
COOROY HINTERLAND PLAYGROUND ECONOMIC AND FINANCIAL ANALYSIS

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EXECUTIVE SUMMARY

BACKGROUND

Noosa Shire Council (Council) is proposing to develop the Cooroy Hinterland Playground to fulfil a longstanding vision for an iconic, nature-based, all-abilities playground in Cooroy that encourages engagement with the environment, inspires the imagination of children and adults alike, and provides a signature destination for both local residents and tourists visiting the Cooroy hinterland.

Key elements will include entry statements, a waterplay area inclusive of plant room and water tank storage infrastructure, a climbing area with a double flying fox linkage across the existing creek, open green space, barbeque and picnic structures and more.

This report has been developed to as part of a submission to Queensland Government's Local Government Grants and Subsidies Program to identify the community and economic need for the project, the jobs that will be supported as well as the financial capacity and capability for Council to deliver the project in addition to maintaining the project into the future.

NEED FOR THE PROJECT

Cooroy is growing and evolving rapidly, and the town centre is changing its retail mix and becoming a destination for visitors. The influx of residents and visitors has placed pressure on infrastructure to keep pace, and issues such as traffic congestion, parking availability and loss of amenity for residents have been experienced.

The shortage of significant playground and park facilities in Cooroy and the hinterland provides the opportunity to enhance the region's facilities for both residents and visitors with the proposed iconic playground, which will link and reactivate key facilities and tourist attractions in Cooroy such as the Old Mill cultural heritage area and the Cooroy Library. The playground will also provide sufficient car parking spaces to accommodate users and visitors to the area.

The Cooroy Hinterland Playground will represent an important recreation and destination node to meet the needs of the growing Cooroy hinterland area, while also supporting ongoing growth for the region. It will act as a drawcard for local Noosa residents and visitors alike and will support local businesses and the continued evolution of the Cooroy town centre.

ECONOMIC / SOCIAL BENEFITS AND JOBS SUPPORTED

The project will not only benefit the local economy from direct spend on construction and ongoing maintenance of \$0.25 million per annum but will also facilitate increased facility usage and visitation from both within and outside of the Noosa LGA which could result in additional resident and visitor expenditure within the Noosa LGA estimated at \$1.2 million per annum. It is estimated that 28 full time equivalent (FTE) jobs could be generated over the duration of construction, with 17 FTE jobs expected as a result of ongoing operational and visitor spend impacts with 11 FTE jobs being direct and 6 FTE jobs being from flow-on effects.

As well as the jobs created through construction and operation of the playground and associated additional resident and visitor spend, there are additional social and health benefits that may occur as a result of the playground. These include the benefits associated with passive and active recreational activities including both mental and physical health benefits, as well as amenity and property value benefits for residents. Communities will be brought together in this outdoor green 'social hub' and are encouraged to participate in active and passive recreation through many diverse activities and play elements. The physical, psychological, social and spiritual aspects of such an iconic nature-based playground provide considerable social and health benefits for both the mind and body.

The project is consistent with the State Government objectives of contributing to building safe, connected and liveable communities, in addition to contributing to economic growth and employment in local communities.

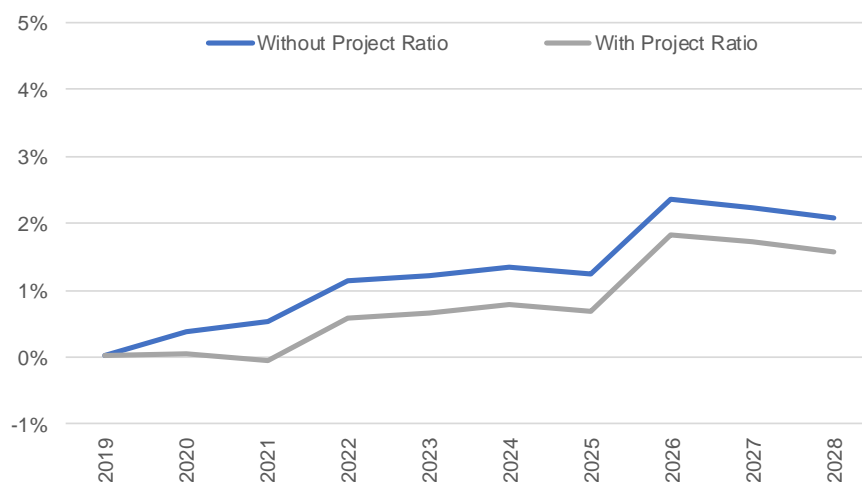
FINANCIAL CAPACITY AND CAPABILITY

The cost of the Cooroy Hinterland Playground is \$4.977 million, to be funded by a 60% contribution from the Local Government Grants and Subsidies Program (\$2.986 million) and the residual from Council (\$1.991 million). Council has an approved capital budget of \$1.25 million to establish the project prior to June 2019, with the remainder of its residual funding requirement included in its 2019/20 financial forecast. Council anticipates funding its contribution via debt with a repayment term of 20 years. The assumed grant/subsidy portion of the project funding is not incorporated into Council's long-term financial forecasts, and if Council is not able to secure grant/subsidy funding there is a risk the project will be significantly delayed or not proceed.

Council understands that the Cooroy Hinterland Playground is not a commercial venture, but rather constitutes the provision of recreational facilities to meet the needs of local residents in addition to attracting recreational users from other areas outside of the Noosa LGA to further support the local economy and enhance local business growth and job opportunities. As such, Council understands that it will need to fund the initial construction of the project – net of available grants/subsidies – and ongoing operational and maintenance costs from its general fund.

Without the proposed project, Council has budgeted for a small operating surplus in 2018/19, with the extent of the surplus expected to grow gradually to just above 2% over the next decade. The following figure shows the impact of the proposed project on Council's Operating Surplus Ratio over the next 10 years assuming a 60% contribution from the Local Government Grants and Subsidies Program. While the project reduces the extent of Council's surplus over the period, the ratio remains financially sustainable without the need for additional increases in the general rate beyond the modest increases already proposed by Council in the absence of the project. Further, Council's Net Financial Liabilities Ratio is only slightly reduced as a result of the additional debt drawn down to fund the project after grant/subsidy contributions, with the ratio remaining in negative territory and well below the upper threshold of 60%.

Figure E.1. Impact of the Project on Council's Operating Surplus Ratio



Source: AEC.

This iconic project is investment ready with land available, residual Council funds (after grants/subsidies) available for construction and is sufficiently progressed to ensure it can begin construction from no later than mid 2019. Council has in place resourcing capacity, financial capacity and a program of delivery for the project that will ensure completion of construction well in advance of 30 June 2021. Council has an established procurement policy that will also ensure that the project delivers value for money for the local community, with Council's Infrastructure Services Directorate responsible for project delivery and ongoing operations and maintenance.

Council's current asset base is valued at \$1.101 billion in replacement cost terms and the investment in the Cooroy Hinterland Playground represents just 0.45% of this value. Council fully understands the additional whole of life costs that will be incurred as part of the project and the implications of the project on its long-term financial forecast.

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1. INTRODUCTION

Landscape architects have been engaged by Noosa Shire Council to fulfil a longstanding vision for an iconic playground in Cooroy. The Cooroy Hinterland Playground will be an iconic, nature-based, all-abilities playground that encourages engagement with the environment, inspires the imagination of children and adults alike, and provides a signature destination for both local residents and tourists visiting the Cooroy hinterland.

The site will be approximately 7,000m² and is located adjacent to the Cooroy Library carpark. The land borders the North of the Cooroy Creek as well as the Old Mill cultural heritage area, which is linked by the existing footpath and boxed-culvert pedestrian bridge.

Key elements will be included in the playground design, including entry statements, a waterplay area inclusive of plant room and water tank storage infrastructure, a climbing area with a double flying fox linkage across the existing creek, open green space, barbeque and picnic structures and more. Playground design has been specifically guided by the Noosa Design Principles, which outlines Council's preferred design solutions across the shire.

This report has been developed as part of a submission to Queensland Government's Local Government Grants and Subsidies Program and aims to identify the community and economic need for the project, the full-time equivalent jobs that will be supported as well as the lifecycle costs of the project and financial implications on Council's financial sustainability.

Input-Output modelling has been used in this study to assess the economic impacts of the Cooroy Hinterland Playground during construction and once operational. The financial assessment has used the forward financial projections of Council to determine the extent of impact on Council's ongoing financial sustainability from the project and Council's capacity to deliver the project.

2. PROJECT DESCRIPTION AND NEED

2.1 OVERVIEW OF THE PROJECT

The Cooroy Hinterland Playground will create a key location for community integration and facilities located on the corner of Maple Street and Marara Street. The site will be approximately 7,000m² and is located adjacent to the Cooroy Library carpark. The land borders the North of the Cooroy Creek as well as the Old Mill cultural heritage area, which is linked by the existing footpath and boxed-culvert pedestrian bridge. Skate bowls and BMX tracks are also located close to the playground, linking community gathering locations.

Figure 2.1 shows the proximity of the Cooroy Hinterland Playground to other key infrastructure within a 5-minute and 10-minute walking radius.

Figure 2.1. Site Location and Context



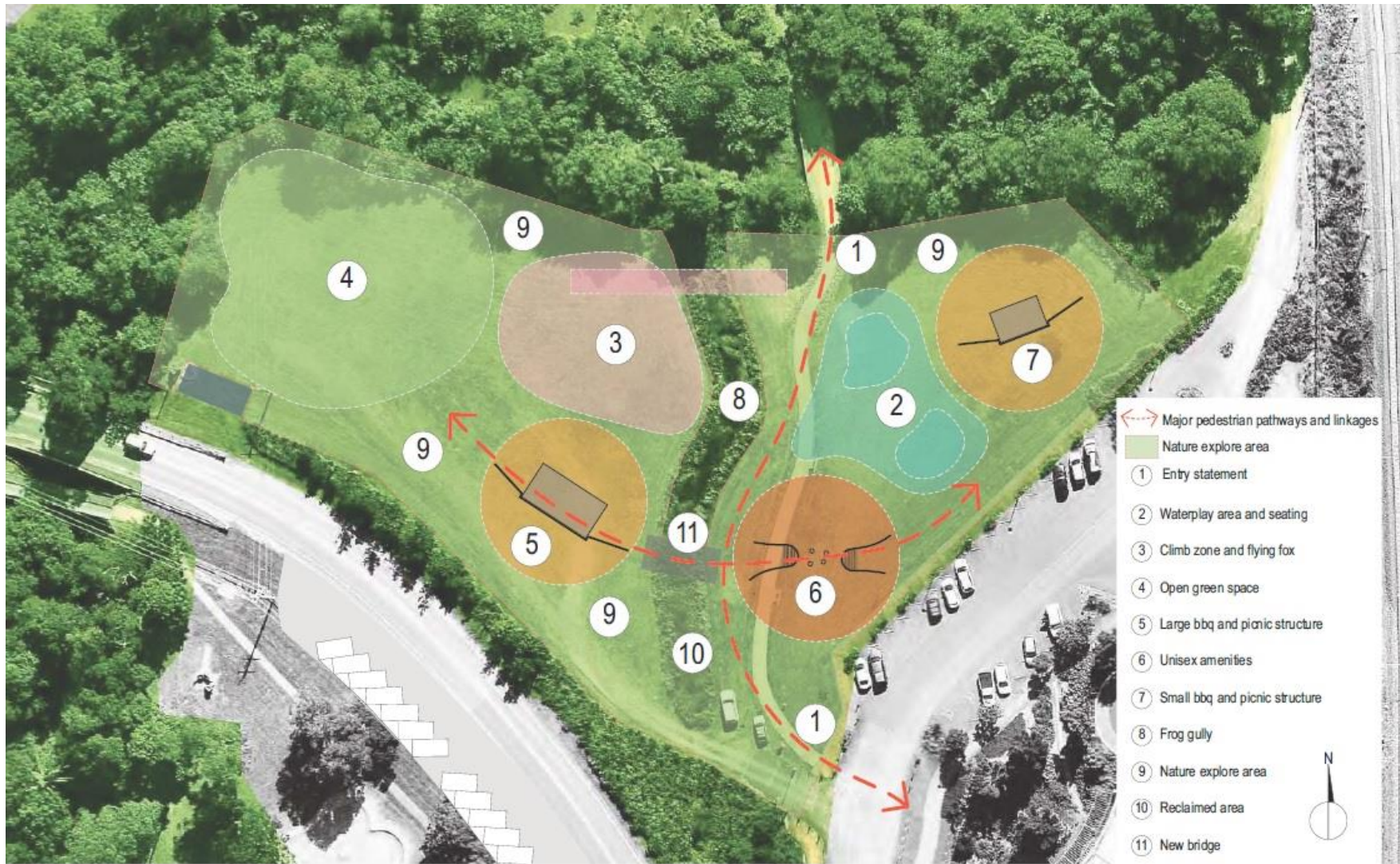
Source: Form Landscape Architects, Robinson Architects Noosa Shire Council (2018a).

The following key elements will be included in the playground design:

- Waterplay area
- Climb zone and flying fox
- Large and small barbeque areas
- Picnic area
- Frog pong/ gully
- Log and rope traversing area
- Sand pit
- Open green space (kick and throw/ picnic lawn)
- Nature explore area
- Bridge
- Rock stacking zone
- Fire pit
- Local artwork

Designs outlining the location of key elements of the proposed project are provided in Figure 2.2 and Figure 2.3.

Figure 2.2. Playground Structure and Locations



Source: Form Landscape Architects, Robinson Architects Noosa Shire Council (2018a).

Figure 2.3. Integrated Landscape Masterplan



Source: Form Landscape Architects, Robinson Architects Noosa Shire Council (2018a).

2.2 PROJECT COSTS

2.2.1 Construction Cost

The construction cost of the proposed playground and associated carpark is estimated at \$4.98 million.

2.2.2 Ongoing Operating/ Maintenance Costs

Once completed, the playground will require maintenance of its facilities and equipment and estimated annual costs are outlined in the following table.

Table 2.1. Ongoing Annual Operating and Maintenance Costs

Maintenance	Cost
Vehicle	\$2,873
Contracted services	\$84,400
Maintenance, renewal and replacement	\$115,348
Other	\$46,766
Total	\$249,387

Source: Noosa Shire Council (2018).

2.3 NEED FOR THE PROJECT

Cooroy is growing and evolving rapidly. Cooroy State Suburb has seen average annual population growth of 1.8% from 2011 to 2016 according to the Census of Population and Housing (ABS, 2017a). This is faster than the growth that Noosa LGA has seen over the same period, growing at an average annual rate of 1.1%. Noosa hinterland SA2 also has grown faster than the LGA at 1.2% annually (ABS, 2017a, ABS 2018b). The rapid growth has seen the town centre changing its retail mix and becoming a destination for visitors. The influx of residents, as well as visitors, has placed increased pressure on infrastructure to keep pace, and issues such as traffic congestion, parking availability and loss of amenity for residents have been experienced (Noosa News, 2017).

With the evolution of the town taking place, it is important that infrastructure and facilities keep pace to residents and visitors with a variety of high-quality activities to do in the town and ensure amenity and recreation requirements are met. The shortage of significant playground and park facilities in Cooroy and the hinterland provides the opportunity to enhance the region's facilities with the Cooroy Hinterland Playground. The playground will provide an iconic destination for Noosa Shire residents as well as tourists, in addition to linking key facilities and tourist attractions in Cooroy such as the Old Mill cultural heritage area and the Cooroy Library. In fact, a specific project outcome for Council is to reactivate engagement with the Lower Mill area which is currently underutilised.

The playground will also provide sufficient car parking spaces to accommodate users and support the car parking needs of the growing Cooroy township.

The Cooroy Hinterland Playground will represent an important recreation and destination node to meet the needs of the growing Cooroy hinterland area, while also supporting ongoing growth for the region. It will act as a drawcard for local Noosa residents and visitors alike and will support local businesses and the continued evolution of the Cooroy town centre.

2.4 POTENTIAL SOCIO-ECONOMIC BENEFITS

Communities will be brought together in this outdoor green 'social hub' and are encouraged to participate in active and passive recreation through many diverse activities and play elements. The physical, psychological, social and spiritual aspects of such an iconic nature-based playground provide considerable social and health benefits for both the mind and body.

The playground has been designed to encourage use through protecting and enhancing the environment, as well as promoting cultural and heritage values and assist with place-making through the construction of special attributes in the area. The area is adaptable and caters for multiple uses and types of activities. The playground

has been designed in such a manner to be used by people of all ages and abilities with a diverse range of play and leisure elements, enabling it to act as a community facility that can be enjoyed by all.

The Cooroy Hinterland Playground will create both passive and active recreational activities for the community to enjoy. Passive recreational activities including wildlife viewing and bird watching, picnics, barbeques or photography can be enjoyed in the playground. Active recreational activities such as walking, running, playing on the playground or climbing generates health benefits to those utilising the playground. Active recreation leads to better health and wellbeing whilst helping to reduce obesity. By residents being active and healthy, businesses benefit as their employees won't have as many sick days, whilst also benefitting the health care system (DoLGSCI, 2018).

Recreational activities also have mental health benefits to members of the community. Being close and involved in nature has been shown to reduce mental fatigue and hence reduce the amount of aggression and violence (Frances *et al*, 2001). With recreational activities often brings social interaction which benefits both adults and children alike, creating a location to meet new and old friends.

The Cooroy Hinterland Playground is expected to increase visitation from both locals and non-locals coming to the region. With a maximum capacity of the playground estimated to be 176 adults and 236 children there are significant opportunities and areas for visitors to attend the playground. These visitors are likely to spend at local shops and businesses creating an economic benefit to flow through the economy. Estimated visitor spend in the economy is analysed in section 3.3.2.

Property prices located near green amenities have been found to be higher than those located further away (Crompton, 2001). The iconic nature of the Cooroy Hinterland Playground, and its anticipated capacity to improve amenity in the region and act as a significant drawcard for locals and visitors alike, can be expected to increase demand for property and thereby prices in the local area (for both residences and businesses). As properties located close to green amenities become more expensive, this will lead to higher rates being able to be charged by Council and therefore able to provide more services to the community.

3. ECONOMIC IMPACT ASSESSMENT

3.1 APPROACH

Modelling in this section estimates the economic activity supported by construction and operation of the project. Input-Output modelling is used to examine the direct and flow-on¹ activity expected to be supported within the regional economy. A description of the Input-Output modelling framework used is provided in Appendix A.

Input-output modelling in this report describes economic activity by examining four types of impacts:

- **Output:** Refers to the gross value of goods and services transacted, including the costs of goods and services used in the development and provision of the final product. Output typically overstates the economic impacts as it counts all goods and services used in one stage of production as an input to later stages of production, hence counting their contribution more than once.
- **Gross product:** Refers to the value of output after deducting the cost of goods and services inputs in the production process. Gross product (e.g. Gross Regional Product) defines a true net economic contribution and is subsequently the preferred measure for assessing economic impacts.
- **Income:** Measures the level of wages and salaries paid to employees of the industry under consideration and to other industries benefiting from the project.
- **Employment:** Refers to the part-time and full-time employment positions generated by the economic stimulus, both directly and indirectly through flow-on activity, expressed in full-time equivalent (FTE) positions².

3.2 GEOGRAPHIC SCOPE

This assessment examines the economic impacts to the Noosa Local Government Area (LGA).

3.3 MODEL DRIVERS

3.3.1 Construction Phase

The Cooroy Hinterland Playground has construction estimated at a total cost of \$4.98 million.

For modelling purposes, construction costs were broken down into their respective Australian and New Zealand Standard Industrial Classification (ANZSIC) industries. This breakdown was developed based on assumptions by AEC regarding the most appropriate ANZSIC industries for each activity, and the relevant proportion of expenditure to be allocated to each industry. The percent of jobs that is expected to be sourced locally has been estimated and is shown in Table 3.1.

Table 3.1. Capital Costs

IO Industry	Cost (\$M)	Sourced from Noosa LGA
Construction Services	\$3.00	85%
Fabricated Metal Product Manufacturing	\$0.11	10%
Heavy and Civil Engineering Construction	\$0.48	85%
Professional, Scientific and Technical Services	\$0.24	25%
Heritage, Creative and Performing Arts	\$0.17	50%
Other Agriculture	\$0.20	80%
Non-Residential Building Construction	\$0.22	80%

¹ Both Type I and Type II flow-on impacts have been presented in this report. Refer to Appendix A for a description of each type of flow-on impact.

² Where one FTE is equivalent to one person working full time for a period of one year.

IO Industry	Cost (\$M)	Sourced from Noosa LGA
Furniture Manufacturing	\$0.02	50%
Other Manufactured Products	\$0.53	50%
Road Transport	\$0.00	50%
Total	\$4.98	

Note: Totals may not sum due to rounding.
Source: AEC, Noosa Shire Council (2018)

3.3.2 Operational Phase

3.3.2.1 Ongoing Operational and Maintenance Costs of the Playground

Inspections of the playground site will be paid out directly as wages and salaries to employees of the Noosa Shire Council. As there is no additional output except salaries paid to employees, there will be no Type I flow-on impacts due to no additional spending on goods and services. Most economic impacts from staff inspections will be through Type II flow-on impacts representing the consumption induced from additional household income. Economic impacts for inspection of the playground have been modelled using the construction services ANZSIC industry.

Council has indicated that it intends to contract out some maintenance elements to local businesses in the Cooroy area, in particular the water play infrastructure as currently occurs at the Tewanin Splash Park. Maintenance costs of the Cooroy Hinterland Playground were split into their respective ANZSIC industries depending on the type of activity undertaken. This breakdown was developed based on assumptions by AEC regarding the most appropriate ANZSIC industries for each activity, and the relevant proportion of expenditure to be allocated to each industry. A split of expenses by ANZSIC industry can be found in Table 3.2 with **annual operating expenses are expected to be almost \$250,000.**

Table 3.2. Maintenance Costs by Industry

IO Industry	Cost (\$)
Building Cleaning, Pest Control and Other Support Services	\$46,350
Public Order, Safety and Regulatory Services	\$18,250
Water Supply, Sewerage and Drainage Services	\$9,834
Construction Services	\$75,385
Construction Services – Staff Costs	\$77,063
Insurance and Superannuation Funds	\$5,000
Professional, Scientific and Technical Services	\$11,700
Electricity Transmission, Distribution, On Selling and Electricity Market Operation	\$2,932
Retail Trade	\$2,873
Total	\$249,387

Source: AEC, Noosa Shire Council (2018).

3.3.2.2 Increased Visitor Spend in the Noosa Economy

Maximum capacity of the playground is estimated to be 176 adults and 236 children (Form Landscape Architects, Robinson Architects Noosa Shire Council (2018b) with weekday demand estimated to average 10% of maximum capacity twice per day. Public holidays, school holidays and weekend capacity utilisations are estimated to average 33% of maximum capacity three times per day. With 195 weekdays and 170 public holidays, school holidays or weekends during the year, it can be assumed that there will be 86,108 visitors to the playground in year, comprising of 36,784 adults and 49,324 children.

Visitor splits between locals and non-locals have been split with 70% expected to be local residents and 30% expected to be visitors to the Noosa LGA.

- Locals:
 - Locals that would already visit an alternative playground – 45,207 people.
 - Locals that would not go to a playground if not for the Cooroy Hinterland Playground – 15,069 people.

- Non-Locals:
 - Induced non-locals, i.e. visitors that are brought to the area directly because of the Cooroy Hinterland Playground – 6,458 people.
 - Not induced non-locals, i.e. visitors that have already come to the area but spend additional time at the Cooroy Hinterland Playground as a result of its existence – 19,374 people.

Not induced non-locals and *locals specifically visiting the playground* have been assumed to spend an extra \$10 above what they would normally spend in the Council area. *Locals that would already visit an alternative playground* are not assumed to increase their spend. The spending is assumed to be split between food and beverage services and retail trade at 75% and 25% respectively, with the total provided in Table 3.3.

Table 3.3. Additional Spend from Locals and Not Induced Non-Locals by Industry

Industry	Spend \$M
Food and Beverage Services	\$0.258
Retail Trade	\$0.086
Total	\$0.344

Source (AEC).

On top of the additional spend from not induced non-locals and locals specifically visiting the playground, there will be additional spend from *induced non-locals visiting the Council area due to the existence of the playground*. In order to estimate this additional spend, data from Tourism Research Australia (TRA) was used to estimate visitor spend for those visiting a National Park or State Park. TRA data was also used to calculate the ratio between domestic day trippers visiting a National/ State Park and domestic overnight visitors undertaking the same activity to estimate spending habits of the two visitor types which were identified as \$87 per person for a day trip visitor and \$163 per person for a domestic overnight visitor.

National average splits of expenditure by item for each visitor type in 2017-18 were used to estimate the Input-Output industries impacted by additional visitor expenditure (TRA, 2018). In developing these estimates, some expenditure items at the national level were excluded from estimates of local expenditure as it is unlikely they would be purchased with the regional economy visited, in particular on travel expenses (e.g. airfares, other long distance travel, and/ or some car expenses).

Table 3.4 outlines the percent splits of expenditure across relevant Input-Output industries used in this study, with Table 3.5 outlining estimated induced visitor expenditure in the Noosa LGA as a result of the Cooroy Hinterland Playground.

Table 3.4. Breakdown of Expenditure per Induced Visitor by Industry

Industry	Day Trip	Domestic Overnight
Water, Pipeline and Other Transport	0.5%	7.4%
Rental and Hiring Services (except Real Estate)	1.0%	3.2%
Retail Trade	55.3%	33.1%
Road Transport	2.3%	2.1%
Accommodation	0.0%	30.8%
Food and Beverage Services	32.3%	17.9%
Heritage, Creative and Performing Arts	7.2%	4.8%
Gambling	0.0%	0.2%
Technical, Vocational and Tertiary Education Services	0.0%	0.2%
Arts, Sports, Adult and Other Education Services	0.0%	0.0%
Postal and Courier Pick-up and Delivery Service	0.7%	0.2%
Personal Services	0.7%	0.2%
Total	100.0%	100.0%

Source: TRA (2018), TEQ (2018), AEC.

Table 3.5. Estimated Induced Visitor Spend by Industry (\$M)

Industry	Day Trip	Domestic Overnight	Total
Water, Pipeline and Other Transport	\$0.001	\$0.047	\$0.048
Rental and Hiring Services (except Real Estate)	\$0.002	\$0.020	\$0.022
Retail Trade	\$0.123	\$0.210	\$0.333
Road Transport	\$0.005	\$0.013	\$0.018
Accommodation	\$0.000	\$0.195	\$0.195
Food and Beverage Services	\$0.072	\$0.114	\$0.185
Heritage, Creative and Performing Arts	\$0.016	\$0.031	\$0.046
Gambling	\$0.000	\$0.001	\$0.001
Technical, Vocational and Tertiary Education Services	\$0.000	\$0.001	\$0.001
Arts, Sports, Adult and Other Education Services	\$0.000	\$0.000	\$0.000
Postal and Courier Pick-up and Delivery Service	\$0.002	\$0.001	\$0.003
Personal Services	\$0.002	\$0.001	\$0.003
Total	\$0.222	\$0.634	\$0.857

Source: Form Landscape Architects, Robinson Architects Noosa Shire Council (2018b), TRA (2018), TEQ (2018), AEC.

Combined, additional spend in the Noosa LGA as a result of the playground from locals and not induced non-locals (\$0.344 million) and induced non-locals (\$0.857m) is estimated to total \$1.201 million per annum.

3.4 MODEL RESULTS

3.4.1 Summary of Job Impacts

A summary of the full-time equivalent jobs that will be created as a result of the project are found below.

Table 3.6. Summary of FTE Jobs Created

Activity	Direct FTE	Flow-on FTE	Total FTE
Construction (temporary)	12	17	28
Operations (permanent)	11	6	17
Total	23	23	45

Note: Totals may not sum due to rounding.

Source: AEC.

Additional details regarding the results of the impact assessment modelling are presented in the following sections.

3.4.2 Construction

Economic impacts caused through the construction of the Cooroy Hinterland Playground are expected to support:

- \$8.3 million in industry output (including \$3.7 million directly).
- \$3.8 million in GRP (including \$1.3 million directly).
- \$1.9 million in wages and salaries (including \$0.7 million directly).
- 28 FTE jobs (including 12 directly).

A summary of economic activity supported in the local economy by the project in aggregate during construction is provided in the table below.

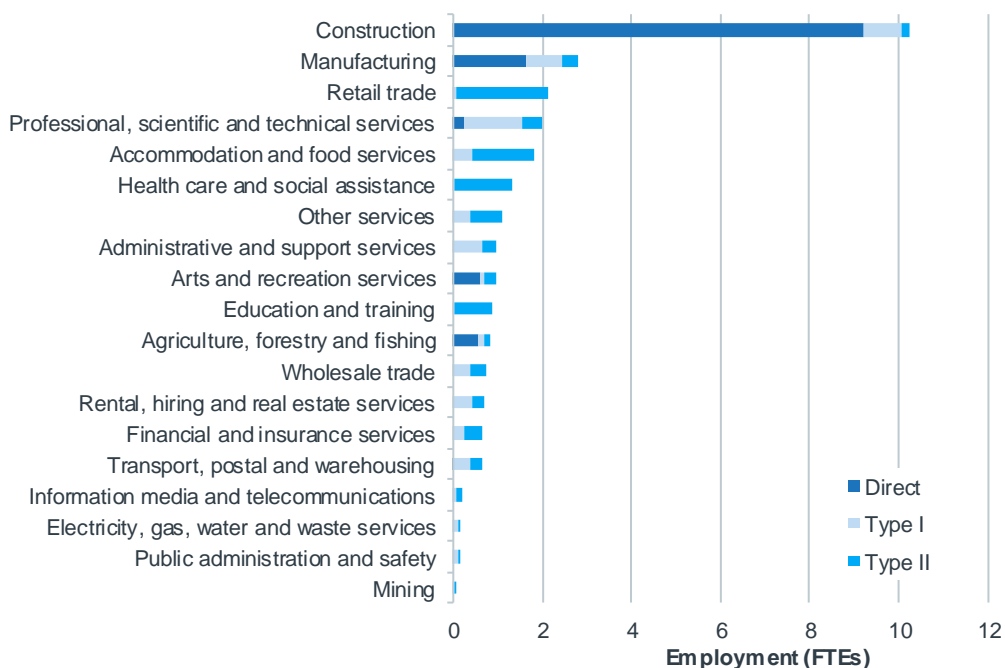
Table 3.7. Economic Activity Supported by Construction

Impact	Output (\$M)	GRP (\$M)	Incomes (\$M)	Employment (FTEs)
Direct	\$3.7	\$1.3	\$0.7	12
Type I Flow-On	\$2.0	\$0.9	\$0.5	7
Type II Flow-On	\$2.6	\$1.5	\$0.7	10
Total	\$8.3	\$3.8	\$1.9	28

Source: AEC.

A breakdown of FTE by industry is shown in Figure 3.1.

Figure 3.1. FTE by Industry from Construction Impacts



Source: AEC.

3.4.3 Operations

Economic impacts associated with maintenance and operating costs as well as visitor expenditure in the region are expected to support:

- \$3.3 million in industry output (including \$1.5 million directly).
- \$1.8 million in GRP (including \$0.8 million directly).
- \$1.0 million in wages and salaries (including \$0.5 million directly).
- 17 FTE jobs (including 11 directly).

A summary of economic activity supported in the local economy by the operations of the playground is provided in the following table.

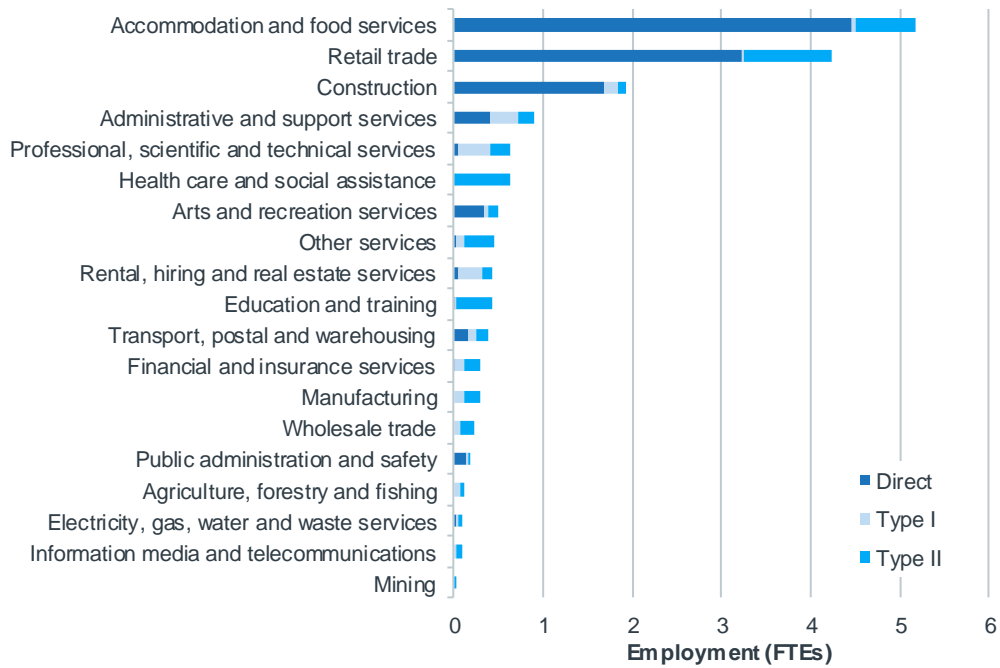
Table 3.8. Economic Activity Supported by Operations (Annually)

Impact	Output (\$M)	GRP (\$M)	Incomes (\$M)	Employment (FTEs)
Direct	\$1.5	\$0.8	\$0.5	11
Type I Flow-On	\$0.6	\$0.3	\$0.2	2
Type II Flow-On	\$1.2	\$0.7	\$0.3	5
Total	\$3.3	\$1.8	\$1.0	17

Note: Totals may not sum due to rounding.
Source: AEC.

A breakdown of FTE by industry is shown in Figure 3.2

Figure 3.2. FTE Supported by Industry, Operations (2023)



Source: AEC.

4. FINANCIAL ANALYSIS

4.1 METHOD OF COST RECOVERY

The Cooroy Hinterland Playground is not a commercial venture, but rather constitutes the provision of recreational facilities to meet the needs of local residents in addition to attracting recreational users from other areas outside of the Noosa LGA to further support the local economy and enhance local business growth and job opportunities. As such, Council understands that there will be no user pays fees and charges revenue available to recover project costs and that it will need to fund the initial construction of the project – net of available grants/subsidies – and ongoing operational and maintenance costs from its general fund. Council's Infrastructure Services Directorate will be responsible for the delivery of the project and its ongoing operations and maintenance.

4.2 CAPITAL FUNDING

The proposed playground has construction estimated at a total cost of \$4.977 million. Council wishes to apply for 60% of the project through the Local Government Grants and Subsidies Program, equating to \$2.986 million. Council will fund the remainder of the project, being \$1.991 million.

Council a capital budget of \$1.25 million to begin to establish the project prior to June 2019 and the remainder of its funding requirement excluding grants/subsidies in 2019/20. Council anticipates to fund its contribution to the project via debt funding with a repayment term of 20 years.

The remainder of the project funding requirement – equal to the extent of funding requested via the Local Government Grants and Subsidies Program – is not yet incorporated into long-term financial forecasts, and as such should Council not be successful in securing grant/subsidy funding there is a risk the project will be delayed or not proceed. However, with the support of grant/subsidy funds through the Local Government Grants and Subsidies Program, Council has adequate capital funding available to construct the project for the benefit of the community well before the required operational timeframe of 30 June 2021.

4.3 PROJECT FINANCIALS

The table on the following page outlines the projected financial summary for the project. With no revenue generation capacity, the project achieves an operating deficit on an annual basis which needs to be funded through Council general rates. The Net Present Value (NPV) of the deficit over the next 20 years is estimated at \$8.844 million without any grants and subsidies and \$5.935 million with a 60% contribution to capital costs from the Local Government Grants and Subsidies Program, using a social discount rate equal to Council's debt rate.

Table 4.1. Cooroy Hinterland Playground Project Financial Summary

Project Financials (\$'000)	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Project Capital Funding										
Capital Cost	\$ 1,250	\$ 3,727	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Grant/Subsidy Funding	\$ 750	\$ 2,236	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Debt Funding	\$ 500	\$ 1,491	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Equity Funding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Average Useful Life of Capital in Year	20	20	-	-	-	-	-	-	-	-
Project Operating Statement										
Operating Revenue	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Operating Expenses	\$ -	\$ 330	\$ 575	\$ 583	\$ 590	\$ 598	\$ 606	\$ 614	\$ 622	\$ 631
Labour, Materials and Services Costs	\$ -	\$ 249	\$ 254	\$ 259	\$ 265	\$ 270	\$ 275	\$ 281	\$ 286	\$ 292
Interest Expense	\$ -	\$ 18	\$ 71	\$ 68	\$ 66	\$ 63	\$ 60	\$ 57	\$ 54	\$ 51
Depreciation Charges	\$ -	\$ 63	\$ 250	\$ 255	\$ 260	\$ 265	\$ 271	\$ 276	\$ 282	\$ 287
Operating Surplus/(Deficit)	\$ -	\$ (330)	\$ (575)	\$ (583)	\$ (590)	\$ (598)	\$ (606)	\$ (614)	\$ (622)	\$ (631)
Project Cash Flows										
Capital Cost	\$ (1,250)	\$ (3,727)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Grants/Subsidies	\$ 750	\$ 2,236	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Operating Revenue	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Operating Expenses	\$ -	\$ (330)	\$ (575)	\$ (583)	\$ (590)	\$ (598)	\$ (606)	\$ (614)	\$ (622)	\$ (631)
Adjustment for Interest Expense	\$ -	\$ 18	\$ 71	\$ 68	\$ 66	\$ 63	\$ 60	\$ 57	\$ 54	\$ 51
Adjustment for Depreciation Charges	\$ -	\$ 63	\$ 250	\$ 255	\$ 260	\$ 265	\$ 271	\$ 276	\$ 282	\$ 287
Net Cash Inflows/(Outflows)	\$ (1,250)	\$ (3,977)	\$ (254)	\$ (259)	\$ (265)	\$ (270)	\$ (275)	\$ (281)	\$ (286)	\$ (292)
20-Year NPV (exc grants/subsidies)	\$ (8,844)									
20-Year NPV of Grants/Subsidies	\$ 2,909									
20-Year NPV (net of grants/subsidies)	\$ (5,935)									
Project Financials (\$'000)	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038
Project Capital Funding										
Capital Cost	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Grant/Subsidy Funding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Debt Funding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Equity Funding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Average Useful Life of Capital in Year	-	-	-	-	-	-	-	-	-	-
Project Operating Statement										
Operating Revenue	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Operating Expenses	\$ 639	\$ 647	\$ 656	\$ 665	\$ 674	\$ 682	\$ 692	\$ 701	\$ 710	\$ 719
Labour, Materials and Services Costs	\$ 298	\$ 304	\$ 310	\$ 316	\$ 323	\$ 329	\$ 336	\$ 342	\$ 349	\$ 356
Interest Expense	\$ 48	\$ 44	\$ 41	\$ 37	\$ 34	\$ 30	\$ 26	\$ 22	\$ 17	\$ 13
Depreciation Charges	\$ 293	\$ 299	\$ 305	\$ 311	\$ 317	\$ 324	\$ 330	\$ 337	\$ 343	\$ 350
Operating Surplus/(Deficit)	\$ (639)	\$ (647)	\$ (656)	\$ (665)	\$ (674)	\$ (682)	\$ (692)	\$ (701)	\$ (710)	\$ (719)
Project Cash Flows										
Capital Cost	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Grants/Subsidies	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Operating Revenue	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Operating Expenses	\$ (639)	\$ (647)	\$ (656)	\$ (665)	\$ (674)	\$ (682)	\$ (692)	\$ (701)	\$ (710)	\$ (719)
Adjustment for Interest Expense	\$ 48	\$ 44	\$ 41	\$ 37	\$ 34	\$ 30	\$ 26	\$ 22	\$ 17	\$ 13
Adjustment for Depreciation Charges	\$ 293	\$ 299	\$ 305	\$ 311	\$ 317	\$ 324	\$ 330	\$ 337	\$ 343	\$ 350
Net Cash Inflows/(Outflows)	\$ (298)	\$ (304)	\$ (310)	\$ (316)	\$ (323)	\$ (329)	\$ (336)	\$ (342)	\$ (349)	\$ (356)

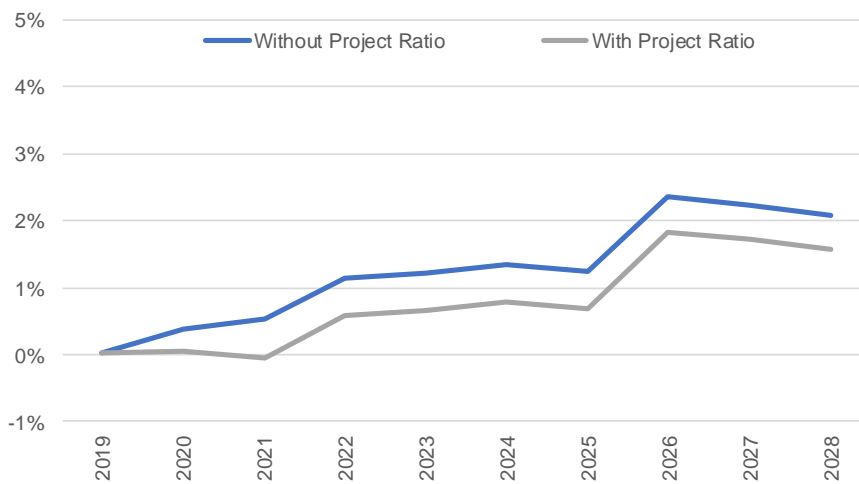
Source: AEC.

4.4 IMPLICATIONS FOR FINANCIAL SUSTAINABILITY

The operating surplus ratio measures the extent to which operating revenue covers operating expenses and is calculated as total operating revenue (excluding capital revenue) divided by total operating expenses (including depreciation and interest). The lower bound and upper bound thresholds for this financial sustainability ratio are 0% and 10%, respectively. Without the proposed project, Council has budgeted for a small operating surplus in 2018/19, with the extent of the surplus expected to grow gradually to just above 2% over the next decade.

The following figure shows the impact of the proposed project on Council's Operating Surplus Ratio over the next 10 years using existing inputs and assumptions contained within the long-term financial forecast (Queensland Treasury Corporation model). The project reduces the extent of Council's surplus over the period, but the Operating Surplus Ratio remains financially sustainable without the need for additional increases in the general rate beyond the modest increases already proposed by Council in the absence of the project. As such, Council is able to afford the ongoing operational and maintenance expenses associated with the project – assuming a 60% contribution from the Local Government Grants and Subsidies Program – without undue price shocks on the local community.

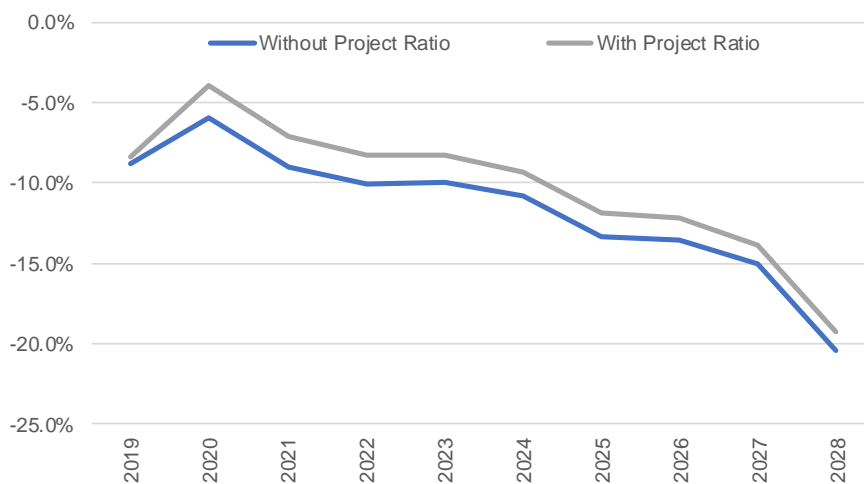
Figure 4.1. Impact of the Project on Council's Operating Surplus Ratio



Source: AEC.

The net financial liabilities ratio measures the extent to which Council can fund its liabilities through operating revenues and is calculated as total financial liabilities divided by total operating revenue. The upper threshold for this financial sustainability ratio is 60%. Council has a negative Net Financial Liabilities Ratio which is only slightly reduced as a result of the additional debt drawn down to fund the project after grant/subsidy contributions, and therefore the project does not threaten Council's future ability to borrow and fund debt servicing requirements.

Figure 4.2. Impact of the Project on Council's Net Financial Liabilities Ratio



Source: AEC.

4.5 FINANCIAL CAPACITY AND ABILITY TO DELIVER

Council has in place resourcing capacity, financial capacity and a program of delivery for the project that will ensure it is constructed well in advance of 30 June 2021. Council has an established procurement policy that will also ensure that the project is installed at a total capital cost that provides value for money for the local community.

Council's current asset base is valued at \$1.101 billion in replacement cost terms and the investment in the Cooroy Hinterland Playground represents just 0.45% of this value.

Council fully understands the additional whole of life costs that will be incurred as part of the project and the implications of the project on its long-term financial forecast.

The project is investment ready with land available, residual Council funds (after grants/subsidies) available for construction and the project well progressed to ensure it can begin to be constructed from no later than mid 2019.

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APPENDIX A: INPUT-OUTPUT METHODOLOGY

INPUT-OUTPUT MODEL OVERVIEW

Input-Output analysis demonstrates inter-industry relationships in an economy, depicting how the output of one industry is purchased by other industries, households, the government and external parties (i.e. exports), as well as expenditure on other factors of production such as labour, capital and imports. Input-Output analysis shows the direct and indirect (flow-on) effects of one sector on other sectors and the general economy. As such, Input-Output modelling can be used to demonstrate the economic contribution of a sector on the overall economy and how much the economy relies on this sector or to examine a change in final demand of any one sector and the resultant change in activity of its supporting sectors.

The economic contribution can be traced through the economic system via:

- **Direct impacts**, which are the first round of effects from direct operational expenditure on goods and services.
- **Flow-on impacts**, which comprise the second and subsequent round effects of increased purchases by suppliers in response to increased sales. Flow-on impacts can be disaggregated to:
 - **Industry Support Effects (Type I)**, which represent the production induced support activity as a result of additional expenditure by the industry experiencing the stimulus on goods and services in the intermediate usage quadrant, and subsequent round effects of increased purchases by suppliers in response to increased sales.
 - **Household Consumption Effects (Type II)**, which represent the consumption induced activity from additional household expenditure on goods and services resulting from additional wages and salaries being paid within the economic system.

These effects can be identified through the examination of four types of impacts:

- **Output:** Refers to the gross value of goods and services transacted, including the costs of goods and services used in the development and provision of the final product. Output typically overstates the economic impacts as it counts all goods and services used in one stage of production as an input to later stages of production, hence counting their contribution more than once.
- **Gross Product:** Refers to the value of output after deducting the cost of goods and services inputs in the production process. Gross product defines the true net contribution and is subsequently the preferred measure for assessing economic impacts.
- **Income:** Measures the level of wages and salaries paid to employees of the industry under consideration and to other industries benefiting from the project.
- **Employment:** Refers to the part-time and full-time employment positions generated by the economic shock, both directly and indirectly through flow-on activity, and is expressed in terms of full-time equivalent (FTE) positions.

Input-Output multipliers can be derived from open (Type I) Input-Output models or closed (Type II) models. Open models show the direct effects of spending in a particular industry as well as the indirect or flow-on (industrial support) effects of additional activities undertaken by industries increasing their activity in response to the direct spending.

Closed models re-circulate the labour income earned as a result of the initial spending through other industry and commodity groups to estimate consumption induced effects (or impacts from increased household consumption).

MODEL DEVELOPMENT

Multipliers used in this assessment are derived from sub-regional transaction tables developed specifically for this project. The process of developing a sub-regional transaction table involves developing regional estimates of gross production and purchasing patterns based on a parent table, in this case, the 2014-15 Australian transaction table (ABS, 2017b).

Estimates of gross production (by industry) in the study area were developed based on the percent contribution to employment (by place of work) of the study area to the Australian economy (ABS, 2012; 2017b), and applied to Australian gross output identified in the 2014-15 Australian table.

Industry purchasing patterns within the study area were estimated using a process of cross-industry location quotients and demand-supply pool production functions as described in West (1993).

Where appropriate, values were rebased from 2014-15 (as used in the Australian national Input-Output transaction tables) to current values using the Consumer Price Index (ABS, 2018).

MODELLING ASSUMPTIONS

The key assumptions and limitations of Input-Output analysis include:

- **Lack of supply-side constraints:** The most significant limitation of economic impact analysis using Input-Output multipliers is the implicit assumption that the economy has no supply-side constraints, so the supply of each good is perfectly elastic. That is, it is assumed that extra output can be produced in one area without taking resources away from other activities, thus overstating economic impacts. The actual impact is likely to be dependent on the extent to which the economy is operating at or near capacity.
- **Fixed prices:** Constraints on the availability of inputs, such as skilled labour, require prices to act as a rationing device. In assessments using Input-Output multipliers, where factors of production are assumed to be limitless, this rationing response is assumed not to occur. The system is in equilibrium at given prices, and prices are assumed to be unaffected by policy and any crowding out effects are not captured. This is not the case in an economic system subject to external influences.
- **Fixed ratios for intermediate inputs and production (linear production function):** Economic impact analysis using Input-Output multipliers implicitly assumes that there is a fixed input structure in each industry and fixed ratios for production. That is, the input function is generally assumed linear and homogenous of degree one (which implies constant returns to scale and no substitution between inputs). As such, impact analysis using Input-Output multipliers can be seen to describe average effects, not marginal effects. For example, increased demand for a product is assumed to imply an equal increase in production for that product. In reality, however, it may be more efficient to increase imports or divert some exports to local consumption rather than increasing local production by the full amount. Further, it is assumed each commodity (or group of commodities) is supplied by a single industry or sector of production. This implies there is only one method used to produce each commodity and that each sector has only one primary output.
- **No allowance for economies of scope:** The total effect of carrying on several types of production is the sum of the separate effects. This rules out external economies and diseconomies and is known simply as the “additivity assumption”. This generally does not reflect real world operations.
- **No allowance for purchasers’ marginal responses to change:** Economic impact analysis using multipliers assumes that households consume goods and services in exact proportions to their initial budget shares. For example, the household budget share of some goods might increase as household income increases. This equally applies to industrial consumption of intermediate inputs and factors of production.
- **Absence of budget constraints:** Assessments of economic impacts using multipliers that consider consumption induced effects (type two multipliers) implicitly assume that household and government consumption is not subject to budget constraints.

Despite these limitations, Input-Output techniques provide a solid approach for taking account of the inter-relationships between the various sectors of the economy in the short-term and provide useful insight into the quantum of final demand for goods and services, both directly and indirectly, likely to be generated by a project.

In addition to the general limitations of Input-Output Analysis, there are two other factors that need to be considered when assessing the outputs of sub-regional transaction table developed using this approach, namely:

- It is assumed the sub-region has similar technology and demand/ consumption patterns as the parent (Australia) table (e.g. the ratio of employee compensation to employees for each industry is held constant).

- Intra-regional cross-industry purchasing patterns for a given sector vary from the national tables depending on the prominence of the sector in the regional economy compared to its input sectors. Typically, sectors that are more prominent in the region (compared to the national economy) will be assessed as purchasing a higher proportion of imports from input sectors than at the national level, and vice versa.

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