environment* and *State Code 6: Protecting the state-controlled road network*.

1.2 Proposed development

The development proposes establishment of several land uses over three precincts, as detailed in **Table 1.2** and illustrated in **Attachment A**.

Table 1.2 Proposed development details

ID	Land Use	Quantity	
Precinct 1			
1	Food and drink outlet (fast food)	560	m^2 GFA
2	Shop / food and drink outlet (restaurant / café)	1,590	m^2 GFA
3	Hotel (Tavern)	1,215	m^2 GFA
Precinct 2			
4	Multiple dwelling	230	Units
Or			
4	Showroom	5,500	m^2 GFA
Precinct 3			
6	Outdoor sport and recreation (Waterpark)	371	parking spaces
7	Short-term accommodation	209	Rooms
8	Food and drink outlet (restaurant / café)	204	m^2 GFA
9	Function facility	1,523	m^2 GFA

2. Traffic impact assessment findings

2.1 Traffic generation

The traffic generation expected for the proposed development is shown in **Table 2.1**. Traffic generation rates for the proposed development have been based on those provided in the RTA's *Guide to Traffic Generating Developments (GTGD)*, the updated RMS *Guide to Traffic Generating Developments – Technical Direction (TDT 2013/04)*, the *Institute of Transportation Engineers (ITE) Traffic Generation Data Trip Generation Manual* (11th Edition), TMR's *Road Planning and Design Manual* and TMR's *Traffic Generation Data - 2006 – 2018*.

Table 2.1 Traffic generation

AM Peak hour	PM peak hour	Weekend peak hour	Daily
660 trips	780 trips	862 trips	7,351 trips

2.2 Traffic impact assessment assumptions

The following assumptions have been relied upon for the traffic impact assessment:

- the ultimate development will commence operation by 2029
- the 10-year design horizon is 2039
- 2% compounding growth rate applied to traffic volumes on Lakeside Drive, Racecourse Drive and the future Lakeside Drive extension
- 3% compounding growth rate applied to traffic volumes on Stuart Drive, and
- 1% compounding growth rate applied to traffic volumes on Edison Street.

2.3 Intersection capacity assessment

There are two key intersections in proximity to the subject site which development generated traffic will utilise, namely, the Racecourse Road / Lakeside Drive signalised intersection and Racecourse Road / Lakeside Drive / Townsville Turf Club Access signalised intersection.

An assessment of aggregate-intersection-delay impact 'with development' has been undertaken for these existing signalised intersections for the year of opening (2029) in accordance with *Section 11.3.1* of Department of Transport and Main Roads (TMR) *Guide to Traffic Impact Assessment*. The assessment indicates that the aggregate-intersection-delay impact 'with development' is greater than 5% in the AM peak hour, PM peak hour and weekend peak hour, and therefore mitigation measures are triggered.

To ensure the safety and efficiency of the State-controlled road network is maintained post development, transport infrastructure upgrades are proposed to achieve an appropriate level of service at the 10-year design horizon (2039). The proposed transport infrastructure upgrades are as follows:

1. apply a common control group (CCG) phasing sequence to the existing Racecourse Road eastbound / Lakeside Drive and Racecourse Road westbound / Lakeside Drive / Townsville Turf Club Access signalised intersections and modify the phasing sequence and timing to cater for existing and development generated traffic, as well as a new road connection to Stuart Drive
2. provide a new road connection between Racecourse Road and Stuart Drive connecting to the Stuart Drive / Edison Street roundabout in the south and Racecourse Road / Lakeside Drive signalised intersection in the north. The road connection will be to a two-lane, two-way road configuration and direct property access will be prohibited
3. provide a new four-legged single lane roundabout at the midpoint between Racecourse Road and Stuart Drive. The eastbound and westbound approaches to this roundabout will facilitate access to the proposed development, and
4. upgrade the existing Stuart Drive / Edison Street three-legged roundabout to a four-legged double lane roundabout in the north-south direction. A four-lane, two-way carriageway on both Stuart Drive approaches will be required for 130m on the approach and 170m on the departure side of the roundabout.

An illustration of the proposed and existing intersections from SIDRA is included as **Attachment B**. All upgrades will be designed in accordance with the TMR *Supplement to Austroads Guide to Road Design*.

2.4 Midblock capacity assessment

Adopting industry accepted typical midblock capacity volumes, the trigger for road link duplication based on background traffic growth alone for the year of opening (2029) and 10-year design horizon (2039) scenarios is shown in **Table 2.4.1**.

Based on background traffic growth alone, the existing four-lane, two-way configuration of Lakeside Drive and Racecourse Road is suitable up to the 10-year design horizon (2039). Stuart Drive however, triggers duplication to a four-lane, two-way carriageway at the year of opening (2029) based on background traffic growth alone.

Table 2.4.1 Midblock capacity assessment – background traffic

Road link	Existing configuration	AADT (2024)	Duplication AADT (vpd)	Growth rate	AADT (2029)	AADT (2039)
Lakeside Drive	Four-lane, two-way road	9,878	37,600	2%	12,034	14,669
Racecourse Road	Four-lane, one-way road	23,528	37,600	2%	25,977	31,666
Stuart Drive	Two-lane, two-way road	14,042	16,000	3%	16,279	21,877

Introducing development generated traffic to the year of opening (2029) and 10-year design horizon (2039) scenarios, the trigger for road link duplication is shown in **Table 2.4.2**.

Table 2.4.2 Midblock capacity assessment – background plus development traffic

Road link	Configuration	AADT (2024)	Duplication AADT (vpd)	Development traffic	AADT (2029)	AADT (2039)
Lakeside Drive	Four-lane, two-way road	9,878	37,600	3,353	15,387	18,022
Racecourse Road	Four-lane, one-way road	23,528	37,600	2,770	28,747	34,436
Stuart Drive	Two-lane, two-way road	14,042	16,000	1,089	17,368	22,966
Lakeside Drive extended	Two-lane, two-way road	2,550 [1]	16,000	7,351	10,223	10,852

Note:
1. Redistributed background traffic via new road connection between Racecourse Road and Stuart Drive

The existing four-lane, two-way configuration of Lakeside Drive and Racecourse Road and the proposed two-lane, two-way configuration for the new Lakeside Drive extended road has capacity to accommodate development generated traffic and background traffic in the 10-year design horizon (2039).

Regarding Stuart Drive, duplication to a four-lane, two-way carriageway is required in the year of opening (2029) and 10-year design horizon (2039) scenarios, however the need to upgrade is triggered by background traffic growth only, irrespective of whether the proposed development is introduced. Additionally, a suitable four-legged double lane roundabout can be established for Stuart Drive / Edison Street using short entry and exit lanes to provide a four-lane, two-way carriageway for Stuart Drive through the roundabout.

Based on the above, it would not be reasonable for the Applicant to be required to upgrade Stuart Drive to a four-lane, two-way configuration as part of this development application, given that duplication is required as a consequence of background traffic growth alone, not as a consequence of the development.

3. Conclusion

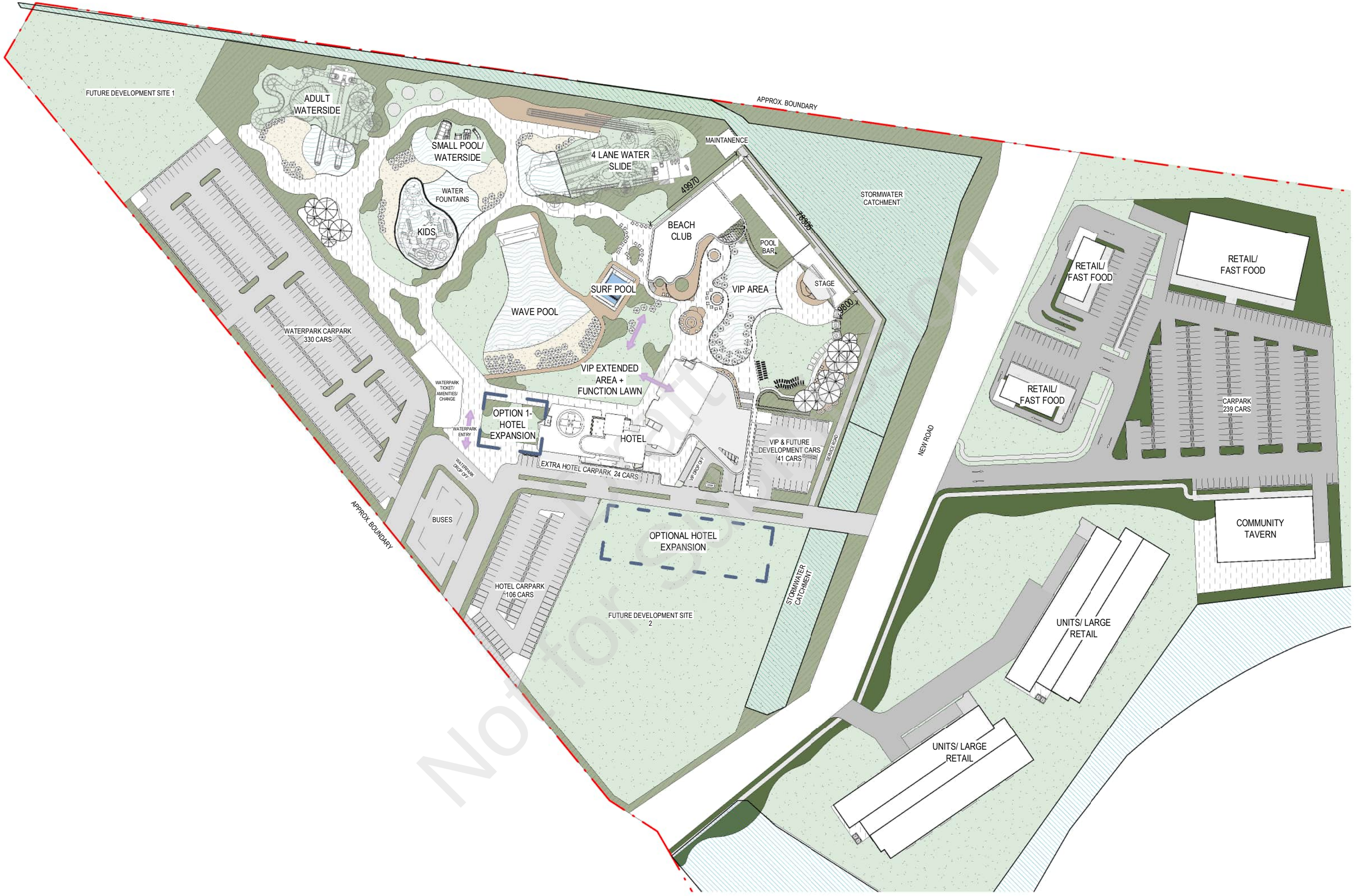
Further details on the above traffic impact assessment findings including the SIDRA analysis will be detailed in a full TIA report that will be submitted during the DA process.

Yours sincerely

Luke Seeney, RPEQ 23542
Director | Principal Engineer | RPEQ

Attach.

Attachment A Preliminary masterplan drawing



2407 TSV Hotel & Water Park

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Masterplan

2407_ PD A-001
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MASTERPLANNING ■

Shaun McCarthy 1 : 1500 @ A3

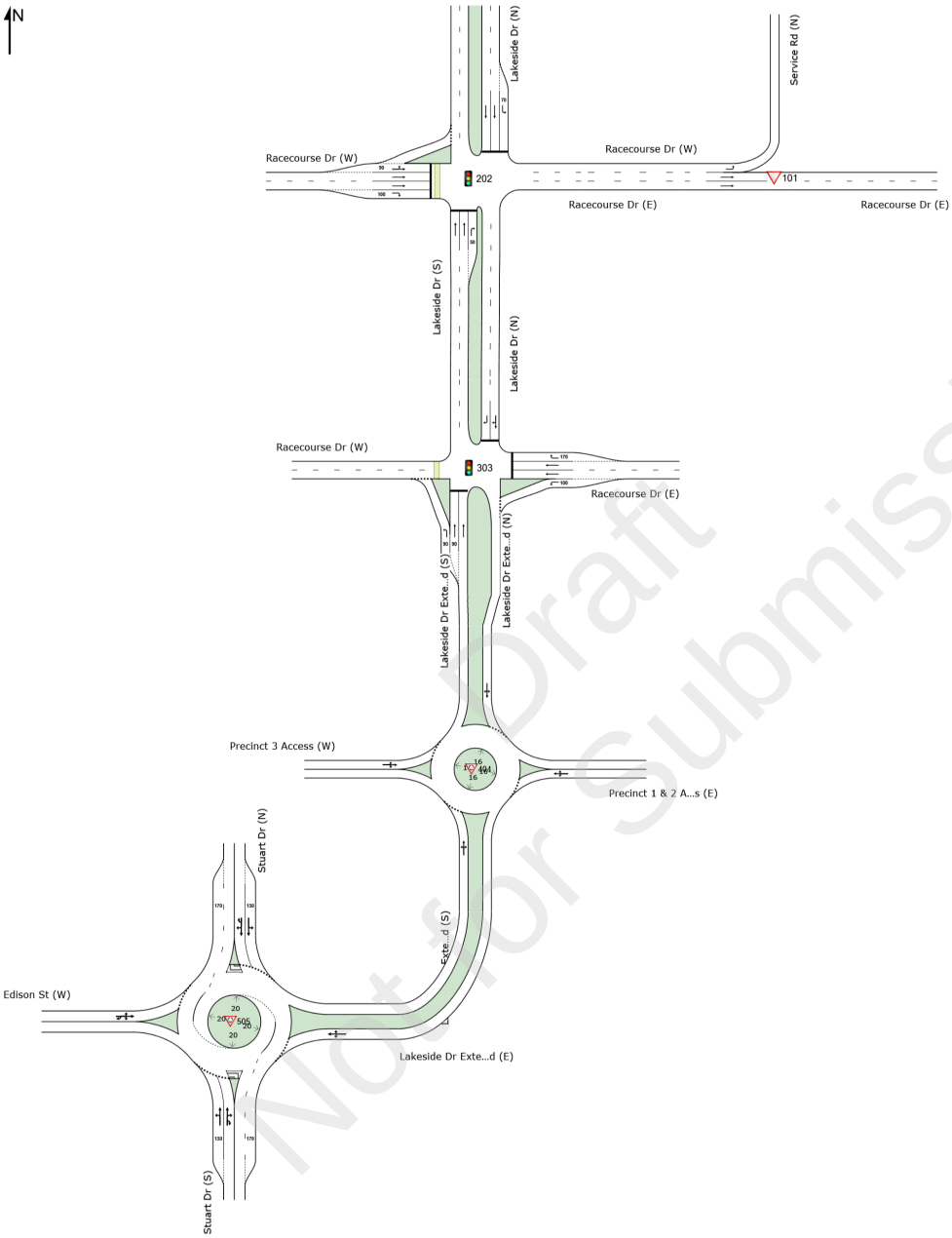
Attachment B Ultimate design SIDRA layout

NETWORK LAYOUT

Network: N101 [Racecourse_Lakeside_Townsville Turf Club Access_Design_2039_AM (Network Folder: Design)]

2039 Design Traffic Volumes
Network Category: Proposed Design 1

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



SITES IN NETWORK		
Site ID	**CCG ID**	**Site Name**
101	NA	Racecourse_Lakeside_Existing_AM (EAST)
202	CCG1	Racecourse_Lakeside_Design_2039_AM (WEST)
303	CCG1	Racecourse_Lakeside_Lakeside Extended_Design_2039_AM
404	NA	Precinct 1 & 2_Precinct 3_Design_2039_AM
505	NA	Stuart_Edison_Design_2039_AM

APPENDIX 7

ECONOMIC IMPACT ASSESSMENT

CIRCUIT BREAKER TOWNSVILLE

ECONOMIC IMPACT ASSESSMEMT

JUNE 2024

Contents

Sources of Information

Information has been utilised from the following sources:

- Australian Bureau of Statistics
- Tourism Research Australia (TRA)
- Townsville Water Park – Market Study and Feasibility Report

Input-Output Modelling

Input-Output (IO) modelling is used to estimate the flow-on economic impacts from a change in the regional economy.

Direct Impact

Is the direct change of jobs or output for each relevant industry, to calculate the economic impact either the direct number of jobs or expenditure for each industry is necessary to calculate the flow on effects.

Flow on Effects

Supply-Chain Effects

The increased output generated by servicing industry sectors in response to the direct change in output and demand.

Consumption Effects

As output increases, so too does employment and wages and salaries paid to local employees. Part of this additional income to households is used for consumption in the local economy which leads to further increases in demand and output. The flow-on impacts for the region's economy from a direct change are summarised as Output, Employment, Wages and Salaries and Value-Added economic multipliers.

Introduction

Purpose of this report

The economic impact assessment analyses the economic impact that the development has across industries including employment, wages and salaries, value-add and output. The impacts have been modelled for both the construction and operational phase. The impacts of the construction phase only accounts for the impacts over the construction period of 2 years, while the operational phase is annual impact.

Proposed Development

The proposed development includes the construction of a new 200-room hotel, as well as a large waterpark and beach club complex. The hotel will feature high-end amenities and facilities. The waterpark is envisioned to be a major regional attraction, with multiple pools, water slides, and other aquatic features. The adjacent beach club will provide beachside dining, retail, and recreational offerings for hotel guests and the general public.

In order to facilitate this development, significant earthworks and road infrastructure will need to be undertaken. This will likely involve grading, excavation, and land clearing to prepare the site, as well as the construction of new access roads, internal driveways, and parking areas to support the hotel, waterpark, and beach club. The development of this supporting infrastructure will be a key component of the overall project.

Overall, this multi-faceted development represents a sizable investment in the region's tourism offerings. If approved and executed successfully, it has the potential to drive economic activity, create new jobs, and establish the area as a premier destination for both local residents and visitors.

Location

The Circuit Breaker project has secured land located in Cluden next to the Cluden Park racecourse. The site is strategically located at the intersection of the Bruce highway and Sturt drive, both of which are entrance points into the region.

Economic Impact Assessment Circuit Breaker

The impact assessment investigates the construction phase of the project, along with the operational phase. A breakdown of the industries employment, output, value-add, and wages and salaries have been calculated through input-output modelling.

Construction Phase – Economic Impact Assessment

The proposed $270 million development represents a significant investment that will drive substantial economic activity during the construction phase. To model the expected economic impacts, the construction costs have been broken down by industry sector, as outlined in Table 1. This industry-level breakdown serves as the foundation for the economic impact modelling across the 2-year construction period.

The construction costs cover a wide range of activities, including site preparation, building construction, specialty trade contracting, and the procurement of building materials and equipment. By analysing how these construction expenditures will flow through the regional economy, it is possible to estimate the direct and flow-on economic impacts that will be generated.

The direct impacts account for the initial, on-site employment and economic output associated with the construction work itself. The indirect impacts capture the upstream effects as construction firms purchase goods and services from their suppliers. And the flow-on impacts reflect the broader, economy-wide stimulus within the local economy.

Input-Output Industry Allocation

Table 1

Year	Industry Sector	Direct Change Output ($M)
1	Non-Residential Building Construction	$61.6
1	Heavy & Civil Engineering Construction	$18.2
1	Construction Services	$39.5
1	Professional, Scientific & Technical Services	$9.6
2	Non-Residential Building Construction	$92.4
2	Heavy & Civil Engineering Construction	$27.2
2	Construction Services	$17.4
2	Professional, Scientific & Technical Services	$4.1

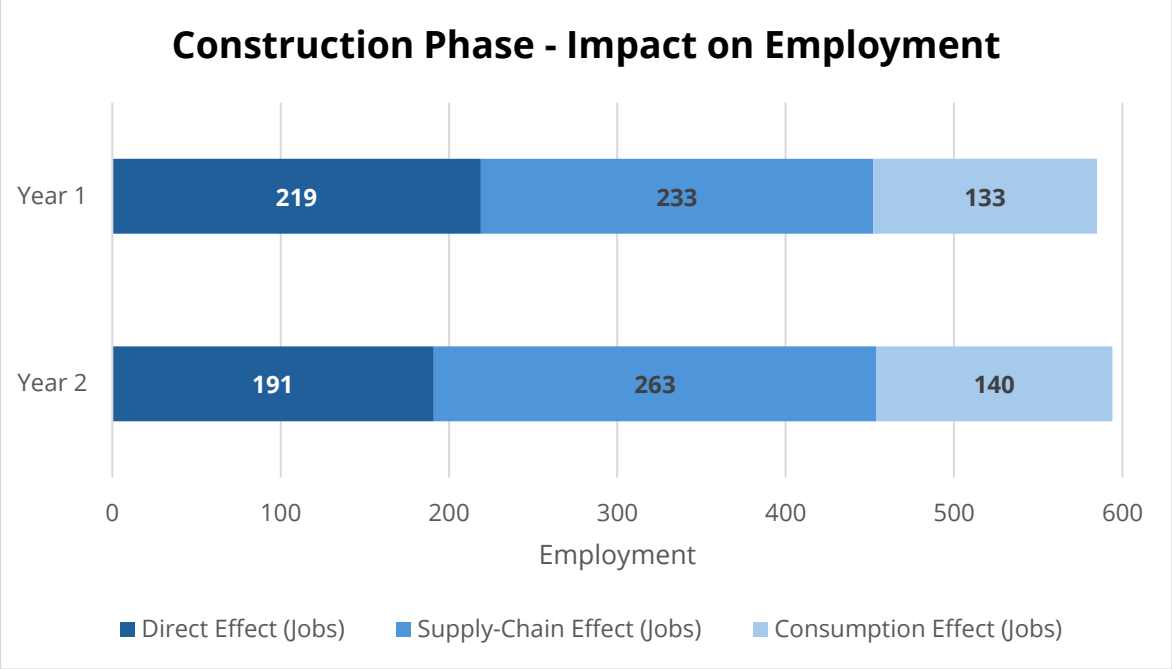
Impact on Employment

As the construction phase is over a two-year period the yearly impact on employment is different. The peak gain in employment is in the second year when construction has fully commenced with earth works and other initial site preparations completed.

In the first year of construction, it is expected to be a greater number of people who are directly employed during development. This is due to different skills and trades required in preparation of the build, along with the commencement of main construction activities. In year 2 the flow-on effects have a greater impact as employment will be steadier with those working on site, this in turn will have greater impact on flow-on employment.

Further employment impacts on individual industry for year 1 and year 2 can be found in the Appendix.

Figure 1

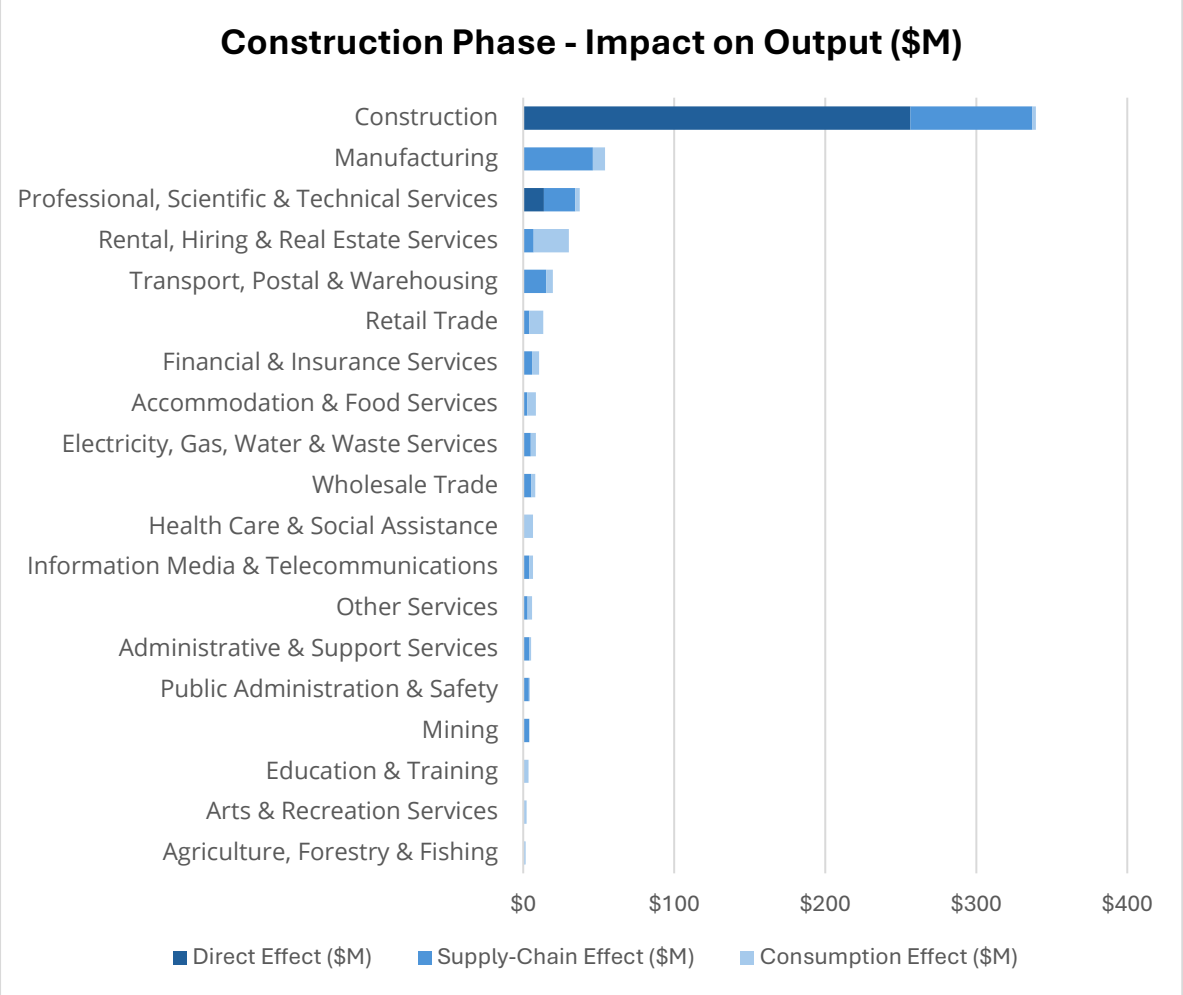


Impact on Output

A direct increase in output of $270 million (project development cost) over a two-year period would induce an estimated $299.5 million in flow-on effects, resulting in a total effect of $569.4 million in output over the two years. The first year of construction is expected to have an economic output of $270.3 million ($128.9 million directly, $142.4 million in flow-on effects), with year 2 having slightly more of an impact of $299.1 million ($141.1 million directly, $158 million in flow-on effects).

The construction industry will see the greatest impact which is no surprise with this being the primary activity in development. Supporting industries such as manufacturing, professional scientific & technical services, transport, and retail trade.

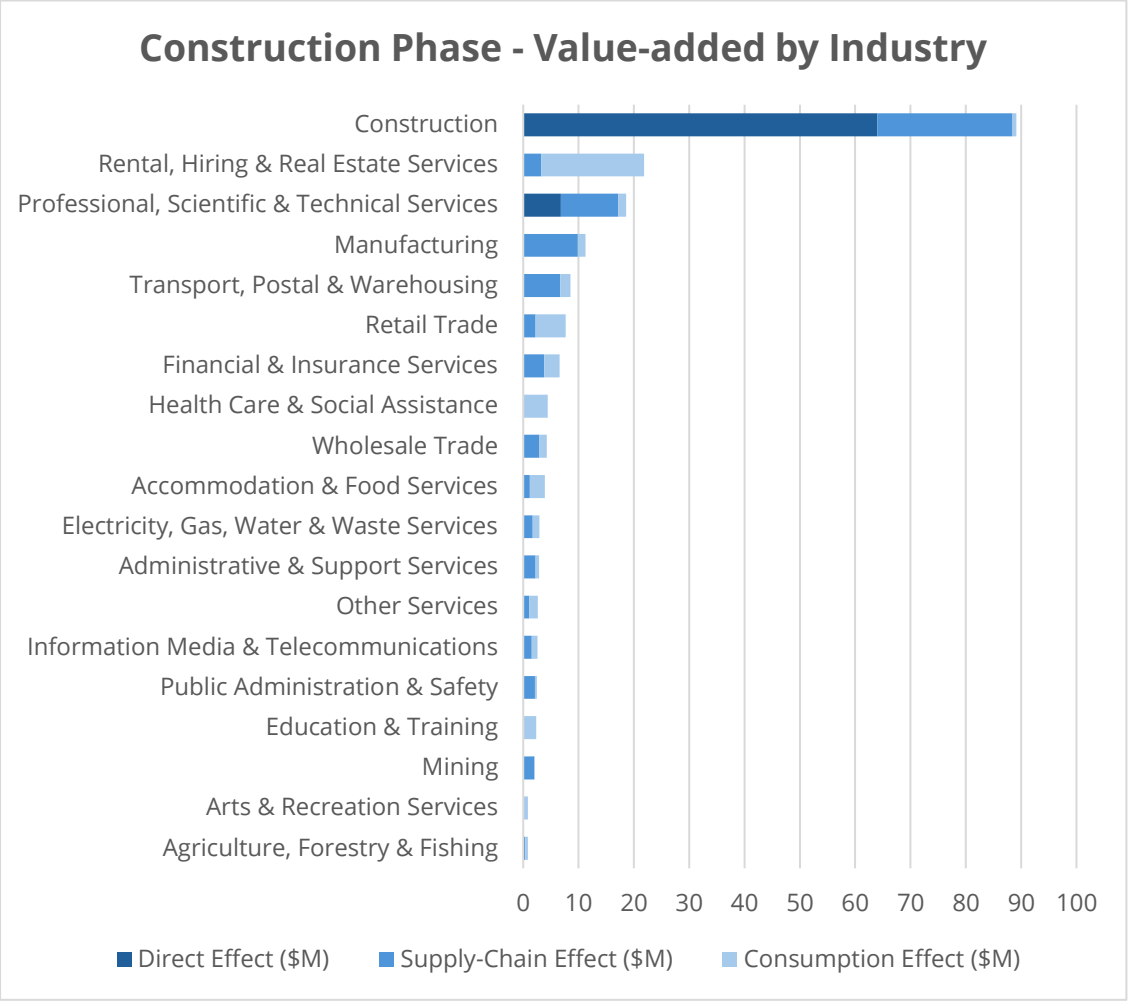
Figure 2



Impact on Value-add

Across the two-year construction period the development is expected to provide a contribution of $192 million in value-add ($70.8 million directly, and $121.2 million through flow-on effects). The first year of construction will provide an increase of $93.3 million in value-add, with the second year having slightly more value-added contributions of $98.7 million. The value-adding impacts of the construction phase will only contribute to the region's gross regional product (GRP) over the development years, whereas the operational phases impact ongoing. Figure 3 breaks down where the value-adding activity is most prevalent over development with construction having the greatest impact, followed by rental, hiring & real estate services (largely housing), professional, scientific & technical services, and manufacturing.

Figure 3



Impact Summary

Over the two-year construction phase of the circuit breaker project the following benefits are expected to be felt:

- Output: Over the construction phase of the project there is expected to be a total economic output of $569.4 million
- Employment: The peak year (year 2) of construction activities will support 581 jobs, while 1,154 jobs are expected to be supported over the two-year period.
- Wages and Salaries: Over the two years $101.3 million of wages and salaries would be paid to employees. $41.6 million will be direct wages and salaries, while a further $59.7 million will be paid to those impacted through flow-on effects.
- Value-added: Over the two-year construction period the development is expected to generate $192 million in value-add.

Impact on Output ($M)

Impact Year	Direct Effect	Supply-Chain Flow On Effect	Consumption Flow On Effect	Total	Type 1 Multiplier	Type 2 Multiplier
Year 1	$128.900	$99.076	$42.315	$270.291	1.769	2.097
Year 2	$141.100	$113.683	$44.354	$299.137	1.806	2.120
Years 1-2	**$270.000**	**$212.759**	**$86.669**	**$569.428**	**1.788**	**2.109**

Impact on Employment

Impact Year	Direct Effect	Supply-Chain Flow On Effect	Consumption Flow On Effect	Total	Type 1 Multiplier	Type 2 Multiplier
Year 1	219	225	129	573	2.027	2.616
Year 2 - Peak Gain	191	255	135	581	2.335	3.042

Impact on Wages and Salaries ($M)

Impact Year	Direct Effect	Supply-Chain Flow On Effect	Consumption Flow On Effect	Total	Type 1 Multiplier	Type 2 Multiplier
Year 1	$21.163	$19.278	$9.042	$49.483	1.911	2.338
Year 2	$20.408	$21.930	$9.466	$51.804	2.075	2.538
Years 1-2	**$41.571**	**$41.208**	**$18.507**	**$101.287**	**1.991**	**2.436**

Impact on Value-added ($M)

Impact Year	Direct Effect	Supply-Chain Flow On Effect	Consumption Flow On Effect	Total	Type 1 Multiplier	Type 2 Multiplier
Year 1	$35.662	$34.514	$23.129	$93.306	1.968	2.616
Year 2	$35.176	$39.304	$24.215	$98.695	2.117	2.806
Years 1-2	**$70.839**	**$73.818**	**$47.344**	**$192.001**	**2.042**	**2.710**

Other Benefits across the Construction phase

Outside of the economic benefits across the construction phases, the development of the Circuit Breaker project is expected to benefit the region by, but not limited to:

- Employment opportunities and on-the-job training for local workers, helping to develop the regional construction workforce. With at least 10 FTE apprentices working on the project. With an additional 15 to 20 apprentices supported during construction (30 in total).
- Majority of the work will be allocated to regional businesses with 80% of the spend being within North Queensland.
- Engagement with local Indigenous businesses, with the goal of allocating between 6-10% of the total construction contract value to these enterprises.

Operational Phase – Economic Impact Assessment

Once construction is complete, the hotel, waterpark, and beach club development will transition into its operational phase, where it will generate ongoing economic impacts through its day-to-day activities. This section will explore the annual economic impacts the Circuit Breaker project will provide to the region.

The analysis draws upon a report provided by Pico Play, which offers insights into the expected visitor numbers attracted to the development. It will also utilise visitor expenditure patterns, current visitor profiling and accommodation trends to model the impacts.

By combining this industry intelligence with an assessment of the current tourism landscape in the region, the economic impact modelling provides a comprehensive outlook on the benefits that will be produced during the facility's operational lifetime.

Modelling Assumptions

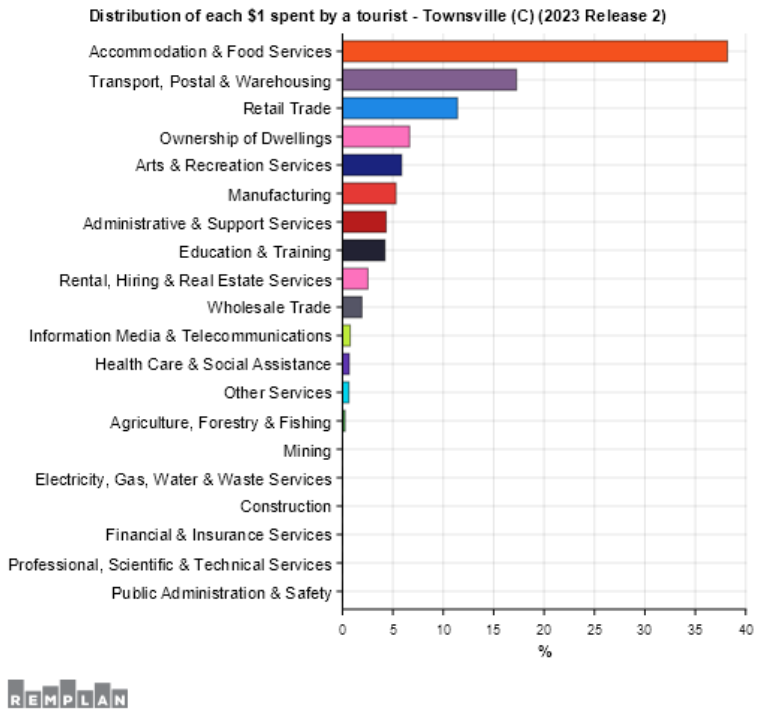
Visitor Profile

Visitor Profile	Domestic Day	Domestic Overnight	International
Average stay (nights)	-	3.7	11.5
Average spend per trip ($)	$182.67	$1,021.31	$651.79
Average spend per night ($)	-	$278.36	$56.78

Distribution of Expenditure

The industry breakdown for each dollar spent by a visitor in Figure 4.

Figure 4



Additional Visitors to the Region

A report from Pico Play has outlined the forecasted visitation that the waterpark would attract and the type of traveller to the region. This assisted in determining the visitation estimates and the impact it would have on the regions economy. As a hotel is being developed on site this has been considered when utilising the forecasted visitation.

Visitor Type

The Circuit Breaker project will attract an additional 39,207 visitors through the accommodation, an additional 145,066 visitor nights. Of that it is expected that the waterpark would be used one of those 3.7 days.

63,447 would be domestic visitors who visit the waterpark and beach club facility but would stay elsewhere. It is assumed that these visitors would spend an additional day at the waterpark.

The same assumption is made for international visitation which accounts for 20,653 additional international visitor nights.

Residents would account for 56,956 of the visitors to the waterpark. Average per Capita Spend at the waterpark $57.45.

Visitor Type	Circuit Breaker Visitors	Expenditure per Visitor	Notes
Residents	56,956	$57.45	Cost of Access + Additions
Domestic Day	153,982	$182.67	Additional Day Trip
Domestic Overnight	63,447	$278.36	An additional day
Domestic Overnight @ Circuit Breaker	39,207	$1021.31	Reason for Visitation
International	20,653	$56.78	Additional day
Total	334,245		

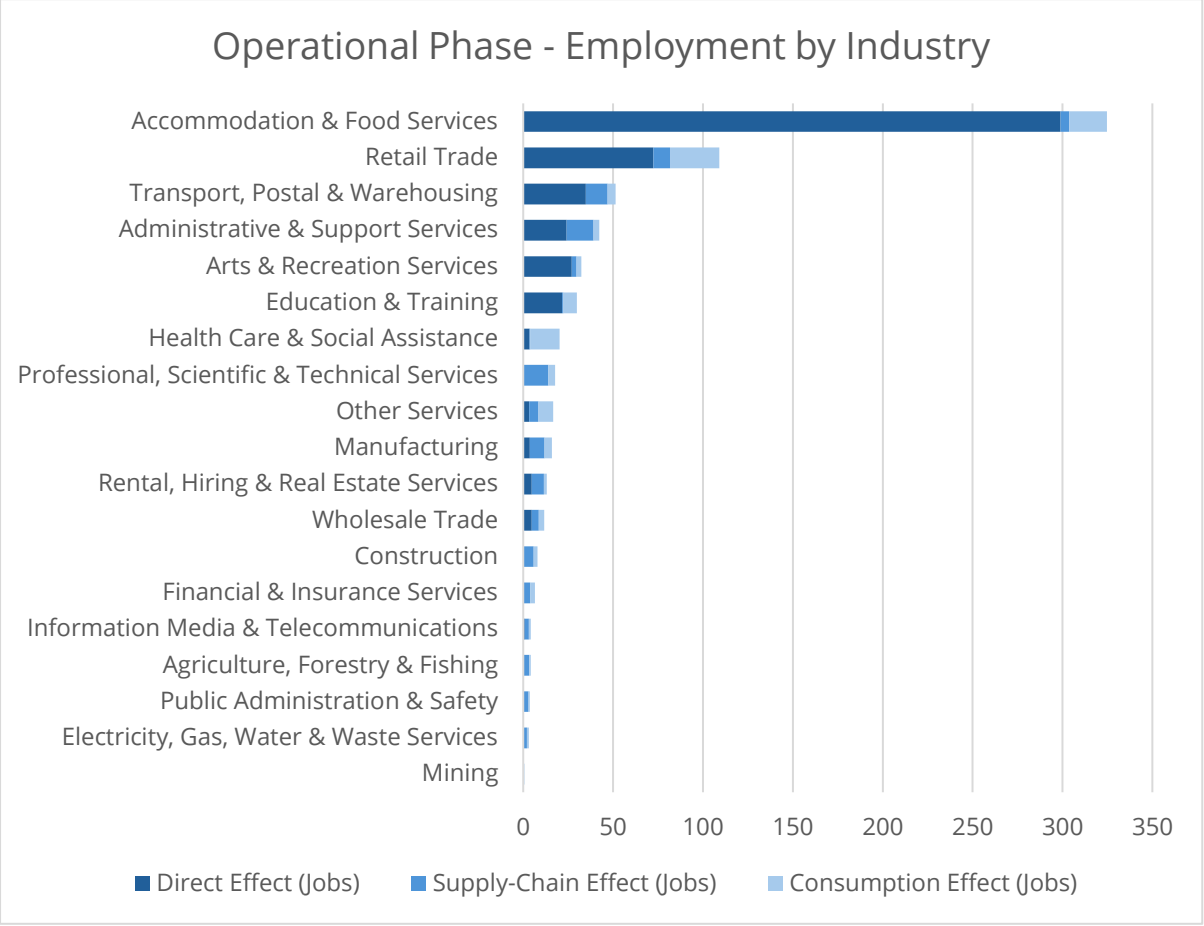
Economic Impact Summary

Impact on Employment

The operational phase of the Circuit Breaker development would generate approximately 715 jobs, of which 500 would be direct and 215 through flow-on effects. Being in full operations the employment required would be on an ongoing basis.

Employment in the accommodation and food industry would require the greatest demand with 324 jobs require (298 directly and 26 through flow-on effects). Retail trade, transport, and arts and recreation services also have a strong demand for employment, which aligns with the industry expenditure of the visitor dollar. A breakdown of the effects on industry are highlighted in Figure 5.

Figure 5

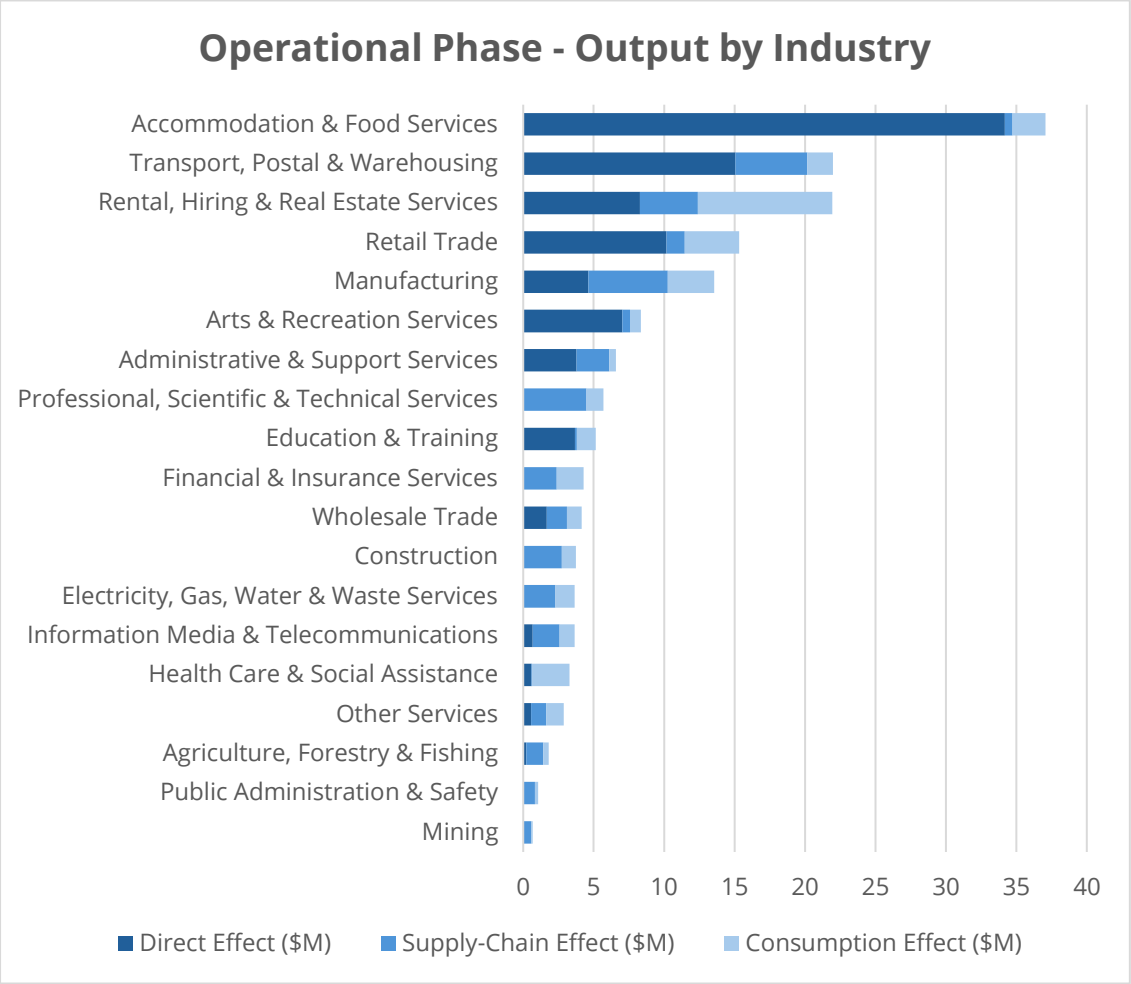


Impact on Output

The direct impact of output has been calculated through the additional visitor expected and applying that to the expenditure per visitor dollar. An output of $90.5 million is expected to be injected into the local each year. A further $74.3 million is expected to be felt through the flow-on effects annually, for a total impact to output of $164.8 million.

The accommodation and food service industry are expected to have the greatest impact with 35.1 million in output ($32.2 million directly, and $2.9 million through flow-on effects). A breakdown of the industry output is broken in Figure 6.

Figure 6

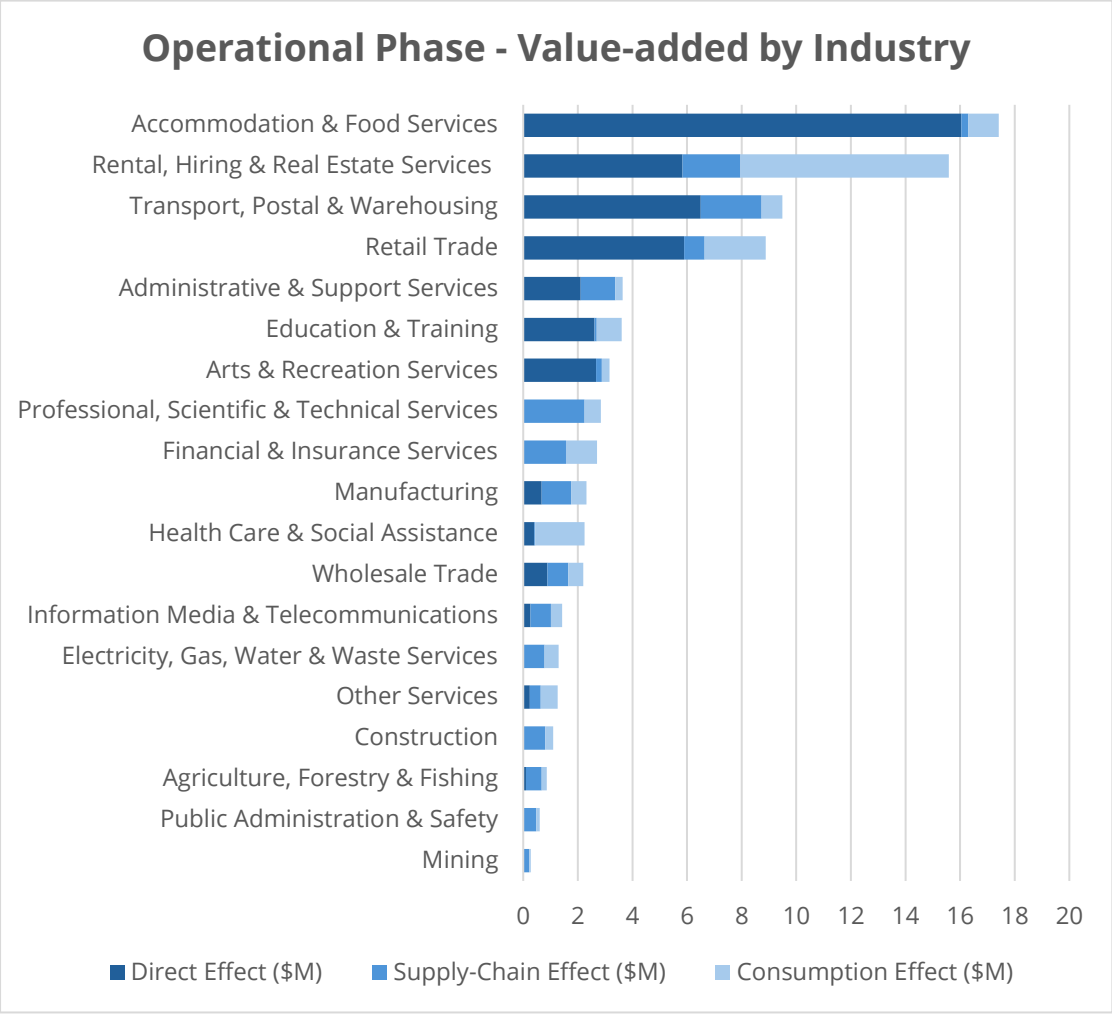


Impact on Value-added

The value-add of each industry across the operational phase will add to the gross regional product. Annually the Circuit Breaker project is expected to contribute an additional $164.8 million to the gross regional product (GRP). $90.5 million of value-adding activity is expected to be through direct effects, with a further $74.3 million through flow-on effects.

Similarly to the other impacts, the accommodation and food service industry has the greatest impact, with $17.4 million in value-added activities of which $16 million is direct, and $1.4 million through flow-on effects.

Figure 7



Overall Impact Summary of Operational Phase

The development of the circuit breaker project is expected to create the following benefits annually:

- Output: The operation of the project is expected to provide $164.8 million in economic activity annually, of which $90.5 million is direct, and $74.3 million through flow-on effects.
- Employment: The project will support 715 ongoing jobs, of which 500 are direct, and 215 through flow-on effects.
- Wages and Salaries: With the additional employment required for the project a total of $42.7 million of wages and salaries would be provided each year, of which $25.9 million would be direct, and $16.8 million through flow-on effects.
- Value-added: The operations of the project will provide an $80.9 million of value adding activity in the economy, which supports the growth in the GRP. $44.2 million through direct effects, and a further $36.7 million through flow-on effects.

Impact Summary	Direct Effect	Supply-Chain Effect	Consumption Effect	Total Effect	Type 1 Multiplier	Type 2 Multiplier
Output ($M)	$90.539	$38.655	$35.604	$164.798	1.427	1.820
Employment (Jobs)	500	103	112	715	1.206	1.430
Wages and Salaries ($M)	$25.852	$8.834	$7.968	$42.654	1.342	1.650
Value-added ($M)	$44.234	$16.617	$20.044	$80.895	1.376	1.829

Other Benefits during the Operational Phase

Outside of the economic benefits across the construction phases, the development of the Circuit Breaker project is expected to benefit the region by, but not limited to:

- Additional supply of visitor rooms to meet growing demand from visitation.
- The development will expand on region's portfolio of tourism assets, strengthening its appeal as a visitor destination.
- Development of underutilised land at an entrance area of the region.
- The beach club and waterpark will provide new recreation opportunities for residents of the surrounding community.

Conclusion

Through the input-output modelling and the incorporation of data from sources such as the ABS, TRA and research reports, an assessment has been provided of the evaluation of the significant economic benefits the Circuit Breaker project will generate for the Townsville region both during construction and in the ongoing operational phase. By modelling the flow of expenditures across sectors and the resulting multiplier impacts, it is clear the development will be a major driver of regional economic activity, productivity, and employment. Over the two-year construction period alone, impacts will include over $569 million in total output, support for nearly 1200 jobs, and adding nearly $200 million in value-add to the GRP. Once operational, annual impacts of $165 million in economic output, support for 715 continuing jobs, and $80 million in value-add further reinforce how the project will meaningfully contribute to achieving the strategic tourism and development goals for North Queensland.

Economic Estimates and Impact Modelling Assumptions

REMPLAN incorporates an input–output methodology and the underlying assumptions of this approach need to be kept clearly in mind. The

assumptions are listed below:

1. **Fixed production coefficients.** That is to say that if we wanted to double output of a particular industry sector, we would have to double all of its inputs with no evidence of scale economies. This assumption implies constant returns to scale.

2. **Regional performance matches national and state average performance.** While this can vary between industries these differences are usually apparent in other aspects of the economy.

3. **Input proportions will remain the same and there will be no change in technology.** As long as the model is kept up to date this latter concern should not pose a threat to its effectiveness, except as a tool for long-term forecasting.

4. **Homogeneity among industries**. It is assumed that each industry sector produces a fixed set of products that are not produced by any other sector. It is however possible to have some overlap e.g. liquor sold in bottle shops (the Retail sector) and in cafes (the Accommodation, Cafes and Restaurants sector).

5. **No supply constraints**. It is assumed that the intermediate and household sectors are able to service any increases in final demand. This assumption could weaken the predictive capacity of the model in those cases where increases in overall demand could bring about input shortages and raise their prices in the short term. However, in most day-to-day cases increased input demand should not present a problem.

Disclaimer

All figures, data and commentary presented in this report are based on data sourced from the Australian Bureau of Statistics (ABS), most of which relates to the 2021, 2016, 2011, 2006 and 2001 Censuses.

Using ABS datasets and an input / output methodology industrial economic data estimates for defined geographic regions are generated.

This report is provided in good faith with every effort made to provide accurate data and apply comprehensive knowledge. However, REMPLAN does not guarantee the accuracy of data nor the conclusions drawn from this information. A decision to pursue any action in any way related to the figures, data and commentary presented in this report is wholly the responsibility of the party concerned. REMPLAN advises any party to conduct detailed feasibility studies and seek professional advice before proceeding with any such action and accept no responsibility for the consequences of pursuing any such action.

Appendix