

KUR-World

Appendix 8b

Economic Impact Assessment

Environmental Impact Statement





KUR-WORLD

Integrated Eco-Resort EIS

KUR-World
Great Barrier Reef

W S Cummings
B Econ

38 Grafton St
(PO Box 2148)
Cairns Q 4870

phones
07 4031 2888
0418 871 011

email
cummings@cummings.net.au

website
www.cummings.net.au

CUMMINGS ECONOMICS
ABN: 99 734 489 175

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SUMMARY OF MAIN POINTS

Introduction

- The project involves 33 revenue elements spread over 15 attractions/recreation activities, 10 accommodation elements, 5 central/support facilities and 3 lots of property sales.
- The project is spread over four stages that are scheduled to start operations:
 - Stage 1A..... Oct 2018
 - Stage 1B..... Jan 2021
 - Stage 2..... Feb 2024
 - Stage 3..... Oct 2027
- Economic impacts are analysed on:
 - the immediate Kuranda area west to the Clohesy River, Kuranda SA2
 - the Mareeba/Tablelands LGAs
 - the immediate Cairns region SA4
 - the Queensland and National economies.
- Analysis is over nine years from 2018-19 through to fully established and operational 2027-28.

Construction Phase

- Construction costs are broken into two types:
 - the main resort construction totalling \$536 million;
 - estimated construction through property sales totalling \$319 million.
- Construction is estimated to average about \$95 million a year over nine years, with peak in year 2020-21 at \$160 million.
- Direct construction employment is expected to peak at about 350 in 2020-21 and with Type 1 “flow-on” effects in the regional economy, at about 700.

Property Sales

- Property sales are expected to proceed over the first three years to 2020-21 and then again in Years 2023-24 and 2026-27. There will be a small impact of associated activity generated by sales activity, visits by potential buyers and post-sale legals estimated to be of the order of \$14 million and to create at peak, direct jobs about 30.

Resort Operation

- Revenue from resort operation is expected to build up over the 10-year period from \$17 million a year to \$306 million a year in 2027-28 when the resort will be fully operational.
- Day visitor numbers are projected to build up from 103,000 in 2018-19 to about 500,000 in 2027-28, ie. an average of about 1,400 a day.
- Overnight guests are projected to build up from about 1,200 in 2018-19 to 240,000 in 2027-28, staying an average of three nights generating about 720,000 visitor nights. Total in 2027-28 on-the-ground visitors each day is estimated at 2,000.

- Direct employment generated at the resort is estimated to reach about 1,450 by 2027-28 and with “flow-on” effects, generate a total of about 1,900 jobs in the region.
- Apart from expenditure at the resort, day visitors and overnight guests are estimated to generate by 2027-28, expenditure in the economy away from the resort of an estimated \$230 million with the largest being on outside tours by overnight stay visitors of about \$170 million.
- Estimated direct employment generated by this expenditure is approximately 1,300 in 2027-28 and with “flow-on” effects, about 1,700.

Ability to Absorb the Project

- Analysis of trends in tourism over a period of time results in forward projection of likely visitors to the region over the period to 2028 as follows:
 - Chinese visitors growing at 15% per annum to 2021-22 and 5% per annum thereafter to 2027-28 by 480,000 to about 710,000;
 - Other international visitors growing at 2.0% per annum from 181,000 to 852,000 by 2027-28;
 - Domestic visitors continuing to grow at long-term trend of 2.5% per annum by 654,000 to 2,550,000 by 2027-28.

This would result in total visitation numbers growing from 2.8 million to 4.1 million, ie. by about 1.3 million or 3.2% per annum.

- By comparison, visitor nights at KUR-World of 720,000 in 2027-28 compares with estimated additional visitor nights of about 8 million.
- Day trip numbers of 500,000 when fully operational compares with an estimated additional 8 million visitor days in the region by 2027-28.
- Rate of development of the project can be varied in the light of market conditions.

Total Economic Impacts

- Total economic impacts of the construction phase plus operational, when fully established in 2027-28, is estimated to reach as follows.

Direct expenditure.....	\$470 m
Addition to GRP (Cairns SA4 region) including Type 1 “flow-on” effects	\$345 m
Direct employment generated	2750
Total employment generated including Type 1 “flow-on” effects.....	3600

- A peak expenditure impact of about \$470 million is expected to be reached in 2024-25. With construction winding down from 2025-26, there is expected to be a mild fall back in expenditure and employment in those years but with total expenditure and employment in 2027-28, when the resort is fully operational, rising and exceed the 2024-25 level.
- It is estimated that when fully operational, the resort will be adding (with “flow-on” effects), about 2.0% per annum to Gross Regional Product in the Cairns region.
- Estimated employment impact including “flow-on” is estimated to add about 2.8% to Cairns region employed workforce.

Location of Employment

- It is estimated the resort when fully operational, will directly generate about 970 full time equivalent jobs but with a substantial part time employment requirement, total workforce needed is estimated at about 1450.
- Analysis of past employment patterns in Kuranda and the Tablelands indicates that of workforce living in Kuranda, almost 60% work outside Kuranda and especially in Cairns.
- Of those working in Kuranda, about 31% travel into Kuranda from outside Kuranda (21% from Cairns).
- It is estimated:
 - That about 24% of the workforce will be drawn from Cairns (for construction (26%) and operational phase (23%));
 - That there will be a substantial opportunity to provide local employment for Kuranda residents currently traveling away from Kuranda for employment (operational period 15%);
 - That there will be a significant opportunity with training to reduce the high level of unemployment in the area, especially in the relatively large Indigenous population and to provide substantial part-time jobs for currently underemployed;
 - That there will be a substantial ability to draw workforce from other Tablelands centres;
 - That during construction phase, there could be a need to provide local temporary accommodation at peak for up to about 50 workers;
 - That given appropriate mitigation measures, needs to locate additional workforce and population in Kuranda will be moderate (24% of workforce when fully operational).

Impacts on Kuranda

- Kuranda's population is currently about 4700 and by 2027-28 on long-term trend growth trends could be expected to be about 5500.
- Apart from direct impacts of the resort, there will be secondary impacts coming from expenditure by day trippers and overnight stayers in Kuranda shops and tourism facilities. There will be an impact of construction to accommodate additional local workforce and population and there will be expenditure by additional permanent residents and by temporary residents during construction. Expenditure is estimated to be running at about \$36 million a year by 2027-28, generating a further 150 jobs most of which are likely to be filled by Kuranda residents.
- Additional local employment by 2027-28, including at the resort and due to secondary impacts, is estimated at about 500 generating a population of about 1000 and requiring additional 354 dwellings.
- Addition to population generated by 2027-28 directly by the project and secondary impacts on Kuranda are estimated to be about 1000 or add 21% to current existing population in the Kuranda area, ie. the equivalent of an annual growth rate of 2% per annum.
- Additional requirement of about 350 dwellings by 2027-28 (ie. an average of about 35 a year over the project lead-in period), compares with an average of about 30 a year dwelling approvals over the past five years.

- Estimated additional dwelling allotments currently available in the area about equal additional dwelling needs by 2027-28.

However, it is clear that to meet normal underlying growth of Kuranda and maintain a buffer to ensure the market does not “overheat”, there will be a need for additional dwelling allotment subdivisions by 2023-24.

Tourism Impacts

- Accommodation sector in the Tropical North Queensland region in 2015-16 accounted for 3980 rooms in hotels and resorts and 3933 serviced apartments, a total of 7913.
- Based on project growth of tourism in the region, it is estimated an additional 3800 rooms in hotels and serviced apartments will be needed by 2027-28.
- The project is estimated to supply 1400 rooms in hotel, resort, serviced apartments and villas by 2027-28, well below indicated needs.

Kuranda Tourism

- The project is expected to lift day visitor numbers to Kuranda from a current level of about 1 million a year to about 1.5 million a year by 2027-28.

Tablelands Tourism

- The resort establishes an iconic accommodation establishment in the Tablelands area and can be expected to lift day visitation to Tablelands attractions dramatically, stimulating further development of both existing and new tourism and support businesses.

Reef Tourism

- It can be expected that most of the overnight visitors to the resort will undertake a reef trip adding of the order of 15% to expected reef visitation.

Airport and Air Services

- The overnight accommodation is expected to generate by 2027-28 about 460,000 additional passenger movements, about a 9% increase on current levels of about 5 million. The level of passenger movements would represent about 15 inward and 15 outward flights a week and be especially supportive of flights from Chinese mainland cities.

Potential for Business and Supply Chain Opportunities

- Surveying among local businesses in the region indicates substantial opportunities for Tablelands businesses to supply during the construction and have materials including concrete, timber and light steel fabrication. It indicates opportunities for establishment of plant on the Tablelands to produce steel trusses and for expansion of businesses stocking a wide range of inputs.
- Apart from impacts on Tablelands tourism attractions and the airport, the operational phase will provide major opportunities for Tablelands businesses to supply fresh produce, fruit and meat products to the resort. The development will increase business opportunities for existing Kuranda tourist operations but also supplies of goods and services to the resort.

Potential for Direct Investment

- The project will offer opportunities for local direct investment in villas, 4-star and serviced apartments with a total value of over \$200 million.

Wider Effects on the Queensland and Australian Economies

At a Queensland State level:

- The project will especially strengthen the Cairns regional economy with “flow-on” impacts right down through coastal regional economies to Brisbane and the south-east corner of the State.
- When fully operational, the project can be expected to add of the order of \$400 million a year to Gross State Product and generate of the order of 4000 jobs a year in the Queensland economy.
- Including “flow-on” effects, the project could be expected to generate of the order of \$60 - \$70 million a year in tax revenue for the Queensland State Government.
- The project will help consolidate Queensland’s position in international holiday tourism and especially help Queensland become the leading State in Australia for holiday visitors from China.

At a National level:

- The project will play a significant role in diversifying Australia’s growing economic engagement with China, developing people to people contact in the tourism sector and across a wide range of goods and services and helping to foster bilateral social and cultural relations.
- The regional location of the project will help consolidate the role of the Far North Queensland region in spreading the positive impacts of international tourism beyond the major metropolitan centres in the south-east, with special potential benefits to the Red Centre and Darwin tourism areas linked by strong air services with Cairns, and throughout regional Queensland.

1.0 INTRODUCTION

1.1 General

The following is to provide information and analysis for an Economic Impact Assessment in accordance with the Terms of Reference for the KUR-World Integrated Eco-Resort project EIS and the 2016 Economic Impact Assessment Guidelines Queensland Government Coordinated Projects.

1.2 Layout of Report

This report is broken into five major sections of analysis:

- 1) Introduction
- 2) Construction Phase Impacts
- 3) Operational Phase Impacts
- 4) Total Activity Impacts
- 5) Sector Impacts and Other Matters
- 6) Appreciation of Wider Effects on the Queensland and National Economy

A profile of the local district and regional economy is given in previous EIS, Section 11.1.

1.3 Basis of Analysis

It should be noted that the following analysis is based on current planned full development and proposed timings.

Market conditions into the future could result in some variation to the timing and composition of development.

1.4 Methodology

Methodology and Technical Notes are given in Appendix 1.

Throughout this report, unless otherwise indicated, dollar figures are in 2017 values.

It should be noted that “modelling” impacts on the economy and forward projections are based on assumptions, including about accuracy and relevance of data available and the resulting figures should be regarded as estimates only.

1.5 Financial Years

Financial analysis for the project is carried out in accordance with Hong Kong financial year and common Australian tourism contracting practice with financial years ending March and impacts in the following are analysed in financial years ending March.

2.0 THE PROJECT

2.1 Outline

The project involves the establishment of a major tourism oriented integrated eco-resort at Myola just west of Kuranda. Apart from a range of middle and upper end accommodation in a rural setting, the project will offer a spread of attractions and recreation activities for both guests and day trippers.

The theme of the resort will be oriented to health, well-being and education and provide specialist accommodation and services in those fields.

While the resort will be aimed generally at domestic and international market segments, it will particularly provide new infrastructure aimed at realising new opportunities for the Cairns/Tropical North Queensland region to attract visitors from growing middle class populations in Asia, especially China.

2.2 Elements and Phases

The KUR-World project is currently proposed to have 33 operational elements/revenue points that when fully developed tend to fall into four groups:

- 1) Attractions/Recreation activities..... 15
- 2) Accommodation 10
- 3) Central/supporting facilities..... 5
- 4) Property sales..... 3
- Total..... 33**

It is proposed that the project will be delivered in stages over a nine-year period to early 2027. The following table sets out timing of bringing the operational elements/revenue points on stream

Table 1: Project Revenue Elements and Proposed Timing

Element	Operation start	Type
Stage 1A Developments		
Produce Farm	Oct 2018	Attraction
Temporary Cattle & Equestrian Show Venue	Oct 2018	Attraction
Temporary Indigenous Cultural Show Venue	Oct 2018	Attraction
Temporary KUR-World Reception/Shopping & Restaurant Centre (becomes Lakehouse Centre)	Oct 2018	Central
Quad Bike Experience	Oct 2018	Recreation
Horse Riding Tours	Oct 2018	Recreation
KUR-Cow Tourism Park – Stage 1	Oct 2018	Attraction
Barnwell/State Forest Walking Tracks	Oct 2018	Recreation
Glamping Experience - Stage 1 (15 Tents)	Oct 2018	Accommodation
Queenslander Lots (x 21)	Oct 2018	Property Sales
Stage 1B Developments		
KUR-Cow Tourism Park – Stage 2	Jan 2021	Attraction
Permanent Cattle & Equestrian Show Amphitheatre	Jan 2021	Attraction
Permanent Indigenous Cultural Centre	Jan 2021	Attraction
Additional Glamping Experience Tents (+10, total now 25)	Apr 2019	Accommodation
4-Star Resort – first 60 apartments	Jan 2021	Accommodation
Village Hub – Stage 1 (retail, restaurants, commercial offices, plaza, amphitheatre, promenade)	Jan 2021	Central

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56 Residence Farm Stay Properties + Student Accom Building	Jan 2021	Property Sales
56 Residence Farm Stay Properties + Student Accom Building (Hotel Operations)	Jan 2021	Accommodation
Residential/Premium Villas – Stage 1 (x39)	Jan 2021	Property Sales
Rainforest Education Centre	Jan 2021	Attraction
Dinner and Equestrian Show	Jan 2021	Attraction
Zip Line Experience	Jan 2021	Recreation
Small Functions/Learning Centre	Jan 2021	Central
Stage 2 Developments		
Village Hub – Stage 2 (village market, restaurants, parking, etc.)	Jan 2024	Central
4-Star Resort – Remaining 210 apartments	Jan 2024	Accommodation
Sport and Recreation Centre	Jan 2024	Recreation
Golf Course, Clubhouse, Convention Centre	Jan 2024	Recreation
Residential/Premium Villas – Stage 1 (x154)	Jan 2024	Accommodation
Stage 3 Developments		
Health & Wellbeing Medical Retreat	Jan 2027	Accommodation
KUR-World Campus	Jan 2027	Central
University Dorm Accommodation (300 student beds + 30 supervisors)	Jan 2027	Accommodation
5-Star Resort	Jan 2027	Accommodation
Residential/Premium Villas – Stage 2 (x93)	Jan 2027	Accommodation

The early phases especially involve bringing attractions and recreation activities on stream with accommodation development progressively being introduced and in the final phase, developing university campus and specialist health facilities.

The following analysis of economic impacts stretches over ten years from 2018-19 to the first full year of operations in 2027-28.

2.3 Major Outcomes

The major outcomes for the development for Kuranda, Tablelands and the Tropical North Queensland region will be:

- The development of a major “signature” resort on the Tablelands that will act as a catalyst stimulating tourism development in that part of the region;
- Progressive expansion of the range of accommodation available in the Cairns region including special elements of health and well-being and university campus accommodation in the Tablelands area;
- Expansion of the range of day tripper attractions/opportunities in the Cairns tourism region including recreation activities and a range of new features not currently available;
- Provision of a range of new facilities that will be especially attractive to new international growth markets, especially mainland China.

3.0 BACKGROUND ON AFFECTED ECONOMY

The impact of the development on the region is analysed at three main levels:

- On the immediate Kuranda community (as measured by Australian Bureau of Statistics (ABS) Statistical Area Level 2);
- On the Tablelands district of which Kuranda is a part (as measured by Mareeba Shire and Tablelands LGAs);
- On the Cairns/Tropical North Queensland tourism region of which the Tablelands district is an important part (as measured by ABS Cairns Statistical Area Level 4).

An appreciation of wider effects on the Queensland and National economies is given in Section 9.

Background on the economy of Kuranda, the Tablelands and the Cairns region is given in Section 11.1 Social and Economic Profile. Maps showing statistical boundaries used, are given in Technical Note, Appendix 1.

4.0 CONSTRUCTION PHASE

4.1 Direct Expenditure

Construction expenditure will fall into two categories:

- the main resort development
- through the sale of properties to individual investors.

The following table sets out estimated direct expenditure on the main resort by phases and years.

Table 2: Estimated Main Resort Construction Expenditure

	Total \$m	2018-19 \$m	2019-20 \$m	2020-21 \$m	2021-22 \$m	2022-23 \$m	2023-24 \$m	2024-25 \$m	2025-26 \$m	2026-27 \$m
Stage 1A										
KUR-Cow Tourism - Stage 1	9.75	9.75								
Professional fees	0.45	0.45								
Infrastructure	3.3	3.3								
Sub Total	13.5	13.5								
Stage 1B										
KUR-Cow Tourism - Stage 2	23.9	23.9								
Equestrian	10.8	10.8								
Village Hub	17		12	5						
Rainforest Education	7.1		5	2.1						
Adventure Pk	20		10	10						
Professional fees	39	10	14.5	14.5						
Infrastructure	98.5	25.5	36.5	36.5						
Sub Total	216.3	70.2	78	68.1						
Stage 2										
Convention Centre & Sporting Fields	19.3			7.3	9.6	2.4				
Golf Clubhouse & Course	17.6			6.6	8.8	2.2				
Professional fees	22.4			8.4	11.2	2.8				
Infrastructure	45.7			17.2	22.8	5.7				
Sub Total	105			39.5	52.4	13.1				
Stage 3										
Campus & Student Accommodation	92.8						34.8	46.4	11.6	
5-Star Eco Resort	79						29.6	39.5	9.9	
Health & Well-being	24.3								16.2	8.1
Professional fees	1.2								0.8	0.4
Infrastructure	4.3								2.8	1.5
Sub Total	201.6						64.4	85.9	41.3	10
Total	536.4	83.7	78	107.6	52.4	13.1	64.4	85.9	41.3	10

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On top of this as properties are sold, construction will take place either through KUR-World selling: property with individual investors building dwellings, or through sale of land and dwelling packages or through strata title sales.

The following table estimates the construction involved by years.

Table 3: KUR-World Estimated Construction Involved by Years Financed by Property Sales

Years	Stage 1A		Stage 1B				Stage 1B		Stage 2		Stage 2		Stage 3		Total \$M
	Queenslander Lots		Lifestyle Villas		4-star Resort		Premium Villas		4-star Resort		Premium Villas		Premium Villas		
	No.	Value \$M	No.	Value \$M	No.	Value \$M	No.	Value \$M	No.	Value \$M	No.	Value \$M	No.	Value \$M	
2018-19	-	-	7	4.2	-	-	-	-	-	-	-	-	-	-	4.2
2019-20	21	7.9	28	16.8	169	14.8	24	14.6	-	-	-	-	-	-	54.1
2020-21	-	-	21	12.6	101	8.9	15	8.8	26	10.3	19	11.6	-	-	52.1
2021-22	-	-	-	-	-	-	-	-	79	30.8	58	34.7	-	-	65.4
2022-23	-	-	-	-	-	-	-	-	79	30.8	58	34.7	-	-	65.4
2023-24	-	-	-	-	-	-	-	-	26	10.3	19	11.6	12	7.0	28.8
2024-25	-	-	-	-	-	-	-	-	-	-	-	-	35	20.9	20.9
2025-26	-	-	-	-	-	-	-	-	-	-	-	-	35	20.9	20.9
2026-27	-	-	-	-	-	-	-	-	-	-	-	-	12	7.0	7.0
2027-28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0
Total	21	7.9	56	33.6	270	23.7	39	23.4	210	82.1	154	92.4	94	55.8	318.9

Thus, total capital expenditure generated by the project is estimated to total \$855 million over a nine-year period composed of:

- Direct capital expenditure through KUR-World entity - \$536.4 million.
- Capital expenditure directly or indirectly generated by sales of property to individual investors - \$318.9 million.

The last group will be composed of:

4-Star Resort Units..... \$105.8 m

Premium Villas..... 171.6 m

Lifestyle Villas \$33.6 m

Queenslanders..... \$7.9 m

Total.....\$318.9 m

Most of these will be built and sold to individual investors, who will place them back in the short-term accommodation pool. However, some may choose to purchase the land only and directly meet the cost of the construction of building Queenslanders, Premium Villas or Lifestyle Villas.

It is estimated that this will involve no more than 30% of these categories, ie. involving an expenditure of up to \$64 million not through the KUR-World entity. Thus, total expected capital expenditure through the KUR-World entity is estimated to be above \$790 million.

4.2 Estimated “Flow-on” Impacts and Employment

The following table gives estimated construction expenditure by year.

Table 4: KUR-World Estimated Construction Expenditure by Years

Years	Main construction	Following property sales	Total
2018-19	\$83.7 m	\$4.2 m	\$87.9 m
2019-20	\$78.0 m	\$54.1 m	\$132.1 m
2020-21	\$107.6 m	\$52.1 m	\$159.7 m
2021-22	\$52.4 m	\$65.4 m	\$117.8 m
2022-23	\$13.1 m	\$65.4 m	\$78.5 m
2023-24	\$64.4 m	\$28.8 m	\$93.2 m
2024-25	\$85.9 m	\$20.9 m	\$106.8 m
2025-26	\$41.3 m	\$20.9 m	\$62.2 m
2026-27	\$10.0 m	\$7.0 m	\$17.0 m
2027-28	\$0.0 m	\$0.0 m	\$0.0 m
Total	\$536.4 m	\$318.9 m	\$855.3 m

The following table renders yearly construction expenditure by industry categories as defined in ABS National Account Input/Output Tables.

Table 5: KUR-World Construction Phase, Estimated Expenditure by Industry Categories

Years	Residential building construction	Non-residential building construction	Heavy & civil engineering	Professional scientific & technical services	Total
	\$m	\$m	\$m	\$m	\$m
2018-19	\$4.20 m	\$44.45 m	\$28.80 m	\$10.45 m	\$87.90 m
2019-20	\$54.10 m	\$27.00 m	\$36.50 m	\$14.50 m	\$132.10 m
2020-21	\$52.10 m	\$31.00 m	\$53.70 m	\$22.90 m	\$159.70 m
2021-22	\$65.40 m	\$18.40 m	\$22.80 m	\$11.20 m	\$117.80 m
2022-23	\$65.40 m	\$4.60 m	\$5.70 m	\$2.80 m	\$78.50 m
2023-24	\$93.20 m	\$0.00 m	\$0.00 m	\$0.00 m	\$93.20 m
2024-25	\$106.80 m	\$0.00 m	\$0.00 m	\$0.00 m	\$106.80 m
2025-26	\$58.60 m	\$0.00 m	\$0.40 m	\$0.80 m	\$59.80 m
2026-27	\$15.10 m	\$0.00 m	\$1.50 m	\$2.80 m	\$19.40 m
2027-28	\$0.00 m	\$0.00 m	\$0.00 m	\$0.00 m	\$0.00 m
Total	\$514.90 m	\$125.45 m	\$149.40 m	\$65.45 m	\$855.20 m

It can be seen that expenditure is estimated to peak in 2020-21 at a total of about \$160m and then fall back but with a sub peak in 2024-25 and be completed in 2026-27.

The following tables apply standard multipliers to industry categories to give estimates of impact on Gross Regional Product (GRP). (See Technical Notes, Appendix 1.)

Table 6: KUR-World Construction Phase, Estimated Addition to Gross Regional Product including “Flow-on” Type 1, by Years

Years	Residential building construction	Non-residential building construction	Heavy & civil engineering	Professional scientific & technical services	Total
	\$m	\$m	\$m	\$m	\$m
2018-19	\$3 m	\$29 m	\$21 m	\$8 m	\$61 m
2019-20	\$34 m	\$18 m	\$26 m	\$11 m	\$89 m
2020-21	\$33 m	\$20 m	\$39 m	\$17 m	\$110 m
2021-22	\$42 m	\$12 m	\$16 m	\$8 m	\$79 m
2022-23	\$42 m	\$3 m	\$4 m	\$2 m	\$51 m
2023-24	\$59 m	\$0 m	\$0 m	\$0 m	\$59 m
2024-25	\$68 m	\$0 m	\$0 m	\$0 m	\$68 m
2025-26	\$37 m	\$0 m	\$0 m	\$1 m	\$38 m
2026-27	\$10 m	\$0 m	\$1 m	\$2 m	\$13 m
2027-28	\$0 m	\$0 m	\$0 m	\$0 m	\$0 m
Total	\$328 m	\$83 m	\$108 m	\$49 m	\$568 m

The following gives estimated direct employment created based on regional input/output multipliers.

Table 7: KUR-World Construction Phase, Estimated Direct Employment

Years	Residential building construction	Non-residential building construction	Heavy & civil engineering	Professional scientific & technical services	Total
	No.	No.	No.	No.	No.
2018-19	14	40	35	39	128
2019-20	176	24	44	55	299
2020-21	169	28	65	86	348
2021-22	213	16	28	42	299
2022-23	213	4	7	11	235
2023-24	303	0	0	0	303
2024-25	347	0	0	0	347
2025-26	190	0	0	3	193
2026-27	49	0	2	11	62
2027-28	0	0	0	0	0
Total	1674	112	181	247	2214

The indications are that the direct construction workforce will peak at about 350 in 2020-21.

The following gives estimated total employment including Type 1 “flow-on” effects.

Table 8: KUR-World Construction Phase, Estimated Total Employment including “Flow-on” Type 1, by Years

Years	Residential building construction	Non-residential building construction	Heavy & civil engineering	Professional scientific & technical services	Total
	No.	No.	No.	No.	No.
2018-19	24	154	99	57	334
2019-20	307	93	126	79	606
2020-21	296	107	185	125	713
2021-22	371	64	78	61	575
2022-23	371	16	20	15	422
2023-24	529	0	0	0	529
2024-25	607	0	0	0	607
2025-26	333	0	1	4	339
2026-27	86	0	5	15	106
2027-28	0	0	0	0	0
Total	2924	434	514	356	4231

The indications are that at peak, “flow-on” effects will add about 360 to employment in the region but it is expected that this will be primarily outside the Kuranda area in other Tablelands centres and Cairns.

4.3 Capacity Analysis - Construction

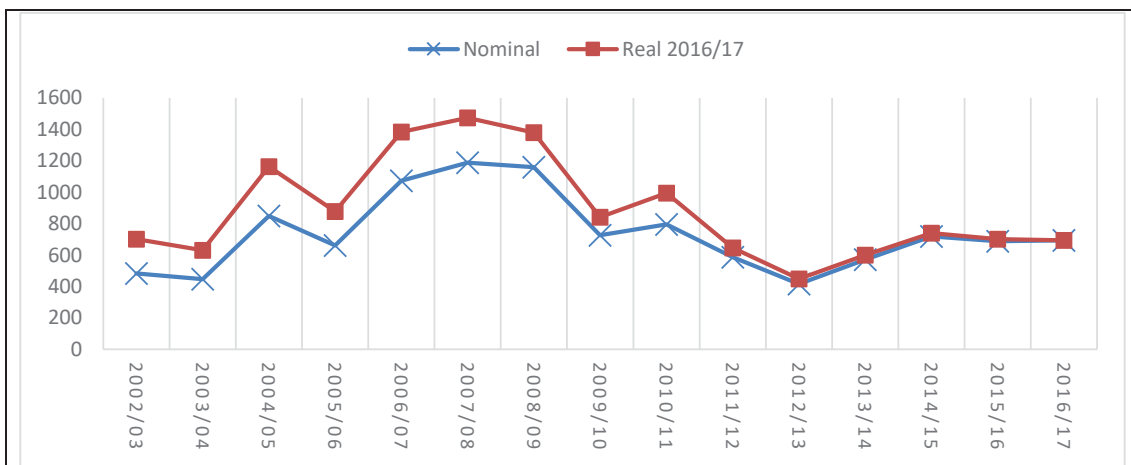
During the construction phase, the project is moderately large in the regional economy and an analysis was carried out to test whether there would be any undue constraints on normal supply of inputs to the construction sector.

The report, Appendix 2, from Thirkell Consulting Engineers sets out the results.

A major question for the economic impact analysis has been whether the impact is as large in relation to the capacity of the region, that a major revision of the input/output multipliers used in the preceding section would be needed.

The following table gives historical value of building approvals in the Cairns/Far North Queensland Statistical Division, in recorded dollars and adjusted by CPI Brisbane to current 2017 values.

Chart 9: Building Approvals Cairns/Far North Queensland Statistical Division-Nominal & Real



Source: Australian Bureau of Statistics Cat No. 8731.0.

The chart indicates that in “real” terms, the construction sector has been operating recently well below historical capacity. The average for the past six years of \$640 million is \$410 million lower than the average for the preceding nine years of \$1050 million.

As indicated by Table 4, construction in Year 1 is low and is estimated to rise to a peak in Year 3 (2020-21) at \$160 million.

A level of around \$160m is not very large in the scale of past levels of activity the construction sector has the capacity to deliver.

Current indications are that value of building approvals will rise over the next three years 2017-18, 2018-19 and 2019-20 due to the committed substantial projects of the GA Group \$370 million involving five high rise towers in the Cairns Central Business District and the \$170 million Cairns Convention Centre project. Also likely is the \$187 million Marina Project at Port Douglas.

Most of this work seems likely to be over by the time the KUR-World peak is reached in 2020-21.

Also in the picture is the Nova 8 project that involves two high rise towers in its first phase with building value estimated at around \$100 million.

Nova 8 are hoping to start in 2018.

The general rise in construction involved from the various projects is likely to result in a rise in employment and population growth that will lead to a rise in the underlying rate of construction of dwellings and other commercial and community facilities.

Thus, the indications are that the next three years will see construction in the region rise from its recent low levels, to about average historical levels, but not to record levels and that the KUR-World project would come in to sustain that level but not cause the level of construction to be so high that it would outrun normal capacities to supply.

The attached Thirkell report, Appendix 2, confirms capacity to supply material in the volumes required is within the normal framework of local manufacture, stocking and distribution capacity.

The report especially notes that the supply of concrete, timber and light steel fabrication work can be met by Tablelands’ suppliers and there are some prospects for establishment of capacity in some fields on the Tablelands to manufacture trusses. There is a capacity for Tablelands businesses to stock materials originating from the south and travelling via the Palmerston Highway to the Tablelands.

The report also notes that some potential difficulties with blockwork construction and with minimising transport over the Kuranda Range Road, may be able to be achieved through early design decisions.

Business and supply chain opportunities are further addressed in Section 8.1.

5.0 OPERATING PHASE

5.1 General

To ascertain impact of the operating phase on the local and regional economy, it is necessary to make estimates at a number of levels. The first level is to ascertain what expenditure and activity occurs at the resort itself. Overnight visitors to the resort will not only spend at the resort itself and it is necessary to calculate what the total expenditure generated in the economy would be due to the existence of the resort. Other expenditure will be generated outside the resort by day trippers. Property sales will also generate activity in the economy.

5.2 Revenue and Impact of Resort Operations

5.2.1 Revenue generated

A detailed assessment has been made for each of the activities, of numbers of visitors likely to be attracted and likely expenditure generated by months and years, starting from the Stage 1 commencement date in October 2018 for ten financial years ending March, 2018-19 to 2027-28.

The following gives estimates of total operating revenue including property sales.

Table 10: KUR-World Estimated Operating Revenue, YE March 2018-19 to 2023-24

Year ending March	Est operating revenue	Est property sales	Total revenue
2018-19	\$16.91 m	\$31.50 m	\$48.41 m
2019-20	\$46.92 m	\$46.15 m	\$93.78 m
2020-21	\$69.26 m	\$70.70 m	\$142.29 m
2021-22	\$125.72 m	-	\$125.79 m
2022-23	\$134.75 m	-	\$138.22 m
2023-24	\$158.58 m	\$184.50 m	\$355.45 m
2024-25	\$213.19 m	-	\$213.66 m
2025-26	\$218.28 m	-	\$221.06 m
2026-27	\$242.18 m	\$125.80 m	\$376.03 m
2027-28	\$305.63 m	-	\$275.36 m

Source: KUR-World – Reeve & Ocean Developments Pty Ltd.

Operating revenue figures include inflation rate throughout at RBA mid-range of 2.5% plus, in Years 2 and 3, an extra factor of 1.0% recognising an ability to increase real prices in those years, making total increase 3.5% in those years.

The following Table 10 analyses the impact from “operations”. The impact from property sales is covered separately in Section 5.3. The detailed assessments have been summarised and grouped together into different industry categories as defined in Australian Bureau of Statistics (ABS) National Accounts input/output multiplier tables (ABS Cat 5209.0.55.001). For retail sales an estimate has been made of a proportion imported into the region and not included. (See Technical Note, Appendix 1.)

In Table 11, the expenditure is rendered back into 2017 dollars by deducting inflation at a rate of 2.5% per annum. It can be seen that total revenue will rise strongly each year through to 2027-28 to fully operational level of \$240m in 2017 prices.

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Table 11: Total Annual Revenue from All KUR-World Products by Industry Classification – Original Estimates

Year	Sport & Recreation	Heritage	Food & Beverage	Accommodation	Retail	Other services	Health	Technical Educ Accom	Total
2018-19	\$9,194,906	\$4,323,296	\$2,217,075	\$1,174,088	\$0	\$0	\$0	\$0	\$16,909,364
2019-20	\$24,798,755	\$10,025,157	\$5,204,334	\$6,891,532	\$0	\$0	\$0	\$0	\$46,919,778
2020-21	\$29,252,047	\$15,075,999	\$5,736,031	\$17,212,327	\$622,520	\$425,590	\$0	\$0	\$68,324,515
2021-22	\$37,920,513	\$26,015,440	\$6,072,854	\$47,942,912	\$2,490,971	\$1,538,877	\$0	\$0	\$121,981,567
2022-23	\$39,976,059	\$28,853,971	\$6,937,656	\$50,537,191	\$2,748,314	\$1,577,349	\$0	\$0	\$130,630,539
2023-24	\$46,399,641	\$31,938,014	\$7,135,415	\$63,875,878	\$3,045,075	\$1,616,909	\$0	\$0	\$154,010,933
2024-25	\$59,910,821	\$32,736,464	\$7,313,800	\$102,058,901	\$3,803,264	\$1,657,332	\$0	\$0	\$207,480,583
2025-26	\$61,223,534	\$33,554,875	\$7,496,645	\$104,550,947	\$3,903,171	\$1,698,766	\$0	\$0	\$212,427,938
2026-27	\$62,781,323	\$34,393,747	\$7,684,061	\$121,694,907	\$4,006,190	\$1,741,235	\$3,560,358	\$308,078	\$236,169,899
2027-28	\$64,381,524	\$35,253,591	\$7,876,163	\$169,168,884	\$4,112,479	\$1,784,766	\$15,261,237	\$1,618,252	\$299,456,895

Source: KUR-World detailed revenue analysis – Cummings Economics – Allocation of industry classifications.

Table 11: Total Annual Revenue from All KUR-World Products by Industry Classification deflated to 2017 Values

Year	Sport & Recreation	Heritage	Food & Beverage	Accommodation	Retail	Other services	Health	Technical Educ Accom	Total
2018-19	\$9,194,906	\$4,323,296	\$2,217,075	\$1,174,088	\$0	\$0	\$0	\$0	\$16,909,364
2019-20	\$24,193,907	\$9,780,641	\$5,077,400	\$6,723,446	\$0	\$0	\$0	\$0	\$45,775,394
2020-21	\$27,842,519	\$14,349,553	\$5,459,637	\$16,382,941	\$592,524	\$405,082	\$0	\$0	\$65,032,257
2021-22	\$35,212,966	\$24,157,922	\$5,639,249	\$44,519,760	\$2,313,114	\$1,429,000	\$0	\$0	\$113,272,011
2022-23	\$36,216,336	\$26,140,273	\$6,285,174	\$45,784,200	\$2,489,837	\$1,429,000	\$0	\$0	\$118,344,821
2023-24	\$41,010,522	\$28,228,550	\$6,306,667	\$56,456,969	\$2,691,403	\$1,429,112	\$0	\$0	\$136,123,223
2024-25	\$51,660,913	\$28,228,550	\$6,306,667	\$88,005,071	\$3,279,543	\$1,429,112	\$0	\$0	\$178,909,856
2025-26	\$51,505,231	\$28,228,550	\$6,306,667	\$87,955,077	\$3,283,602	\$1,429,112	\$0	\$0	\$178,708,239
2026-27	\$51,527,555	\$28,228,550	\$6,306,667	\$99,880,678	\$3,288,067	\$1,429,112	\$2,922,151	\$252,854	\$193,835,635
2027-28	\$51,552,112	\$28,228,550	\$6,306,667	\$135,458,324	\$3,292,978	\$1,429,112	\$12,220,105	\$1,295,780	\$239,783,629

Source: From Table 3 above – deflated by 2.5% pa inflation.

KUR-WORLD Eco-Resort EIS
Economic Impact Assessment

Table 12: Total Annual Gross Regional Product from All KUR-World Products by Industry Classification Deflated to 2018-19 Values including “flow-on” Type 1 Multipliers, Cairns SA4 Region

Year	Sport & Recreation	Heritage	Food & Beverage	Accommodation	Retail	Other services	Health	Technical Educ Accom	Total
2018-19	\$6,156,909	\$3,128,337	\$1,628,220	\$963,691	\$0	\$0	\$0	\$0	\$11,877,157
2019-20	\$16,200,240	\$7,077,272	\$3,728,842	\$5,518,604	\$0	\$0	\$0	\$0	\$32,524,959
2020-21	\$18,643,351	\$10,383,337	\$4,009,557	\$13,447,118	\$492,743	\$328,117	\$0	\$0	\$47,304,223
2021-22	\$23,578,602	\$17,480,672	\$4,141,465	\$36,541,819	\$1,923,586	\$1,157,490	\$0	\$0	\$84,823,634
2022-23	\$24,250,459	\$18,915,102	\$4,615,832	\$37,579,672	\$2,070,548	\$1,157,490	\$0	\$0	\$88,589,102
2023-24	\$27,460,646	\$20,426,179	\$4,631,616	\$46,339,880	\$2,238,171	\$1,157,581	\$0	\$0	\$102,254,072
2024-25	\$34,592,148	\$20,426,179	\$4,631,616	\$72,234,562	\$2,727,268	\$1,157,581	\$0	\$0	\$135,769,354
2025-26	\$34,487,903	\$20,426,179	\$4,631,616	\$72,193,527	\$2,730,643	\$1,157,581	\$0	\$0	\$135,627,449
2026-27	\$34,502,851	\$20,426,179	\$4,631,616	\$81,982,061	\$2,734,356	\$1,157,581	\$2,524,739	\$207,543	\$148,166,925
2027-28	\$34,519,294	\$20,426,179	\$4,631,616	\$111,184,192	\$2,738,441	\$1,157,581	\$10,558,171	\$1,063,576	\$186,279,050

Source: From previous Table 3 – Gross Value Added Multipliers plus Type 1, Cummings Economics – see Technical Notes, Appendix 1

5.2.2 Impacts on Gross Regional Product including “flow-on” effects

Based on standard input/output multiplier tables (see Technical Note Appendix 1), the following Table 12 gives estimates of total impacts at Type 1 multiplier level (ie. including “flow-on” impacts of purchase of inputs but not of expenditure of wages and salaries) on Gross Regional Product in the Cairns regional (SA4) economy. Total impact rises steadily to \$186m in 2027-28.

5.2.3 Employment

Estimation of employment generated has been approached from two different directions.

The first has been to estimate employment generated based on input/output multiplier models (see Technical Note, Appendix 1).

This modelling has generated the following estimates of initial employment generated and total employment generated including Type 1 “flow-on” effects.

Table 13: Estimated Modelled Employment Generated

	Initial	Total incl ‘flow-on’ Type 1 level multiplier
2018-19	97	132
2019-20	265	359
2020-21	392	519
2021-22	716	925
2022-23	749	967
2023-24	864	1,114
2024-25	1,152	1,474
2025-26	1,151	1,472
2026-27	1,268	1,609
2027-28	1,622	2,026

Independently as part of detailed assessment of revenue and other activity generated, required employment was modelled at peak level of operations, ie. 2027-28, based on knowledge of employment in tourism operations in the Cairns region.

Table 14: Summary of Estimated Employment (FTE full time equivalent), Required in 2027-28

	No.	
5-star resort	184	
4-star resort	205	
Rainforest Education Centre	42	
Glamping Experience	25	
University dormitory	17	
Farm-stay hotel/Lifestyle villas	17	
Premium villas	46	
Quad bikes/Zipline/Horse riding/Bushwalking tours	64	
Cattle & Equestrian centre, Show & Dinner	44	
Sporting & Recreation centre/Village hub	63	
Golf course & club	56	
Chapel/Lake House Centre	19	
Indigenous cultural/KURCow tourism Park/Organic farm	54	
Health & Well-being medical	40	
University Campus	94	
Total	970	

However in some of the activities, there would be a substantial amount of casual employment and this is estimated (see further details Section 7.2.3), to increase total workforce to 1450.

Thus, all the indications are that when fully developed, there will be employment (full and part time) generated of the order of 1450 and that Type 1 “flow-on” effects will generate something of the order of an additional 410 jobs in the region. (See detail, Section 7.2.3 Table 44.)

It can be seen that, taking into account the fact that the statistical input output modelling is not clear on “full time” as opposed to “part time”, the two approaches roughly agree on the scale of workforce likely to be generated.

5.3 Impact of Property Sales

Impact of expenditure on creation of properties to be sold and resulting construction activity is already covered in Section 4.0 Construction Phase.

Activity generated by property sales in the region is estimated at: marketing 1% of sale value, sales (real estate) 2%, legal 0.5%, total 3.5%. Much of the marketing and sales activity is likely to take place outside the Cairns region. However, it can be expected that overseas buyers will visit the region to inspect properties (see Technical Note, Appendix 1).

Activity created within the Cairns region is estimated at 3% of the sale value.

Table15: Estimated Impact of Property Sales

Year	Sales value	Est regional activity generated output	Est addition GRP Type 1	Est addition direct workforce	Est addition total workforce plus Type 1 flow-on
2018-19	\$31.50 m	\$0.9 m	\$0.7 m	5	5
2019-20	\$46.15 m	\$1.4 m	\$1.1 m	7	8
2020-21	\$70.70 m	\$2.1 m	\$1.6 m	11	12
2021-22	-	-	-	-	-
2022-23	-	-	-	-	-
2023-24	\$184.50 m	\$5.5 m	\$4.2 m	29	32
2024-25	-	-	-	-	-
2025-26	-	-	-	-	-
2026-27	\$125.80 m	\$3.8 m	\$2.9 m	20	22
2027-28	-	-	-	-	-

Regional “flow-on” and estimated addition to Gross Regional Product and employment is estimated using Type 1 multipliers as set out in Technical Note, Appendix 1.

5.4 Impacts of additional spending outside the resort

5.4.1 Visitor numbers

The following table gives estimates of visitor numbers to the resort – day trippers and overnight stays.

Table 16: Estimated Visitor Numbers to Resort

Year	Day trip visitors	Overnight visitors
2018-19	102,967	1,195
2019-20	237,038	11,711
2020-21	286,434	30,087
2021-22	361,989	84,245
2022-23	390,822	85,962
2023-24	433,306	107,826
2024-25	480,067	172,469
2025-26	480,265	172,469
2026-27	484,314	189,078
2027-28	496,644	240,697

5.4.2 Additional day visitor expenditure

For day trippers, the bulk of their expenditure on the day trip is included in the expenditure at the resort. It is estimated that 90% will arrive by coach with the transfer cost already included in resort revenues. Some 10% are estimated to arrive in their own vehicle. Estimated numbers and expenditure generated at an average of \$30 per vehicle (25km x \$0.60 per km two ways). Average two persons per vehicle is as follows.

Table 17: Travel Expenditure Day Visitors Using Their Own Vehicle

Year	Number	Est Expenditure
2018-19	10,297	\$0.2 m
2019-20	23,704	\$0.4 m
2020-21	28,643	\$0.4 m
2021-22	36,199	\$0.5 m
2022-23	39,082	\$0.6 m
2023-24	43,331	\$0.6 m
2024-25	48,007	\$0.7 m
2025-26	48,027	\$0.7 m
2026-27	48,431	\$0.7 m
2027-28	49,664	\$0.7 m

It is estimated that a proportion of the day visitors will also spend time in visiting Kuranda.

The following estimate is based on 90% of day visitors spending an average of \$15 in Kuranda.

Table 18: Estimated KUR-World Day Tripper Expenditure in Kuranda

Year	Number	Est Expenditure
2018-19	92,670	\$1.4 m
2019-20	213,335	\$3.2 m
2020-21	257,791	\$3.9 m
2021-22	325,790	\$4.9 m
2022-23	351,740	\$5.3 m
2023-24	389,975	\$5.8 m
2024-25	432,060	\$6.5 m
2025-26	432,239	\$6.5 m
2026-27	435,883	\$6.5 m
2027-28	446,980	\$6.7 m

In valuing impact of attractions on the regional economy (eg. the Great Barrier Reef, Daintree Cape Tribulation), a convention has been adopted of counting on top of the direct spending on the visit to the attraction, additional visitor night spending on accommodation, food and drinks, etc., depending on the strength of the attraction and its role in generating visits to the region.

In this case, it would seem appropriate to attribute expenditure of one visitor night as being generated by the day trip with an estimated expenditure on accommodation/meals/ other (excluding the day trip expenditure) of \$120 per night per person. (Note: Average spend per night visitors to Cairns \$208; Source Tourism Research Australia. Average for class of visitor involved is likely to be higher.)

Table 19: Estimated Overnight Expenditure by Day Visitors

Year	Number	Est Expenditure
2018-19	102,967	\$12.4 m
2019-20	237,038	\$28.4 m
2020-21	286,434	\$34.4 m
2021-22	361,989	\$43.4 m
2022-23	390,822	\$46.9 m
2023-24	433,306	\$52.0 m
2024-25	480,067	\$57.6 m
2025-26	480,265	\$57.6 m
2026-27	484,314	\$58.1 m
2027-28	496,644	\$59.6 m

5.4.3 Additional overnight visitor expenditure

Overnight visitors are estimated to stay an average of three nights at the resort allowing two full days for activities. (See Technical Note, Appendix 1.)

It is estimated that visitors staying overnight will spend away from the resort on a main day tour, probably to the reef on transport and other as follows.

Table 20: Estimated Expenditure by Overnight Visitors in the Region on Main Day Trips Away from the Resort

	Asian	Western	Domestic	Student
Tours	\$200	\$300	\$150	\$150
Food & Beverage	\$20	\$25	\$25	\$15
Transport	\$50	\$50	\$50	\$50
Shopping	\$50	\$40	\$40	\$30
Total	\$320	\$415	\$265	\$245

On a split, Asian 55%, Western 25% and Domestic and Student 20%. Average is \$330.

It is assumed that expenditure on a second day trip in the region (taking into account spending at KUR-World attractions), would be half that figure at about \$160.

In addition, visitors moving through the airport create expenditure on airport operations, security, shopping etc. estimated at about \$200 per visitor (see Technical Note, Appendix 1).

This would make estimated total expenditure per visitor outside the resort of the order of \$690.

Table 21: Estimated Total Overnight Visitor Expenditure in the Region Away from the Resort

Year	Number	Est expenditure
2018-19	1,195	\$0.8 m
2019-20	11,711	\$8.1 m
2020-21	30,087	\$20.8 m
2021-22	84,245	\$58.1 m
2022-23	85,962	\$59.3 m
2023-24	107,826	\$74.4 m
2024-25	172,469	\$119.0 m
2025-26	172,469	\$119.0 m
2026-27	189,078	\$130.5 m
2027-28	240,697	\$166.1 m

It is envisaged that as part of this expenditure, 90% will visit Kuranda township. Average expenditure is estimated at \$20 per person. Note: This expenditure would be included in the spending identified in the above table.

Table 22: Estimated Expenditure by Overnight Stayers at KUR-World in Kuranda

Year	Numbers visiting	Expenditure
2018-19	1,076	\$0.0
2019-20	10,540	\$0.2
2020-21	27,079	\$0.5
2021-22	75,821	\$1.5
2022-23	77,366	\$1.5
2023-24	97,044	\$1.9
2024-25	155,222	\$3.1
2025-26	155,222	\$3.1
2026-27	170,170	\$3.4
2027-28	216,627	\$4.3

5.4.4 Summary of additional expenditure outside resort

The following summarises the additional expenditure generated outside of the resort.

Table 23: Summary of Additional Expenditure Generated in the Region by Type

Year	In Kuranda	Other			Total
	Day visitors	Day visitors own vehicle	Day visitors night after	Overnight stay - outside tours	
2018-19	\$1.4 m	\$0.2 m	\$12.4 m	\$0.8 m	\$14.7 m
2019-20	\$3.2 m	\$0.4 m	\$28.4 m	\$8.1 m	\$40.1 m
2020-21	\$3.9 m	\$0.4 m	\$34.4 m	\$20.8 m	\$59.4 m
2021-22	\$4.9 m	\$0.5 m	\$43.4 m	\$58.1 m	\$107.0 m
2022-23	\$5.3 m	\$0.6 m	\$46.9 m	\$59.3 m	\$112.1 m
2023-24	\$5.8 m	\$0.6 m	\$52.0 m	\$74.4 m	\$132.9 m
2024-25	\$6.5 m	\$0.7 m	\$57.6 m	\$119.0 m	\$183.8 m
2025-26	\$6.5 m	\$0.7 m	\$57.6 m	\$119.0 m	\$183.8 m
2026-27	\$6.5 m	\$0.7 m	\$58.1 m	\$130.5 m	\$195.8 m
2027-28	\$6.7 m	\$0.7 m	\$59.6 m	\$166.1 m	\$233.1 m

Expenditure is estimated to split into industry classifications as follows.

Table 24: Summary of Additional Expenditure Generated in the Region by Industry Classification

Year	Food & beverage	Retail	Import	Transport	Accommodation	Heritage	Total
2018-19	\$0.5 m	\$0.5 m	\$0.7 m	\$0.6 m	\$12.4 m	\$0.1 m	\$15 m
2019-20	\$2.1 m	\$1.6 m	\$2.2 m	\$4.5 m	\$28.4 m	\$1.2 m	\$40 m
2020-21	\$4.1 m	\$2.8 m	\$4.0 m	\$11.0 m	\$34.4 m	\$3.1 m	\$59 m
2021-22	\$9.6 m	\$6.1 m	\$8.9 m	\$30.2 m	\$43.4 m	\$8.7 m	\$107 m
2022-23	\$9.9 m	\$6.3 m	\$9.2 m	\$30.8 m	\$46.9 m	\$8.9 m	\$112 m
2023-24	\$12.2 m	\$7.7 m	\$11.3 m	\$38.6 m	\$52.0 m	\$11.2 m	\$133 m
2024-25	\$18.6 m	\$11.5 m	\$16.9 m	\$61.4 m	\$57.6 m	\$17.9 m	\$184 m
2025-26	\$18.6 m	\$11.5 m	\$16.9 m	\$61.4 m	\$57.6 m	\$17.9 m	\$184 m
2026-27	\$20.2 m	\$12.4 m	\$18.3 m	\$67.3 m	\$58.1 m	\$19.6 m	\$196 m
2027-28	\$25.3 m	\$15.3 m	\$22.6 m	\$85.4 m	\$59.6 m	\$24.9 m	\$233 m

Applying input/output Type 1 multipliers gives the following estimates of impact including “flow-on” effects on Gross Regional Product, initial employment and total employment including “flow-on”.

Table 25: Estimated Impact including Type 1 “flow-on” on Gross Value Added in Cairns SA4 Region by Additional Expenditure Generated Outside the Resort

Year	Food & beverage	Retail	Import	Transport	Accommodation	Heritage	Total
2018-19	-	-	-	-	\$10 m	-	\$11 m
2019-20	\$2 m	\$1 m	-	\$3 m	\$23 m	\$1 m	\$30 m
2020-21	\$3 m	\$2 m	-	\$8 m	\$28 m	\$2 m	\$44 m
2021-22	\$7 m	\$5 m	-	\$22 m	\$36 m	\$6 m	\$76 m
2022-23	\$7 m	\$5 m	-	\$22 m	\$38 m	\$6 m	\$79 m
2023-24	\$9 m	\$6 m	-	\$28 m	\$43 m	\$8 m	\$94 m
2024-25	\$14 m	\$10 m	-	\$44 m	\$47 m	\$13 m	\$127 m
2025-26	\$14 m	\$10 m	-	\$44 m	\$47 m	\$13 m	\$127 m
2026-27	\$15 m	\$10 m	-	\$48 m	\$48 m	\$14 m	\$135 m
2027-28	\$19 m	\$13 m	-	\$61 m	\$49 m	\$18 m	\$159 m

Table 26: Estimated Impact on Initial Employment in Cairns SA4 Region by Additional Expenditure Generated Outside the Resort

Year	Food & beverage	Retail	Import	Transport	Accommodation	Heritage	Total
2018-19	5	4	-	2	91	1	103
2019-20	18	14	-	19	210	7	269
2020-21	35	25	-	48	254	18	380
2021-22	83	54	-	131	321	52	641
2022-23	86	56	-	134	346	53	674
2023-24	105	68	-	167	384	66	791
2024-25	161	102	-	267	425	106	1060
2025-26	161	102	-	267	425	106	1060
2026-27	175	110	-	292	429	116	1122
2027-28	219	136	-	371	440	148	1313

Table 27: Estimated Impact on Total Employment including Type 1 “flow-on” in the Cairns SA4 Region by Additional Expenditure Generated Outside the Resort

Year	Food & beverage	Retail	Import	Transport	Accom	Heritage	Total
2018-19	5	5	-	4	109	1	124
2019-20	21	17	-	29	251	10	327
2020-21	41	29	-	70	303	25	468
2021-22	97	64	-	193	383	69	805
2022-23	100	66	-	197	414	70	846
2023-24	123	80	-	246	459	88	996
2024-25	188	119	-	392	508	141	1,348
2025-26	188	119	-	392	508	141	1,348
2026-27	204	129	-	429	513	155	1,429
2027-28	255	159	-	545	526	197	1,682

5.5 Ability of Region to Absorb the Project

5.5.1 General

In assessing impact on the economy, it is necessary to determine whether the growth in demand for the type of product offered, natural or stimulated by the project, will be suffice to accommodate the project. In other words, will the capacity offered by the project be at the expense of other existing supply of product in the market.

The following analyses the likely demand for tourism product in the Cairns region over the next ten years and the role of the project in catering for the resulting demand.

It should be noted that the project’s scale and timetable may be varied to suit market conditions.

5.5.2 Likely Growth of Tourism in the Cairns Region

Apart from some relatively short periods of adverse conditions, tourism has been a growth sector in the Cairns region over a long period of time with a number of major factors involved.

The first factor has been a long-term trend for world per capita incomes to progressively expand. This combined with falling transport costs, especially in recent decades with improved aircraft and cheaper air travel, has led to a progression of markets opening up over time.

For the Tropical North Queensland region, there has been a progression from southern Australia and New Zealand in the 1960s–70s, USA North America 1970s, UK/Europe 1980s & 1990s, expanding progressively from UK, Germany, Scandinavia to other European countries. There was a large increase from Japan in the 1990s.

Over the past decade, China has emerged as a major new source of growth.

Against this background, short-term fluctuations have been caused by domestic and global economic conditions and importantly by the level of the Australian dollar.

The late 1980s and early 1990s saw a major growth period occur due to the upgrading and opening of Cairns airport in 1984 to long distance wide-bodied international flights followed by the strong devaluation of the Australian dollar from 1986. Although punctuated by the 1989 pilots’ strike and the 1990-91 recession, the growth continued strongly with domestic airline deregulation and lower airfares and major increases from the Japanese market in the 1990s.

The 1997-98 Asian Crisis brought a check to growth with some loss of air services, especially out of Asia. But a subsequent lower dollar saw strong growth resume until the mid-2000s, although hindered for a few years by the effects of 9/11, SARS and the Iraq War.

A further quite severe check occurred with the Global Financial Crisis followed by the very strong rise in the Australian dollar to record levels up until 2012.

While domestic tourism was affected, a major effect was on the Japanese market.

However more recently, as the value of the dollar has fallen, tourism growth has resumed with domestic numbers returning to previous peak levels in 2014 and international visitors in 2015-16.

A feature of recent growth has been the emergence of visitors from China as a major new market.

The following table gives growth in visitor numbers over the past decade.

Table 28: Growth in Visitor Numbers, Tropical North Queensland

Year	International '000	Domestic '000	Total '000
2005	853	1282	2135
2006	855	1599	2454
2007	836	1514	2350
2008	757	1571	2328
2009	655	1565	2220
2010	686	1350	2036
2011	588	1487	2075
2012	661	1504	2165
2013	685	1594	2279
2014	739	1685	2424
2015	781	(1750) ⁽¹⁾	2531
2016	901	1896	2797

⁽¹⁾Note: TRA figures for this year was defective. The figure of 1750 is an estimate.

Source: Cummings Economics from Tourism Research Australia (TRA).

As part of this picture, the following gives numbers of visitors recorded from China for Tropical North Queensland compared with Australia overall.

Table 29: Growth in Chinese Visitor Numbers, Tropical North Queensland and Australia

Year	Tropical North Qld '000	Australia '000
2005	35	270
2006	32	293
2007	58	336
2008	57	332
2009	41	341
2010	72	424
2011	73	505
2012	106	586
2013	142	665
2014	157	784
2015	174	952
2016	229	1116
Average annual growth 2005-2016	18.5%	13.8%

Source: Cummings Economics from Tourism Research Australia (TRA).

Average annual growth to TNQ from China over the five years 2010-11 to 2015-16 was 25.7% per annum.

Of all visitors from China, one in five (20%) visit the Cairns/TNQ region. In holiday visitors, the proportion would be higher. The current indications are that the upswing in visitors to the Cairns/Tropical North Queensland region will continue.

As the following tables illustrate, incomes in China continue to rise along with outbound travel.

Table 30: GDP per Capita, China, Current Prices, US Dollars

Year	\$US	
2007	2706	
2008	3471	
2009	3840	
2010	4524	
2011	5579	
2012	6327	
2013	7072	
2014	7693	
2015	8109	

Source: Cummings Economics from UN Data.

Table 31: China Outbound Travel

Year	Million	
2007	41	
2008	46	
2009	48	
2010	57	
2011	70	
2012	83	
2013	98	
2014	107	
2015	117	
Average annual growth 2007-2015	14% pa	

Source: Cummings Economics from Travel China Website.

Population in China is ten times that of Japan and as with Japan, China is accessible by direct non-stop flights from Chinese cities. At its peak, with a favourable dollar and direct air services, visitation from Japan peaked at about 250,000.

The indications are that when at similar levels of income to Japan (GDP per capita 2015 \$US 34629), and with a favourable Australian dollar exchange rate and direct air services from mainland cities, the equivalent potential Chinese market for Cairns would be 2.5 million visitors. Thus, there is a great deal more potential growth opportunities out of the Chinese market over the coming decades. A constraint has been lack of all year-round direct air services out of Chinese mainland cities. With State Government assistance, direct services are due to commence in 2018.

In relation to the level of the Australian dollar, the indications are that the commodities boom on a scale that helped push up the Australian dollar strongly over the period through to 2013 seems not likely to occur again in the foreseeable future. Monetary policy that further increased the level of the Australian dollar by running official interest rates well above overseas rates has been abandoned with instruments now being used other than interest rates to control the economy.

A fairly prolonged period of more competitive exchange rates seems to be in sight. Against this background, it can be expected that good growth will continue in the domestic and other non-Chinese international markets.

The announcement of five flights a week from mainland Chinese cities could be expected to carry additional traffic of at least 1000 a week, ie. over 52,000 a year representing about a 25% increase on recent levels. However, it seems likely that the Chinese rate of growth in GDP will gradually slow and see the rate of outbound tourism growth slow. Achievement of direct flights from mainland Chinese cities is likely to see an acceleration of visitor numbers to Cairns in the short run but a progressive slowing.

Over the past five years, Chinese visitor numbers to Cairns have averaged a growth of 25.7% pa. Indications are that due to restrictions in flights over Chinese New Year, 2017 will show limited growth over 2016 for Chinese visitors, say 5%. However, a 25% increase is expected in 2018 with the new flights. After that, a scenario of 15% pa is adopted for four years to 2022 and 5% thereafter to 2028.

The following projects other international markets at an average of 2% pa (cf 5.4% pa last 5 years) and domestic market at 2.5% pa (cf av 2005-2016 2.5% pa) would see the following increase in visitor numbers to the region.

Table 32: Projected Increase in Visitor Numbers

Year	Chinese visitors '000	Other international visitors '000	Domestic visitors '000	Total '000
2016	229	671	1896	2796
2017	240	685	1943	2868
2018	303	698	1992	2993
2019	349	712	2042	3103
2020	401	727	2093	3221
2021	462	741	2145	3348
2022	531	756	2199	3486
2023	558	771	2254	3583
2024	585	787	2310	3682
2025	615	803	2368	3786
2026	645	819	2469	3933
2027	678	835	2488	4001
2028	712	852	2550	4114
Growth in Numbers 2024 on 2016	482	181	654	1318

Source: Cummings Economics.

On the basis of the above projected growth rate, the indications are that over the period through to 2027-28, visitor numbers in the region seem likely to rise of the order of 1.3 million from 2.8 to 4.1 million, ie. at an average rate of 3.2% per annum with about 40% due to the growth in number attributable to the Chinese market. This compares with 2.3% per annum over the 8 years 2008 to 2016 and a 6.2% per annum rise over the past 5 years.

Estimated additional visitor nights by 2027-28 at latest average length of stay of six nights (TRA 2015), is about 8 million. Estimated visitor nights in accommodation at KUR-World in 2027-28 is about 720,000. Day visitors estimated at 500,000 compares with an estimated additional 8 million visitor days in the region. The indications are that KUR-World is not out of scale for the additional market to absorb without impact on other existing operations.

Rate of development can be varied in the light of market conditions.

It can thus be expected that the additional total economic impacts given in previous Section 5.4.5 will not need to be moderated to take account of reductions in other existing operations.

5.5.3 Residential Development

As set out in Section 4.1, the project involves development of property that will be sold to individual investors, totalling \$318.9 million.

4-Star Resort Units.....	480
Premium Villas.....	287
Lifestyle Villas	56
Queenslanders.....	21
Total.....	844

It is expected that almost all of these properties will go into the pool available for short term holiday (tourist) accommodation including all of the 4-Star Resort Units.

Owners may choose to occupy properties for part of the year themselves.

It is estimated that of the others (Premium Villas, Lifestyle Villas and Queenslanders), up to 30% could become permanent residents with owner occupiers or rented, ie. about 110 dwellings.

As per Section 7.2.4 (Table 45), it is estimated that over a period of time, up to 25 will be used for on-site accommodation for resort workers.

It is estimated that number of properties occupied by residents will be up to the following levels.

Table 33: Projected Increase in “On Resort” Residents

Year	Number of new properties	Up to 30% residential
2018-19	7	2
2019-20	73	22
2020-21	55	17
2021-22	58	17
2022-23	58	17
2023-24	31	9
2024-25	35	11
2025-26	35	11
2026-27	12	4
Total	364	110

The type of properties and their location in a tourism resort type atmosphere will not be of a type offered in the Kuranda area and could be expected to be of a type that would not affect the Kuranda market. They are more likely to be of a type that would compete with demand for residential properties in developments like Paradise Palms at Clifton Beach located in association with a golf course.

In any event, the number is low at a cumulative total over nine years of up and to 110.

As set out in the following Section 7.3.5, additional demand for construction of residential dwellings in Kuranda stimulated by the project is estimated at a cumulative total of 354 and the availability of some residential at the resort could potentially relieve any pressure on housing in Kuranda as a result of the project.

6.0 TOTAL ECONOMIC IMPACT CONSTRUCTION AND OPERATIONAL PHASE

6.1 General

Based on the analysis in previous sections, the following brings together the full impacts of the construction and operational phases.

6.2 Summary of Estimated Total Impacts Construction and Operational Phases

The following tables look at total estimated impacts through expenditure generated on construction and operations at the resort and generated outside of the resort attributable to the project.

Table 34: Estimated Total Output (Direct Expenditure), Cairns SA4 Region

Year	Construction	At resort	Away from resort	Property sales	Total
2018-19	\$87.90 m	\$16.9 m	\$14.7 m	\$0.9 m	\$120.4 m
2019-20	\$132.10 m	\$45.8 m	\$40.1 m	\$1.4 m	\$219.4 m
2020-21	\$159.70 m	\$65.0 m	\$59.4 m	\$2.1 m	\$286.2 m
2021-22	\$117.80 m	\$113.3 m	\$107.0 m	-	\$338.1 m
2022-23	\$78.50 m	\$118.3 m	\$112.1 m	-	\$308.9 m
2023-24	\$93.20 m	\$136.1 m	\$132.9 m	\$5.5 m	\$367.7 m
2024-25	\$106.80 m	\$178.9 m	\$183.8 m	-	\$469.5 m
2025-26	\$59.80 m	\$178.7 m	\$183.8 m	-	\$422.3 m
2026-27	\$19.40 m	\$193.8 m	\$195.8 m	\$3.8 m	\$412.8 m
2027-28	-	\$239.8 m	\$233.1 m	-	\$472.9 m

Table 35: Estimated Addition to Gross Regional Product including "Flow-on" Type 1, Cairns SA4 Region

Year	GRP construction	GRP at resort	GRP away from resort	Property sales	GRP Total
2018-19	\$61 m	\$11.9 m	\$11 m	\$0.7 m	\$84.6 m
2019-20	\$89 m	\$32.5 m	\$30 m	\$1.1 m	\$152.6 m
2020-21	\$110 m	\$47.3 m	\$44 m	\$1.6 m	\$202.9 m
2021-22	\$79 m	\$84.8 m	\$76 m	-	\$239.8 m
2022-23	\$51 m	\$88.6 m	\$79 m	-	\$218.6 m
2023-24	\$59 m	\$102.3 m	\$94 m	\$4.2 m	\$259.5 m
2024-25	\$68 m	\$135.8 m	\$127 m	-	\$330.8 m
2025-26	\$38 m	\$135.6 m	\$127 m	-	\$300.6 m
2026-27	\$13 m	\$148.2 m	\$135 m	\$2.9 m	\$299.1 m
2027-28	-	\$186.3 m	\$159 m	-	\$345.3 m

Table 36: Estimated Initial Employment, Cairns SA4 Region

Year	Construction	At resort	Away from resort	Property sales	Total
2018-19	128	80	103	5	316
2019-20	299	223	269	7	798
2020-21	348	329	380	11	1,068
2021-22	299	596	641	-	1,536
2022-23	234	639	674	-	1,547
2023-24	303	752	791	29	1,875
2024-25	347	1,011	1,060	-	2,418
2025-26	194	1,036	1,060	-	2,290
2026-27	61	1,149	1,122	20	2,352
2027-28	-	1,450	1,313	-	2,763

Table 37: Estimated Total Modelled Employment including “Flow-on” Type 1, Cairns SA4 Region

Year	Generated by construction	Generated by expenditure at resort	Generated by expenditure away from resort	Property sales	Total
2018-19	334	103	124	5	566
2019-20	606	286	327	8	1,227
2020-21	713	422	468	12	1,615
2021-22	575	765	805	-	2,145
2022-23	422	820	846	-	2,088
2023-24	529	965	996	32	2,522
2024-25	607	1,297	1,348	-	3,252
2025-26	339	1,329	1,348	-	3,016
2026-27	106	1,474	1,429	22	3,031
2027-28	-	1,860	1,682	-	3,542

A notable feature of the project compared with many mining and energy projects is that activity and employment generated will not see a permanent slow down once the construction phase is completed, only a minor short term dip.

6.3 Impact on Gross Regional Product

Gross Regional Product (GRP) Cairns region (SA4) economy is estimated in 2017 to be of the order of \$13.3bn (Ref. id-NIEIR) and could be expected at a “real” growth rate of 2% pa to be of the order of \$13.7bn in 2018-19 in 2017 values and rise to being of the order of \$16.4bn by 2027-28.

Impact on Gross Regional Product in 2017 values is estimated to be \$345m in 2027-28, ie. an addition to GRP of about 2.0% in 2027-28.

6.4 Impact on Employment

Current employed workforce in the Cairns region is estimated to be of the order of 110,000 and to be of the order of 130,000 by 2027-28.

Thus, estimated direct addition to workforce from the project at about 2750 when the resort was fully developed would add directly about 2.1% to the workforce and with “flow-on” effects, this rises to about 2.7% of the workforce.

7.0 SECTOR IMPACTS

7.1 General

The foregoing section looked at overall impacts on the region's economy and including the ability of the region's tourism growth to absorb the project without negative impact on other operators.

The following analyses potential impacts on various sectors and on the Tablelands and Kuranda.

7.2 Location of Direct Employment Impacts of the Resort Development

7.2.1 General

This section addresses the direct impact of the resort on employment in the region and likely place of residence of the workforce. Section 7.3 especially looks at implications for Kuranda.

Workforce impacts will be spread over construction and operating periods.

7.2.2 Construction period workforce

The following table provides an analysis of where direct construction workforce is likely to reside.

It should be noted that Census 2016 data indicates the following workforce involved in construction relating to Kuranda.

Table 38: Employment in Construction, Census 2016

	Resident & work Kuranda	Resident Kuranda work Cairns	Resident Kuranda work elsewhere	Total No.
Construction, nfd	3	9	-	12
Building Construction, nfd	3	4	3	10
House Construction	4	9	3	16
Other Residential Building Construction	3	-	3	6
Non-Residential Building Construction	6	4	-	10
Road and Bridge Construction	-	3	-	3
Concreting Services	3	-	-	3
Roofing Services	-	-	3	3
Plumbing Services	-	3	3	6
Electrical Services	9	4	-	13
Plastering and Ceiling Services	-	-	3	3
Carpentry Services	4	-	3	7
Painting and Decorating Services	5	-	10	15
Landscape Construction Services	3	-	-	3
Other Construction Services nec	5	4	3	12
Total	48	40	34	122

Source: Cummings Economics from ABS, Census 2016 data.

The indications are that 122 lived in Kuranda and worked in the construction sector. Some 40 worked in Cairns and 34 other than Kuranda.

It can be expected a number of Kuranda workers currently travelling to Cairns and elsewhere will find employment locally in the construction. The following analysis provides that about 25 - 30 of the 74 indicated by the Census 2016, will switch to work on the resort construction.

The Census 2016 indicates that there is a substantial workforce from the rest of the Mareeba/Tablelands area employed in construction, totalling 1270, and that a substantial part of the workforce required for the resort construction will be able to be drawn from that area.

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There will be an opportunity to employ some currently unemployed Kuranda residents (a total of 182 at the time of the 2016 Census), and underemployed, but given other opportunities at the resort operations, fairly low numbers are modelled relating to construction with priority given to the works in the early years of construction before resort operations ramp up.

Most of the professional employment generated will be located in Cairns offices and not travel daily to the site.

During peak construction periods, it is likely that workers will locate temporarily in Kuranda. It is assumed that arrangements are made with providers like the caravan park or otherwise with temporary accommodation to cater for up to 100.

About 30% are estimated to be from Cairns (see Technical Note, Appendix 1).

Table 39: KUR-World Estimated Location of Employment by Place of Residence, Construction Phase

Years	Kuranda travel outside	Kuranda un/under employed	Kuranda ⁽¹⁾ new residence	On-site	Table- ⁽²⁾ Lands Other	Cairns	Cairns Office	Total
Residential Building								
2018/19	14	0	0	0	0	0	0	14
2019/20	20	15	20	0	80	41	0	176
2020/21	20	15	50	0	50	34	0	169
2021/22	20	15	50	0	80	48	0	213
2022/23	20	15	50	0	80	48	0	213
2023/24	20	15	50	0	120	98	0	303
2024/25	20	15	50	0	150	112	0	347
2025/26	20	15	50	0	80	25	0	190
2026/27	10	10	0	0	29	0	0	49
2027/28	0	0	0	0	0	0	0	0
Total	164	115	320	0	669	406	0	1674
%	10%	7%	19%	0%	40%	24%	0%	100%
Non Residential								
2018/19	10	15	0	0	15	0	0	40
2019/20	10	14	0	0	0	0	0	24
2020/21	5	5	0	0	18	0	0	28
2021/22	5	5	0	0	6	0	0	16
2022/23	4	0	0	0	0	0	0	4
2023/24	0	0	0	0	0	0	0	0
2024/25	0	0	0	0	0	0	0	0
2025/26	0	0	0	0	0	0	0	0
2026/27	0	0	0	0	0	0	0	0
2027/28	0	0	0	0	0	0	0	0
Total	34	39	0	0	39	0	0	113
%	30%	35%	0%	0%	35%	0%	0%	100%
Civil Works								
2018/19	0	0	0	0	20	15	0	35
2019/20	0	0	0	0	20	24	0	44
2020/21	0	0	0	0	30	35	0	65
2021/22	0	0	0	0	20	8	0	28
2022/23	0	0	0	0	7	0	0	7
2023/24	0	0	0	0	0	0	0	0
2024/25	0	0	0	0	0	0	0	0

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2025/26	0	0	0	0	0	0	0	0
2026/27	0	0	0	0	2	0	0	2
2027/28	0	0	0	0	0	0	0	0
Total	0	0	0	0	99	82	0	185
%	0%	0%	0%	0%	54%	44%	0%	100%
Professional Services								
2018/19	0	0	0	0	0	9	30	39
2019/20	0	0	0	0	0	25	30	55
2020/21	0	0	0	0	0	36	50	86
2021/22	0	0	0	0	0	12	30	42
2022/23	0	0	0	0	0	0	11	11
2023/24	0	0	0	0	0	0	0	0
2024/25	0	0	0	0	0	0	0	0
2025/26	0	0	0	0	0	0	3	3
2026/27	0	0	0	0	0	0	11	11
2027/28	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	82	165	247
%	0%	0%	0%	0%	0%	33%	67%	100%

⁽¹⁾Note: During the construction period, this element of workforce is assumed to live in temporary accommodation such as caravan parks, dongas and the like.

⁽²⁾Note: It is assumed that employment from other Tablelands centres will be given preference and encouraged by providing daily coach transport from Mareeba to site.

Table 39: KUR-World Estimated Location of Employment by Place of Residence, Construction Phase
Cont'd

Years	Kuranda travel outside	Kuranda un/under employed	Kuranda ⁽¹⁾ new residence	On-site	Table- ⁽²⁾ Lands Other	Cairns	Cairns Office	Total
Total Allocation of Employment								
2018/19	24	15	0	0	35	24	30	128
2019/20	30	29	20	0	100	90	30	299
2020/21	25	20	50	0	98	105	50	348
2021/22	25	20	50	0	106	68	30	299
2022/23	24	15	50	0	87	48	11	235
2023/24	20	15	50	0	120	98	0	303
2024/25	20	15	50	0	150	112	0	347
2025/26	20	15	50	0	80	25	3	193
2026/27	10	10	0	0	31	0	11	62
2027/28	0	0	0	0	0	0	0	0
Total	198	154	320	0	807	570	165	2214
%	9%	7%	14%	0%	36%	26%	7%	100%

⁽¹⁾Note: During the construction period, this element of workforce is assumed to live in temporary accommodation such as caravan parks, dongas and the like.

⁽²⁾Note: It is assumed that employment from other Tablelands centres will be given preference and encouraged by providing daily coach transport from Mareeba to site.

7.2.3 Operating period

The following table summarises estimated workforce required when fully operational in 2023-24 by type of occupation and an estimate of likely numbers part time.

Table 40: Summary of Workforce Requirements by Occupation Category, 2023-24

Occupation Category	FTE	Est full time	Est part time	Total
Housekeeping attendants (30/70)	212	64	296	360
Grounds & maintenance attendants (60/40)	85	51	68	119
Reception & reservation senior management professionals (60/40)	109	65	87	152
Senior management professionals (100/0)	35	35	0	35
Sales & marketing professionals (100/0)	39	39	0	39
Finance administration & IT professionals including university staff 77 (100/0)	91	91	0	91
Food & beverage attendants (30/70)	217	65	304	369
Day spa attendants (30/70)	15	5	20	25
Instructors, guides & performers (40/60)	108	43	130	173
Stable hands/animal minders (70/30)	14	10	8	18
Retail attendants (30/70)	33	10	46	56
Health professionals (90/10)	12	11	2	13
Total	970	489	961	1450

Note: Ratios in table full time/part time. All part time factored at 2 part time to one FTE.

Total ratio full time/part time is 34% to 66%

As recorded in Section 6.4, this represents only a marginal increase in workforce in the Tablelands area and in the Cairns SA4 region generally. However, it is a significant number of jobs in the Kuranda area.

The total of approximately 1400 employees compares with workforce in Kuranda (see EIS, Section 11.1), projected forward to 2027-28, as follows.

Table 41: Projected Kuranda Workforce Without KUR-World, 2027-28

Workforce	Census 2016	Est ⁽¹⁾ 2027-28
Unemployed	182	205
Workforce employed	1823	2054
(Full time 62%)	1007	(1135)
(Part time 38%)	692	(780)

⁽¹⁾ Note: Estimated expansion at average 1.0% per annum, ie. workforce residing in the area increasing at a slower than trend population growth of 1.5% per annum.

Table 42: Estimated Location of Kuranda Employment, 2027-28

Working Kuranda area	Census 2016	Adjusted ⁽²⁾ Census 2016	Est 2027-28
Kuranda residents	735	751	846
Residents from outside working in Kuranda	335	302	385
Total employment Kuranda area	1070	1093	1232
Kuranda residents working outside	1049	1072	1208
Total Kuranda residents employed	1784	1823	2054

⁽²⁾ Note: To bring numbers up to level in above table including those away from work at census time.

It is estimated that the project with employment of about 1400 would about double the jobs located in Kuranda by 2027-28, assuming a continuing growth of jobs at long-term trend growth rate of 1.0% per annum.

There are four main ways of filling resort jobs:

- a) from employment of existing Kuranda residents “unemployed” or “under employed”,
- b) from existing Kuranda residents working outside Kuranda taking up local jobs at the resort,
- c) by outside residents travelling into Kuranda to work at the resort, and
- d) through new residents moving into Kuranda area to take up jobs at the resort or jobs replacing workers in local jobs who have taken up work at the resort.

Detailed 2016 Census data of employment by occupation and industry has been analysed especially to identify the degree to which positions might be filled by existing Kuranda residents traveling outside the area to work. The following comments by classes of employment required compared with data about workforce composition from the 2016 Census.

The main “industry” classifications covered relating to KUR-World will be accommodation, food and beverages, transport and arts and recreation with some health services and education services.

Numbers recorded in the 2011 Census as living in Kuranda but working outside Kuranda were as follows.

Table 43(a): Workforce Residing in Kuranda but Working Outside by Selected Industry Category, 2016 Census

Industry category	Cairns	Mareeba/Other Tablelands	Other Queensland	Total
Accommodation & food services	21	3	25	49
Transport	41	3	13	57
Education & training	77	16	18	111
Health services	122	33	28	181
Arts and recreation services	12	7	5	24

When these figures are compared with those in Table 29, the indications are that almost all employees required in road transport, health and education will be able to come from existing Kuranda residents currently working outside the area but that most of those falling in the accommodation and food services and arts and recreation categories will not be able to be drawn from those travelling outside of Kuranda to work.

The following analyses by type of workforce requirement and census data by “occupation”.

Table 43(b): Kuranda Residents Working Outside Kuranda Compared with Resort Requirements

Housekeeping/attendants		
Est requirements	311	(mainly casual)
Residing Kuranda working outside (housekeepers)	17	
Commercial Cleaner	3	
Housekeepers	7	
Commercial Housekeeper	4	
Other Cleaners	3	
<u>Comment:</u> These are relatively unskilled jobs and will be able to be filled by currently unemployed and underemployed. There will be substantial capacity to draw on the remaining Tablelands area but travel costs relative to earnings would need attention		

Grounds & maintenance attendants		
Est requirements	119	(heavily part time)
Residing Kuranda working outside	69	
Property Manager	4	
Crop Farm Workers	5	
Fruit or Nut Farm Worker	5	
Garden and Nursery Labourers	9	
Garden Labourer	3	
Handyperson	3	
Motor Mechanics	5	
Motor Mechanic (General)	5	
Plumber (General)	6	
Electricians	12	
Electrician (General)	12	
<u>Comment:</u> This is a mix of relatively unskilled and trade workers. There are relevant trade workers travelling out of Kuranda to work and there will be local contractors. There will be an opportunity to provide work to currently unemployed and it is possible that contractors and those with relevant trades in this field will have some capacity to supply the resort's needs. There will be business opportunities in this field.		

Reception & reservation		
Est requirements	140	
Residing Kuranda working outside	63	
Secretaries	3	
General Clerk	30	
Keyboard Operators	4	
Information Officer	7	
Receptionists	6	
Receptionist (General)	3	
Hotel or Motel Receptionist	3	
Medical Receptionist	7	
<u>Comment:</u> A substantial proportion of this type of staff could be recruited from residents currently travelling outside of Kuranda to work.		

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Senior managers - professionals		
Est requirements	34	
Residing Kuranda working outside	73	
Chief Executive or Managing Director	3	
General Managers	8	
Corporate General Manager	8	
Specialist Managers	5	
Corporate Services Manager	7	
Human Resource Manager	8	
ICT Managers	3	
Other Specialist Managers	3	
Specialist Managers nec	3	
Call or Contact Centre and Customer Service Managers	9	
Customer Service Manager	9	
Conference and Event Organiser	3	
Other Hospitality, Retail and Service Managers	4	
<u>Comment:</u> A significant number may be able to be recruited among locals currently traveling out of Kuranda to work. Some senior managers are likely to be recruited from outside and live onsite or in company residences as part of their package.		

Sales & marketing - professionals		
Est requirements	24	
Residing Kuranda working outside	19	
Advertising, Public Relations and Sales Managers	5	
Sales and Marketing Manager	5	
Advertising and Marketing Professionals	3	
Sales Representatives	3	
Sales Representative (Business Services)	3	
<u>Comment:</u> While some could be drawn from Kuranda residents currently travelling outside to work, a number will probably be employed by specialist firms located in Cairns and not necessarily located at the resort. It is also possible KUR-World could establish a sales and marketing office in the Cairns CBD.		

Finance & administrative & professionals including university professionals		
Est requirements	91	
Residing Kuranda working outside	114	
Finance Manager	3	
ICT Project Manager	3	
Accountants	3	
Accountant (General)	3	
Other Information and Organisation Professionals	3	
Marketing Specialist	3	
University Lecturers and Tutors	10	
University Lecturer	10	
ICT Support Technicians	3	
ICT Customer Support Officer	3	
Stock Clerk	3	
Human Resources Clerk	3	
Inspectors and Regulatory Officers	9	
Other Miscellaneous Clerical and Administrative Workers	4	
Checkout Operators and Office Cashiers	6	
Contract Administrator	3	
Office Manager	12	
Accounting Clerks	4	
Accounts Clerk	4	
Bookkeeper	8	
Other Clerical and Office Support Workers	7	
Clerical and Office Support Workers nec	3	
Purchasing and Supply Logistics Clerks	4	
<u>Comment:</u> It appears likely that a high proportion of these positions will be able to be drawn from those currently residing in but working outside Kuranda. Some may well be employed by specialist service providers in Cairns or with a sales and marketing office in Cairns.		

Food & beverage attendants		
Est requirements	358	(heavily casual)
Residing Kuranda working outside	42	
Fast Food Cook	6	
Kitchenhand	3	
Shelf Filler	8	
Chef	6	
Bar Attendants and Baristas	4	
Bar Attendant	3	
Barista	4	
Waiter	8	
<u>Comment:</u> Some can come from existing residents travelling outside. There will be an opportunity to draw some from Kuranda unemployed or underemployed. There will be a substantial potential pool on the Tablelands but travel costs compared with part time nature of much of the work would need to be taken into account. There would be prospect of some use of youth backpackers staying onsite or at local hostel.		

Instructors, guides & performers		
Est requirements	154	
Residing Kuranda working outside	36	
Actors, Dancers and Other Entertainers	3	
Environmental Scientists	9	
Environmental Research Scientist	3	
Park Ranger	3	
Botanist	5	
Bus and Coach Drivers	3	
Tour Guide	7	
Outdoor Adventure Guides	3	
<u>Comment:</u> There is only a small number currently living in but working outside Kuranda. There is a substantial opportunity to draw on unemployed indigenous (with training), and for cattle handling and horse shows to come from a major skilled capacity in the Mareeba/Tablelands area in this field.		

Day spa attendants		
Est requirements	25	
Residing Kuranda working outside (see health professionals below)		
<u>Comment:</u> There would be substantial capacity to draw existing health workers travelling outside to work.		

Stable hands		
Est requirements	18	
Residing Kuranda working outside	6	
Animal Attendants and Trainers	6	
<u>Comment:</u> There is substantial existing local employment and apart from currently unemployed, a major capacity is available from the Tablelands.		

Retail attendants		
Est requirements	46	
Residing Kuranda working outside	78	
Retail Managers	16	
Retail Manager (General)	12	
Sales Assistant (General)	37	
Retail Supervisor	7	
Checkout Operator	6	
<u>Comment:</u> Virtually all this staff could come from existing residents currently travelling outside to work.		

Health professionals		
Est requirements	13	
Residing Kuranda working outside	64	
General Practitioners and Resident Medical Officers	4	
General Practitioner	4	
Registered Nurses	38	
Registered Nurses	4	
Registered Nurses nec	3	
Enrolled Nurse	4	
Nursing Support and Personal Care Workers	4	
Nursing Support Worker	3	
<u>Comment:</u> There is a potential for most of this staff could come from Kuranda residents currently travelling outside to work.		

In relation to the question of availability of workforce from the Tablelands area overall, the following compares workforce by occupation with the workforce by occupation recorded in the 2016 Census for the Mareeba and Tablelands Local Government Areas.

Table 43(c): Workforce Residing on Mareeba/Tablelands by Industry Category, ABS 2016 Census

Industry category	No.	
Accommodation & food services	1122	
Arts and recreation services	348	
Construction	1390	

The indications are that on the Tablelands, there is already a substantial workforce in the area employed in relevant fields. Although KUR-World will increase employment in these fields, there is already a substantial pool of workers in the area in these categories.

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Table 43(d): Mareeba/Tablelands (excluding Kuranda SA2) Workforce (ABS 2016 Census) Compared with Resort Requirements

Housekeeping/attendants		
Est requirements	311	(mainly casual)
Residing Mareeba/Tablelands working outside (housekeepers)	459	
Commercial Cleaners	259	
Domestic Cleaners	72	
Housekeepers	52	
Laundry Workers	15	
Other Cleaners	16	
<u>Comment:</u> This category will need special attention.		

Grounds & maintenance attendants		
Est requirements	119	(heavily part time)
Residing Mareeba/Tablelands	1004	
Automotive and Engineering Trades Workers, nfd	14	
Motor Mechanics	181	
Electricians	152	
Airconditioning and Refrigeration Mechanics	21	
Gardeners	91	
Greenkeepers	22	
Nurserypersons	15	
Hotel Service Managers	5	
Security Officers and Guards	24	
Storepersons	61	
Labourers, nfd	58	
Farm, Forestry and Garden Workers, nfd	55	
Garden and Nursery Labourers	93	
Other Farm, Forestry and Garden Workers	33	
Caretakers	19	
Handypersons	55	
Recycling and Rubbish Collectors	4	
Other Miscellaneous Labourers	101	
<u>Comment:</u> There is a large pool and workforce already in this category in the area.		

Reception & reservation		
Est requirements	140	
Residing Mareeba/Tablelands	451	
Information Officers	47	
Receptionists	186	
Other Sales Assistants and Salespersons	36	
Checkout Operators and Office Cashiers	177	
Other Sales Support Workers	5	
<u>Comment:</u> There is a large pool of workforce to draw from.		

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Senior managers - professionals		
Est requirements	34	
Residing Mareeba/Tablelands	159	
Chief Executives and Managing Directors	47	
Hospitality, Retail and Service Managers, nfd	6	
Accommodation and Hospitality Managers, nfd	3	
Hotel and Motel Managers	68	
Licensed Club Managers	11	
Other Accommodation and Hospitality Managers	24	
<u>Comment:</u> There is a large pool of managers. Special skills for resort managers may need to come from outside.		

Sales & marketing - professionals		
Est requirements	24	
Residing Mareeba/Tablelands	23	
Sales, Marketing and Public Relations Professionals, nfd	6	
Advertising and Marketing Professionals	14	
Public Relations Professionals	3	
<u>Comment:</u> There is a substantial pool to draw from but some training may be necessary in relation to tourism.		

Finance & administrative & professionals including university professionals		
Est requirements	91	
Residing Mareeba/Tablelands	1290	
Finance Managers	31	
Human Resource Managers	20	
Accountants	71	
Auditors, Company Secretaries and Corporate Treasurers	3	
Human Resource Professionals	33	
Tertiary Education Teachers, nfd	3	
University Lecturers and Tutors	6	
Vocational Education Teachers (Aus) / Polytechnic Teachers (NZ)	34	
Office Managers	163	
Personal Assistants	32	
Secretaries	89	
General Clerks	384	
Keyboard Operators	34	
Accounting Clerks	97	
Bookkeepers	183	
Payroll Clerks	21	
Other Clerical and Office Support Workers	32	
Logistics Clerks, nfd	5	
Purchasing and Supply Logistics Clerks	49	
<u>Comment:</u> Very large pool relative to requirements.		

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Food & beverage attendants		
Est requirements	358	(heavily casual)
Residing Mareeba/Tablelands	611	
Cafe and Restaurant Managers	74	
Hospitality Workers, nfd	10	
Bar Attendants and Baristas	119	
Cafe Workers	54	
Waiters	82	
Food and Drink Factory Workers	59	
Fast Food Cooks	55	
Food Trades Assistants	11	
Kitchenhands	147	
<u>Comment:</u> There is not a very large pool to draw from in relation to requirements. Special attention will be needed.		

Instructors, guides & performers		
Est requirements	154	
Residing Mareeba/Tablelands	102	
Actors, Dancers and Other Entertainers	5	
Environmental Scientists	74	
Gallery, Museum and Tour Guides	23	
<u>Comment:</u> Special attention will be needed to meeting this category.		

Day spa attendants		
Est requirements	25	
Residing Mareeba/Tablelands (see health professionals below)		

Stable hands		
Est requirements	18	
Residing Mareeba/Tablelands	160	
Livestock Farm Workers	160	
<u>Comment:</u> There is a very large pool to draw from.		

Retail attendants		
Est requirements	46	
Residing Mareeba/Tablelands	1177	
Retail Managers	320	
Sales Assistants and Salespersons, nfd	5	
Sales Assistants (General)	802	
Retail Supervisors	50	
<u>Comment:</u> A very large pool available to draw from.		

Health professionals		
Est requirements	13	
Residing Mareeba/Tablelands	569	
Health and Welfare Services Managers	30	
Health Professionals, nfd	6	
Medical Imaging Professionals	9	
Occupational and Environmental Health Professionals	28	
Pharmacists	28	
Other Health Diagnostic and Promotion Professionals	3	
Complementary Health Therapists	5	
Podiatrists	4	
General Practitioners and Resident Medical Officers	77	
Other Medical Practitioners	5	
Nurse Managers	11	
Registered Nurses	340	
Medical Technicians	23	
<u>Comment:</u> A very large pool available to draw from.		

As the following table indicates, apart from those Mareeba/Tablelands' residents working outside the Mareeba/Tablelands area in Cairns and the rest of the region as at Census 2016, there are substantial numbers working further afield, especially in mining and construction (much of which is likely to be related to mining) on a FIFO basis.

Table 43(e): Residing Mareeba/Tablelands LGAs (excluding Kuranda) – Working Outside Mareeba/Tablelands LGAs (excluding Kuranda, ABS 2016 Census

Region	No.	
Cairns	609	
Douglas	218	
Cassowary Coast	6	
Outback Queensland incl Peninsula	261	
Townsville Region	57	
Mackay Region	69	
Fitzroy Region	39	
Northern Territory	124	
Outback Western Australia	18	

Based on an appreciation of the foregoing information, the following seeks to allocate the number of employees by location in 2027-28 on the principles of:

- a) preference to locals currently travelling outside Kuranda for work,
- b) training local unemployed,
- c) recruiting substantial local underemployed,
- d) drawing from the rest of the Mareeba/Tablelands where possible,
- e) minimising drawing from Cairns,
- f) establishing a Cairns sales and administration office, and
- g) accommodating some staff on site.

Table 44: Estimated Location of Employees – Operational Phase – Peak 2027-28

Occupation category	Travel outside	Unemployed/ Under-employed	Local new residents	Local onsite	Table-lands	Cairns	Cairns office	Total
Housekeepers	10	70	100	-	90	96	-	360
Grounds & maintenance	20	30	30	-	21	18	-	119
Reception reservations	40	-	20	-	35	47	10	152
Senior managers professional	5	-	20	-	-	10	-	35
Sales & marketing	5	-	9	-	5	10	10	39
Finance, administration & university professionals	50	-	20	-	-	10	11	91
Food, beverage attendants	20	10	89	25	105	120	-	369
Instructors guides performers	15	10	38	-	60	50	-	173
Day spa attendants	10	-	10	-	5	-	-	25
Stable hands	-	8	-	-	10	-	-	18
Retail attendants	36	-	10	-	10	-	-	56
Health professionals	13	-	-	-	-	-	-	13
Total	224	128	346	25	341	355	31	1450
Per cent	15.4%	8.8%	23.8%	1.7%	23.5%	24.5%	2.1%	100%

On this distribution:

- a) About 220 of the estimated 800 traveling outside of Kuranda to work in Cairns by 2027-28 would become locally employed at the resort.
- b) Out of the approximately 200 local unemployed (182 at Census 2016), and of local residents underemployed (Census 2016 approximately 700 in part-time work), about 130 would find employment at the resort.
- c) About 340 would be employed on a daily drive-in basis from elsewhere in the Mareeba/Tablelands area.
- d) About 350 would be drawn from Cairns.
- e) About 30 would work in a sales and administrative office in Cairns.
- f) About 25 would be staff living on resort.
- g) About 350 would be new residents, or, drawn from the Kuranda community currently working in Kuranda, leading to an expansion of population and a need for additional housing and facilities in Kuranda for approximately 700 additional population. (See further analysis, Section 7.3).

Drawing on about 220 existing Kuranda residents currently travelling outside Kuranda to Cairns would decrease traffic on the Kuranda Range by about 440 movements per week day but be offset by about 700 extra movements per week day by estimated workforce from Cairns of about 350, a net increase of 260 per week day.

The approximately 350 new Kuranda residents would generate additional movements.

The foregoing table estimates employment at peak in 2027-28.

The following table estimates total employment by years over the project period.

Previous Table 13 indicates that “flow-on” jobs (Type 1 multiplier) in the Cairns region would increase total about 410 when fully operational. However, it can be expected that most of the expenditure on inputs of goods and services will accrue outside the Kuranda area on the Tablelands and in the Cairns area.

(Note: Only Type 1 multipliers are used and “flow-on” impacts of expenditure of employee incomes are not included in this analysis.)

Table 45: Estimated ⁽¹⁾ Operational Employment by Years Over the Project Period, YE March

Years	Est ⁽¹⁾ Average total	Est total Inc. flow on type 1 multiplier
Part 2018-19	80	103
2019-20	223	286
2020-21	329	422
2021-22	596	765
2022-23	639	820
2023-24	752	965
2024-25	1,011	1,297
2025-26	1,036	1,329
2026-27	1,149	1,474
2027-28	1,450	1,860

⁽¹⁾Note: Based on annual build up of revenue, see Table 9.

“Flow-on” jobs (Type 1 multiplier) would increase the total of 1,450 by about 410 when fully operational.

7.2.4 Total resort construction and operating workforce

The following table summarises the total construction and operational workforce by estimated location of workforce.

Table 46: Summary – KUR-World, Total Resort Employment by Estimated Location

Year	Kuranda travel outside	Kuranda unemployed/ underemployed	Kuranda ⁽¹⁾ new residents	Onsite	Tablelands Other	Cairns	Cairns Office	Total
Construction								
2018/19	24	15	0	0	35	24	30	128
2019/20	30	29	20	0	100	90	30	299
2020/21	25	20	50	0	98	105	50	348
2021/22	25	20	50	0	106	68	30	299
2022/23	24	15	50	0	87	48	11	235
2023/24	20	15	50	0	120	98	0	303
2024/25	20	15	50	0	150	112	0	347
2025/26	20	15	50	0	80	25	3	193
2026/27	10	10	0	0	31	0	11	62
2027/28	0	0	0	0	0	0	0	0
Total	198	154	320	0	807	570	165	2214
%	8.9%	7.0%	14.5%	0.0%	36.4%	25.7%	7.5%	100.0%
Operational								
2018/19	12	7	19	1	19	20	2	80
2019/20	34	20	53	4	53	55	5	223
2020/21	51	29	79	6	78	81	7	329
2021/22	92	53	142	10	141	146	12	596
2022/23	99	56	152	11	151	156	13	639
2023/24	116	66	179	13	177	184	16	752
2024/25	148	85	229	17	227	235	20	961
2025/26	151	86	233	17	230	239	20	976
2026/27	176	101	272	20	269	279	24	1140
2027/28	224	128	346	25	342	355	30	1450
Total	1104	631	1705	123	1685	1750	148	7146
%	15.4%	8.8%	23.9%	1.7%	23.6%	24.5%	2.1%	100.0%
Note: Proportionally allocated.								
Total Construction + Operational								
2018/19	36	22	19	1	54	44	32	208
2019/20	64	49	73	4	153	145	35	522
2020/21	76	49	129	6	176	186	57	677
2021/22	117	73	192	10	247	214	42	895
2022/23	123	71	202	11	238	204	24	874
2023/24	136	81	229	13	297	282	16	1055
2024/25	168	100	279	17	377	347	20	1308
2025/26	171	101	283	17	310	264	23	1169
2026/27	186	111	272	20	300	279	35	1202
2027/28	224	128	346	25	342	355	30	1450
Total	1302	785	2025	123	2492	2320	313	9360
%	13.9%	8.4%	21.6%	1.3%	26.6%	24.8%	3.3%	100.0%
Note: This table does not include employment resulting from day and overnight visitors to Kuranda spending outside the resort.								
⁽¹⁾ Note: Construction new residents are assumed to be temporary residents who will stay in temporary accommodation, caravan parks and the like.								

7.3 Impacts on Kuranda

7.3.1 General

The following looks at economic impacts on Kuranda, of direct impacts of the resort development and then at secondary impacts generated.

7.3.2 Direct impacts on population and housing

From the preceding Section 7.2, it is estimated that the project operational period will create the following additional jobs in Kuranda.

Table 47: Estimated Additional Jobs in Kuranda

Years	New jobs involving additional workers based in Kuranda	
2018/19	19	
2019/20	74	
2020/21	129	
2021/22	194	
2022/23	204	
2023/24	232	
2024/25	282	
2025/26	286	
2026/27	275	
2027/28	350	

On the basis of two population for one job, estimated additional population generated (see Technical Note, Appendix 1), from additional workers located in Kuranda would be needed compared with existing and likely future population with the project.

Table 47: Estimated Additional Population Generated & Percent Increase over Existing & Likely Future Population Without the Project, Kuranda SA2 Area

Years	Estimated Additional population No.	Estimated Population w/o project ⁽¹⁾ No.	Percent Increase %
2018/19	36	4802	0.7%
2019/20	148	4874	3.0%
2020/21	258	4967	5.2%
2021/22	358	5021	7.7%
2022/23	408	5097	8.0%
2023/24	464	5173	9.0%
2024/25	564	5250	10.7%
2025/26	572	5329	10.7%
2026/27	550	5409	10.2%
2027/28	700	5490	12.8%

⁽¹⁾Note: Projected at average 1.5% per annum.

When fully operational, it is estimated that the project will increase Kuranda population by about 12% above what it would have been without the resort.

It is assumed that the construction workers will in large part take up temporary accommodation in the caravan park “dongas” etc. The number of additional dwellings required at a rate of one per 2.83 population is estimated as follows for the operation workforce and temporary accommodation for construction workforce at one per worker.

Table 48: Estimated Additional Dwellings Needed, Kuranda SA2 Area

Years	Dwellings required	(Of which temporary dwellings)	Non-temporary dwellings	Additional non-temporary for that year
2018/19	13	(0)	13	13
2019/20	52	(20)	13	0
2020/21	91	(50)	41	28
2021/22	144	(50)	94	53
2022/23	164	(50)	114	20
2023/24	199	(50)	149	35
2024/25	202	(50)	152	3
2025/26	202	(50)	152	0
2026/27	194	(0)	194	42
2027/28	247	(0)	247	53

7.3.3 Secondary impacts on Kuranda

Secondary impacts on local business will come from a number of directions.

- a) Construction Phase
 - i. Spending by temporary construction work residents
- b) Operation Phase
 - i. Spending by resort overnight and day visitors outside the resort
 - ii. Demand stimulated by resort employee local resident expenditure
 - iii. Expenditure on additional dwellings needed by employees located in Kuranda.

Construction of additional dwellings needed by employees located in Kuranda is estimated in Section 7.2. In Section 5.3.1, it was estimated a substantial proportion of day visitors and those staying overnight would also visit Kuranda and make some expenditure.

Direct population impact on Kuranda is estimated in the previous section. The impact of resulting household expenditure on Kuranda is estimated at approximately \$20,000 per person based on ABS household expenditure data, reduced to allow for substantial leakage outside of the Kuranda area.

The following table brings this information together to estimate total expenditure generated in Kuranda businesses.

Table 49: Estimated Expenditure in Kuranda Businesses

Years	Expenditure by day trippers ⁽¹⁾	Expenditure by overnight visitors ⁽²⁾	Dwelling construction ⁽³⁾	Expenditure by additional permanent residents ⁽⁴⁾	Expenditure by additional temporary residents ⁽⁵⁾	Total
	\$m	\$m	\$m	\$m	\$m	\$m
2018/19	1.4	-	3.3	0.7	-	5.4
2019/20	3.2	0.2	9.8	3.0	0.4	16.6
2020/21	3.9	0.5	9.8	5.2	1.0	20.4
2021/22	4.9	1.5	13.3	7.8	1.0	28.5
2022/23	5.3	1.5	5.0	8.2	1.0	21
2023/24	5.8	1.9	8.8	9.3	1.0	26.8
2024/25	6.5	3.1	0.7	11.3	1.0	22.6
2025/26	6.5	3.1	-	11.4	1.0	22
2026/27	6.5	3.4	-	11.0	-	20.9
2027/28	6.7	4.3	11.3	14.0	-	36.3

⁽¹⁾ Note: See Table 18.

⁽²⁾ Note: See Table 22.

⁽³⁾ Note: See Table 48.

⁽⁴⁾ Note: See Table 47 (Estimated Expenditure in Kuranda \$20,000 per capita).

⁽⁵⁾ Note: See Table 45 (Estimated Expenditure in Kuranda \$20,000 per capita).

The following table estimates impact of this expenditure on employment based on input/output multipliers (see Technical Note, Appendix 1).

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Table 50: Estimated Additional Turnover and Employment in Kuranda Businesses by Industry Sector

Years	Heritage	Retail	Imports	Food & beverage	Resident construction	Household expenditure	Total
Total output							
	<u>\$m</u>	<u>\$m</u>	<u>\$m</u>	<u>\$m</u>	<u>\$m</u>	<u>\$m</u>	<u>\$m</u>
2018/19	\$0.3 m	\$0.2 m	\$0.4 m	\$0.6 m	\$3.3 m	\$0.7 m	\$5.4 m
2019/20	\$0.7 m	\$0.5 m	\$0.9 m	\$1.4 m	\$9.8 m	\$3.4 m	\$16.6 m
2020/21	\$0.9 m	\$0.7 m	\$1.1 m	\$1.8 m	\$9.8 m	\$6.2 m	\$20.4 m
2021/22	\$1.3 m	\$1.0 m	\$1.6 m	\$2.6 m	\$13.3 m	\$8.8 m	\$28.5 m
2022/23	\$1.4 m	\$1.0 m	\$1.7 m	\$2.7 m	\$5.0 m	\$9.2 m	\$21.0 m
2023/24	\$1.5 m	\$1.2 m	\$1.9 m	\$3.1 m	\$8.8 m	\$10.3 m	\$26.8 m
2024/25	\$1.9 m	\$1.4 m	\$2.4 m	\$3.8 m	\$0.7 m	\$12.3 m	\$22.6 m
2025/26	\$1.9 m	\$1.4 m	\$2.4 m	\$3.8 m	-	\$12.4 m	\$22.0 m
2026/27	\$2.0 m	\$1.5 m	\$2.5 m	\$4.0 m	-	\$11.0 m	\$20.9 m
2027/28	\$2.2 m	\$1.7 m	\$2.8 m	\$4.4 m	\$11.3 m	\$14.0 m	\$36.3 m
Direct employment							
	<u>No.</u>	<u>No.</u>	<u>No.</u>	<u>No.</u>	<u>No.</u>	<u>No.</u>	<u>No.</u>
2018/19	2	2	0	5	11	2	22
2019/20	4	5	0	12	32	12	64
2020/21	5	6	0	15	32	22	80
2021/22	8	9	0	22	43	31	112
2022/23	8	9	0	24	16	32	89
2023/24	9	10	0	27	29	36	111
2024/25	11	13	0	33	2	43	103
2025/26	11	13	0	33	0	43	101
2026/27	12	13	0	34	0	39	98
2027/28	13	15	0	38	37	49	151

The following table summarises.

Table 51: Estimated Additional Turnover and Employment Created in Kuranda Businesses

Years	Turnover \$m	Estimated direct employment No.
2018/19	\$5.4 m	22
2019/20	\$16.6 m	64
2020/21	\$20.4 m	80
2021/22	\$28.5 m	112
2022/23	\$21.0 m	89
2023/24	\$26.8 m	111
2024/25	\$22.6 m	103
2025/26	\$22.0 m	101
2026/27	\$20.9 m	98
2027/28	\$36.3 m	151

Estimated impact on population and housing is estimated as follows based on 75% of jobs being filled by Kuranda residents.

Table 52: Estimated Secondary Impact on Population and Dwelling Needs Kuranda

Years	Est Additional Employment	Est Additional Population	Est Dwellings needed
2018/19	22	44	16
2019/20	64	128	45
2020/21	80	160	57
2021/22	112	224	79
2022/23	89	178	63
2023/24	111	222	78
2024/25	103	206	73
2025/26	101	202	71
2026/27	98	196	69
2018/19	151	302	107

7.3.4 Total impacts on Kuranda

Based on the foregoing, it is estimated that the project will have the following impacts on the Kuranda economy when fully operational.

Table 53: Total Additional Impacts on Kuranda, 2027-28

	Directly related to resort activity	Secondary impact on Kuranda businesses	Total
Employment	350	151	501
Population	700	302	1002
Additional dwellings needed	247	107	354

Thus, by 2027-28, the continued impact of the project on the Kuranda population (estimated by then to be about 5490 without the project), is expected to increase population by about 21% to existing population and 18% to projected 2027-28 population without the project and to require an extra 354 dwellings, ie. about 35 a year over the 10-year lead up period to full operations.

An average of about 35 dwellings a year will translate into construction activity averaging of the order of \$8.8m a year. This compares with average dwelling construction Kuranda area last five years of about 30 per annum (see Table 1, Social and Economic Profile EIS, Section 11.1).

Thus, dwelling construction rate in Kuranda could be expected to approximately double over the lead-in period.

7.3.5 Additional housing requirements and land availability

Long Term Housing Need

Estimated demand for additional dwellings is as follows.

Table 54: Estimated Additional Demand for Additional Dwellings Generated by KUR-World in the Kuranda Area

Years	No.	Additional Required For that year
2018/19	29	29
2019/20	97	68
2020/21	148	51
2021/22	223	75
2022/23	227	4
2023/24	277	50
2024/25	280	3
2025/26	273	0
2026/27	263	0
2027/28	354	91

During the construction phase, it is estimated that temporary accommodation might be needed for workers as follows.

2018-19	0
2019-20	20
2020-21	50
2021-22	50
2022-23	50
2023-24	50
2024-25	50
2025-26	50
2026-27	0
2027-28	0

Availability of Allotments

Queensland Treasury report "Residential Land Development Profile" for Mareeba LGA July 2017 indicates as follows.

Table 55: Broadacre Stock s at March 2017

	Total stock Ha	Dwellings High	Yield Medium
Mareeba Shire	1,790	7,338	5,777
Cairns SA4 Region	96,449	746,357	631,777

Of the stock for 7338 dwellings, 7056 was standard urban density of 282 rural density.

Thus the indications are that with Mareeba Shire, there is adequate residential land available to absorb the project without strain.

Average annual lot approvals 2007 to 2016 was 255 which indicates that there is an active development industry that can meet additional needs.

Mareeba Shire have advised in relation to the Kuranda area availability of land for dwellings as per following map totalling 264.

Thus the indications are that the current supply equals the demand likely to be generated up to 2026-27 by the project.

While there would be sufficient to meet initial needs up to about 2020-21, given normal organic growth demands, additional subdivisions would need to be brought on stream in the area to meet demand before 2023-24.

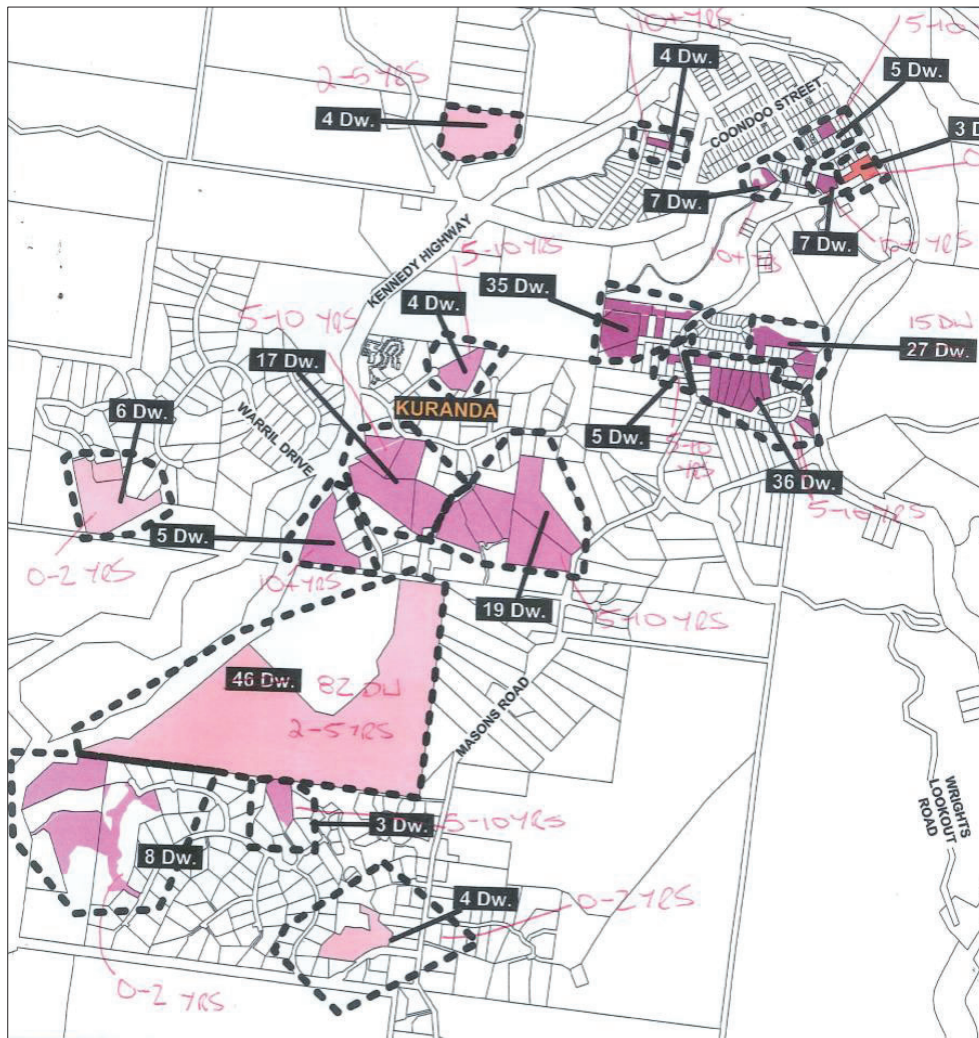
Discussions in the real estate industry indicate that there is not a great deal of surplus capacity in the housing stock in the form of unoccupied dwellings.

Short Term Construction Period Needs

It is estimated that short term temporary accommodation need for construction workforce dwellings in Kuranda will be of the order of magnitude of 50 over most of the construction period.

Preliminary consultation with real estate agents indicate a limited capacity at the caravan park and in available rental properties indicating a need for special attention to this aspect.

Map 56: Land Available for Dwellings, Kuranda Area



7.4 Tourism Impacts

7.4.1 General

Section 5.5 analyses the ability of the tourism market to absorb the project without significant negative impact on other product. It concludes that projected growth (especially of the market out of China to which the project is expected to have particular appeal), will create a demand for a growth in product well in excess of the amount offered by the project.

The following indicates the degree to which KUR-World will impact on aspects of tourism in the region.

7.4.2 Accommodation sector

The project will provide the following level of accommodation by 2023-24.

Table 57: Accommodation Development

	No.	
5-star Resort hotel resort rooms	200 rooms	
4-star Resort serviced apartments est rooms	210 apts	
Lifestyle Villas (farm stay)	56 villas	
Premium Villas	286 villas	
Health & Well-being suites	70 suites	
Rainforest education	350 beds	
University Campus	300 beds	
Glamping	25 tents	
Queensland Houses	21 houses	
Multi unit dwellings	2 suites	

The following table sets out information on the scale and growth of accommodation in the Cairns/Tropical North Queensland Tourism region in two types of accommodation – hotels and resorts and serviced apartment.

Table 58: Hotels & Resorts, Tropical North Queensland

Years	Average room Numbers	Room nights occupied '000	Occupancy Rate %
2005-06	4281	1023	65%
2006-07	4079	972	65%
2007-08	4251	958	62%
2008-09	4374	921	58%
2009-10	4439	919	57%
2010-11	4325	959	61%
2011-12	4035	944	64%
2012-13	3884	963	68%
2013-14	3891	979	69%
2014-15	3982	974	68%
2015-16	3980	1010	69%

Source: ABS Tourism Accommodation Series, 2006-07 to 2010-11.

It can be seen that the retreat of room occupancy rates after 2006-07 saw a reduction in the number of rooms in 2011-12 to 2012-13.

The bounce back in room nights has seen occupancy rates rise to 69% in 2015-16. In 2014-15 and 2015-16, September quarter occupancy rates were 78.9% and 76.3% respectively. Anecdotal information is that in September quarter 2016, shortages of rooms were occurring in hotels in Cairns. Up until 2015-16, no significant rise had occurred in the number of rooms available.

Table 59: Serviced Apartments, Tropical North Queensland

Years	Average room Numbers	Nights occupied No. '000	Occupancy Rate %
2005-06	3428	764	61%
2006-07	3619	764	58%
2007-08	3775	773	56%
2008-09	3964	732	51%
2009-10	4123	738	49%
2010-11	3863	716	51%
2011-12	3740	709	52%
2012-13	3774	739	54%
2013-14	3996	810	55%
2014-15	4062	832	56%
2015-16	3933	871	60%

The table indicates that there was a strong growth in the number of serviced apartments from 2005-06 to 2010-11 and with declining room nights there was a strong fall in occupancy rates to 2009-10. After 2010-11, number of apartments fell off (and tended to switch to residential). Since a low in room nights occupied in 2011-12, there has been a strong rise back to a level 14% above 2005-06.

When the two series are put together, serviced apartments have risen as a proportion of total from 46% to almost 50%.

Projected demand for hotel resort rooms and serviced apartment rooms is as follows based on an average over 10 years of 3.2% pa (see analysis, Table 32), but with Chinese numbers growing at 15% pa up to 2021-22 but slowing after that to 5% pa.

Table 60: Projected Need for Hotel Resort Rooms & Serviced Apartments, TNQ Tourism Region

Years	Hotel & resort rooms	Serviced apartments	Total	Annual increase	Cumulative increase
2015-16	3980	3933	7,913		
2016-17	4135	4086	8,221	308	308
2017-18	4296	4246	8,542	321	629
2018-19	4464	4411	8,875	336	962
2019-20	4638	4583	9,221	346	1308
2020-21	4819	4762	9,581	360	1668
2021-22	5006	4947	9,953	372	2048
2022-23	5146	5086	10,232	279	2319
2023-24	5290	5228	10,518	286	2605
2024-25	5438	5374	10,812	294	2899
2025-26	5590	5524	11,114	302	3201
2026-27	5747	5679	11,426	312	3513
2027-28	5908	5838	11,746	320	3833

By end 2027-28, projected additional rooms required is 3833 of which KUR-World would supply 200 rooms, 210 apartments and 342 villas. If it is assumed that houses and villas have the equivalent of two rooms, total rooms would be 1364 out of estimated requirement of 3800.

The indications are that KUR-World will not oversupply the general hotel resort and serviced apartment market. Moreover, it would greatly stimulate the development of new tourism product across the Tablelands that has languished after the development of Skyrail. The timing of development can be varied to meet the market.

7.4.3 Impacts on other tours and attractions

Kuranda Tourism

Impacts on Kuranda businesses are estimated in Section 7.3. Additional day visitor spending in existing tourism oriented businesses is estimated to rise to the order of \$11.0m in 2027-28. Day visitors are projected to expand from about 1 million per annum to of the order of 1.48 million. Day tripper expenditure in existing Kuranda businesses is estimated to rise from about an estimated \$70m by the order of 16%.

Tablelands Tourism

The location of a major accommodation establishment on the Tablelands, with major international visitor use, has long been a key ambition of the tourism sector and wider community in Tropical Queensland. This is because it can be expected to have a significant impact on existing Tablelands tours and attractions and to greatly stimulate the development of new product and attractions, adding the Tablelands highlands to the Reef, Rainforest and Outback as underpinning sub-regional destinations.

Reef Tourism

It is expected almost all the overnight visitors will visit the reef. It is projected to add by 2027-28 about a further 240,000 visitors to the reef compared with about 1.1 million in 2016, estimated, at overall projected growth of tourism in the area (see Table 32), to be approximately 1.6 million by 2027-28. When fully operational, overnight resort visitors are expected to contribute about 15% of reef trip traffic in the Cairns region.

Expenditure per person on the trip is estimated to be of the order of \$240 in current prices and result in direct expenditure of the order of \$58 million.

7.4.4 Impact on airport and market development

It is expected that almost all visitors staying at the resort will arrive and depart through Cairns airport. Visitors staying overnight, estimated to reach 240,000 by 2027-28, would represent a total of about 460,000 passenger movements a year, ie. about 9% on current levels of approximately 5 million. At an aircraft size of 300 pax, this would represent about 30 movements a week (ie. about two in and two out a day). Those visiting the resort as day trippers, estimated at 480,000 by 2027-28, would account for over eight movements a day, ie. four arrivals and four departures.

The Cairns region has a major interest in achieving and sustaining direct flights from mainland Chinese cities and government assistance is being provided to support direct flights from December 2017. The KUR-World development proceeding can play a role in consolidating the viability of those flights and the public investment made in attracting the flights.

7.5 Road Transport Infrastructure

Impacts on road transport infrastructure are covered elsewhere in the EIS.

8.0 OTHER MATTERS

8.1 Potential for Business and Supply Chain Opportunities

8.1.1 Construction Phase

Supply capacity report by Thirkell Consulting Engineers, Appendix 2, points to substantial opportunities to supply from the Tablelands materials, of concrete, timber and meet light steel fabrication requirements.

It also points to a possibility of location of a plant to produce steel trusses and given a need to minimise transport on the Kuranda Range Road to locate on the Tablelands stock points from which supplies of materials and items brought up from the south via road transport and the Palmerston Highway can be supplied to the project.

8.1.2 Operational Phase

The project will open up substantial opportunities for the region, with probably the most important at this point in time, of helping consolidate the region's place in the Chinese market through helping to consolidate direct air services from mainland Chinese cities and opening up the Tablelands as a key sub regional destination additional to the reef.

Although at this stage, the project is modelled with all attractions and activities being conducted by direct employment, it is likely that a number of functions in the future could be conducted on a buy-in, subcontract or lease basis by outside business providers.

Existing Kuranda businesses will have opportunities as set out in Section 7.3.

A very significant range of opportunities will especially accrue to the Tablelands area. This will include the supply of fresh produce to the resort and other inputs and services, including the development of collateral tourism product and attractions.

8.2 Potential for Direct Equity Investment

The project will provide an opportunity for direct investment in property sales with a total estimated value of \$448m (see Table 15) and in Lifestyle Villas, 4 star Serviced Apartments and Premium Villas with a total value estimated at about \$328m (see Table 3).

9.0 WIDER EFFECTS ON THE QUEENSLAND & NATIONAL ECONOMIES

9.1 Strengthening the Queensland Regional Economy

The Cairns regional economy plays an important role in the wider Queensland economy, especially in making it Australia's most decentralised state.

Outside of Queensland's south-east, the Cairns Tropical North Queensland region:

- Has the largest population and has consistently recorded the highest level of growth of population, both residential and total including visitors;
- Leads by a long way in tourism development, especially in international tourism. In holiday international visitors, it exceeds the States of Western Australia and South Australia;
- Is the leading agricultural region in the North, especially in horticultural production supporting a great deal of road transport services to and from southern Australia;
- Is the leading aviation servicing centre with Cairns airport dominating passenger movements and international air links in northern Australia;
- Is the leading maritime servicing centre with three operational shipyards servicing a large tourism fleet, trading fleet, fishing fleet and Australia's north eastern naval base.

Strengthening the region's economy has strong additional "flow-on" effects to other regions right up and down the Queensland coast with much of the regional impact being on Brisbane and south-east Queensland as a supplier of many manufactured goods and of business and government services.

9.2 Estimated Impact on the Queensland Economy

Impacts on the Cairns regional economy's Gross Regional Product including Type 1 "flow-on" effects over the 10 lead-in years is estimated to total about \$2.4 billion and be contributing, once fully operational in 2027-28, of the order of \$350 million a year.

Regional employment generated during the first nine years build up in the Cairns region is estimated to total of the order of 24,000 job years and when fully operational in 2027-28 be supporting of the order of 3700 jobs in the region.

Queensland wide impacts would be substantially higher than this because of "flow-on" effects to regions down the coast and to Brisbane and the south-east corner. Addition to Queensland State Product (currently at about \$320 billion a year), could be expected to be up around an order of magnitude figure of \$400 million a year and employment generated including "flow-on" could be expected to be around an order of magnitude figure in the State of about 4000 a year.

9.3 Contribution to State Government Budget

Around Australia, state governments' direct revenue of \$79.1 billion plus income from the good and services tax of \$98.3 billion in 2015-16 (ABS Cat No. 5506.0), represented a total of approximately \$16,500 per person employed of 10.7 million.

Translating this through to the estimated employment generated including Type 1 "flow-on" effects of the order of 4000 a year, gives an estimated taxation revenue that could be expected to accrue to the State Government, when the project is fully operational, about \$66 million per annum as an order of magnitude figure. In the first 10-year period, taxation revenue generated for the State Government is estimated to be up over \$300 million and in the first ten years of full operation up around the \$600 million level.

9.4 Impact on Queensland's Tourism

Queensland has a number of focal points for international holiday visitors especially Gold Coast, Cairns and Brisbane each with an airport serviced by direct flights from overseas, Queensland comes in second to New South Wales in international holiday visitors.

This extends to the major current international growth market of China.

Table 61: Holiday Visitors from China, 2016-17

		Total
New South Wales		440,000
Queensland		358,000
Gold Coast	256,000	
Cairns/TNQ	189,000	
Brisbane	149,000	
Victoria		345,000

Source: Tourism Research Australia, International Visitor Survey (IVS).

In 2016-17, some 189,000 (53%) of Queensland holiday visitors from China visited the Cairns/Tropical North Queensland region.

The establishment of KUR-World has the potential to consolidate Queensland's place in international holiday markets, especially from the major growth market of China and help Queensland become the leading State in Australia for Chinese holiday visitors.

9.5 Helping Spread the Impacts of Tourism throughout the Nation

The Cairns/Tropical North Queensland region plays a very important role in helping spread tourism around Australia and outside the south-east corner of the nation, especially international visitors.

The following table illustrates this spread, especially throughout regional Queensland, the Red Centre and the "Top End".

Table 62: Proportion of International Visitors, Who also Visit the Cairns Region

	Percent	
Central Queensland	62%	
Whitsundays	68%	
Townsville	76%	
Darwin	35%	
Red Centre (Lasseter)	54%	

Source: Tourism Research Australia, International Visitor Survey (IVS).

The project will help consolidate Cairns' role in this.

9.6 Strengthening Economic & Social Relations with China

Chinese immigrants once played a strong and special role in the development of the Cairns Tropical North Queensland region. Celebrating Chinese New Year has long been part of the city's social calendar. Indeed, the region has a strong diversity of local residents from various backgrounds. On top of this, the region welcomes an exceptionally wide range of visitors from around the world in an Australian environment.

The KUR-World project will play a special role in diversifying Australia's growing economic engagement with China, especially in developing people to people contact through tourism that will help foster better understanding and harmonious relations.

APPENDIX 1 – TECHNICAL NOTES

1.0 Methodology

Methodology is generally in line with the terms of reference for the Environmental Impact Statement for the project and the Economic Impact Assessment Guidelines of the Queensland Coordinator General.

In relation to economic impact modelling of employment and “flow-on” effects in the economy, standard input/output multiplier models are used. At the request of the Coordinator General’s office, only Type 1 multipliers are used that estimate “industry” flow on effects and Type 2 multipliers “income” effects have been excluded.

The possibility that the scale of the project would lead to short term inability to supply, leading to price rises and/or greater imports was investigated to determine if there was a need to modify these models to take those effects into account.

This has been particularly related to the construction phase. At a regional level, it was found that demand from the project could be met through the region’s normal pattern of supplies and there was no special need to modify the normal input/output multipliers.

In the operational phase over a longer period of time, the resulting increased scale of activity in the region is likely to result in investment in additional supply capability to cater for the higher level of activities.

It should be noted that input/output “flow-on” effects identified by standard modelling tends to be immediate “flow-on” and that secondary “flow-on” effects can occur. For instance, taxes will flow out of the model but subsequently finance the provision of government services like education, health facilities to cater for higher population levels.

2.0 Construction of Input/Output Multipliers

Input/output multipliers used in this analysis have been constructed using national input/output coefficients as provided in Australian Bureau of Statistics National Accounts Catalogue 5209.0.55.001, Table 2, 2009-10, modified to take account of industrial structure of the local region as indicated by workforce by industry, Census 2011, compared with national industry structure. This is on the basis that for a given industry classification, the ratio of the local proportion of total to the national proportion of total is one or more than one, full national coefficients apply to the region and if less than one, then national coefficients are modified in proportion.

3.0 Accuracy of Input/Output Multipliers

Because of the assumptions made:

- that input profiles of industries in the region are the same as the national averages
- that the operations being modelled have an input profile the same as for the broad industry group defined in the ABS national table classifications
- that the regional industry structure as defined by workforce is the same as the referenced year
- that the national coefficients have not changed over time since the year used.

the tables should be regarded as giving order of magnitude estimates only.

4.0 Construction, Employment and “flow-on” Multipliers

The following table gives Modified National Coefficient Model Input/Output Multipliers Type 1 for the Far North Queensland region.

Industry	Output \$m	Total additional GVA with Type 1 "flow-on" \$m	Initial employment	Total employment including Type 1 "flow-on"
Residential building construction	1.00	0.59	3.25	5.68
Non Residential building construction	1.00	0.62	0.90	3.46
Heavy & civil engineering	1.00	0.67	1.21	3.44
Professional, scientific & technical services	1.00	0.69	3.76	5.47

5.0 Operating Phase Employment and "flow-on" Multipliers

The following table gives Modified National Coefficient Model Input/Output Multiplier Type 1 for the Far North Queensland region.

Industry	Output \$m	Total additional GVA with Type 1 "flow-on" \$m	Initial employment	Total employment including Type 1 "flow-on"
Sport & recreation	1.00	0.62	4.69	7.06
Heritage	1.00	0.67	5.93	7.92
Food & beverage	1.00	0.68	8.65	10.18
Accommodation	1.00	0.76	7.38	8.82
Retail	1.00	0.77	8.87	10.39
Other services	1.00	0.75	6.71	7.99
Health	1.00	0.80	9.01	10.05
Technical, education & accommodation	1.00	0.76	7.38	8.82

6.0 Property Sales

Normal activity involved in property sales in the region is estimated to stimulate expenditure as follows levels of activity as a percentage of property value.

Marketing.....1.0%
Sales agent2.0%
Legal.....0.5%
Total3.5%

In this case, much of the marketing and sales activity would be overseas but there will be other expenditure involved with potential purchasers visiting the region and being shown the properties and local legal fees. An estimated regional impact of 3.0% is used.

7.0 "Flow-on" Impacts Property Sales

The following Type 1 multipliers are used.

Proportion of total	Industry	Output	GVA	Initial employment	Total with Type 1 "flow-on"
0.25	Real estate services	1.00	0.71	1.63	3.74
0.25	Professional, scientific & technical services	1.00	0.69	3.30	4.55
0.25	Food & beverage	1.00	0.68	8.65	10.43
0.25	Accommodation	1.00	0.76	7.38	8.82
	Total	1.00	0.75	5.24	5.90

8.0 Gross Value Added and Gross Regional Product

To estimate Gross Regional Product from Gross Value Added, it is necessary to include an amount for indirect taxes less subsidies. The average difference between GRP and GVA for all industries at national level in 2013-14 was 7%. In 2009-10, it was 8%.

As an estimate for the type of activities involved in the region, which is unlikely to include a high degree of subsidisation, where applicable, an expansion factor of 8% is used.

9.0 Population to Workforce Ratio Kuranda

Population to workforce ratio Kuranda in 2011 was 2.13. This would have been affected by the relatively high indigenous population. For forward projection, a typical ratio of 2.0 is used.

The ratio could be lower for the construction workforce estimated to be temporarily located there over the years 2020-21 to 2022-23.

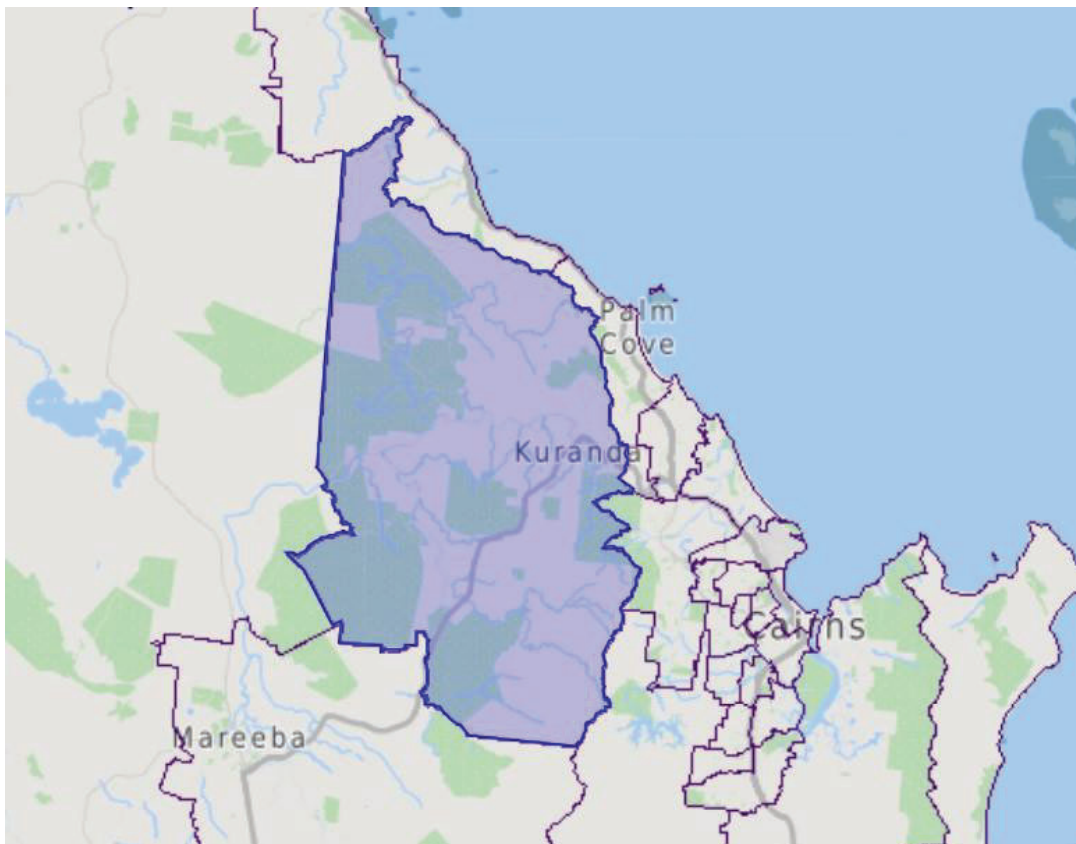
10.0 Statistical Areas Borders

The following gives maps of statistical area borders for:

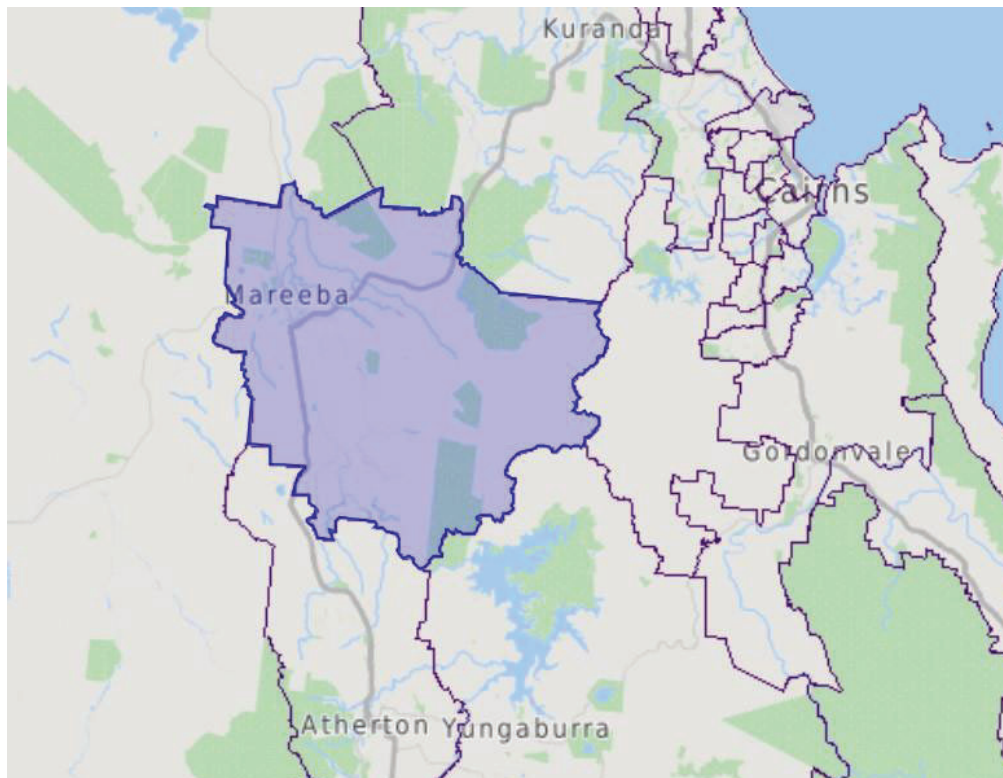
- 1) Kuranda SA2
- 2) Tablelands Local Government Areas
- 3) Cairns & Immediate Region SA4

STATISTICAL AREAS DEFINED

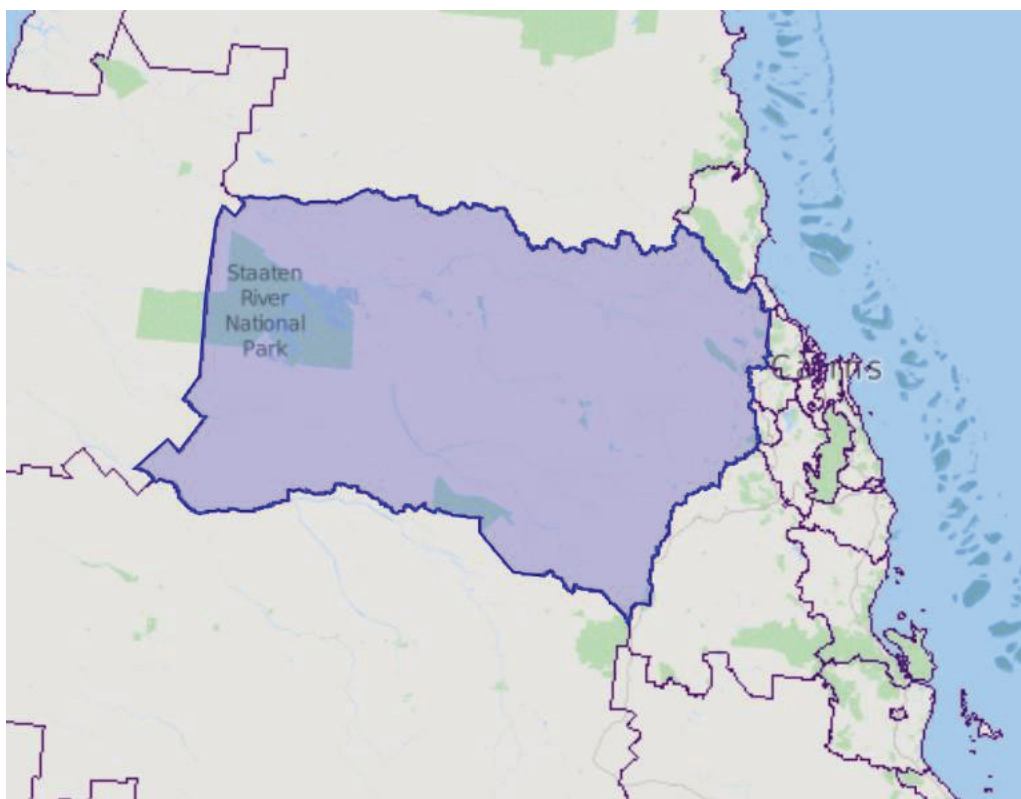
MAP 1 - KURANDA SA2 – (PART MAREEBA SHIRE)



MAP 2A - TABLELANDS COMMUNITY – MAREEBA SA2 – (PART MAREEBA SHIRE)



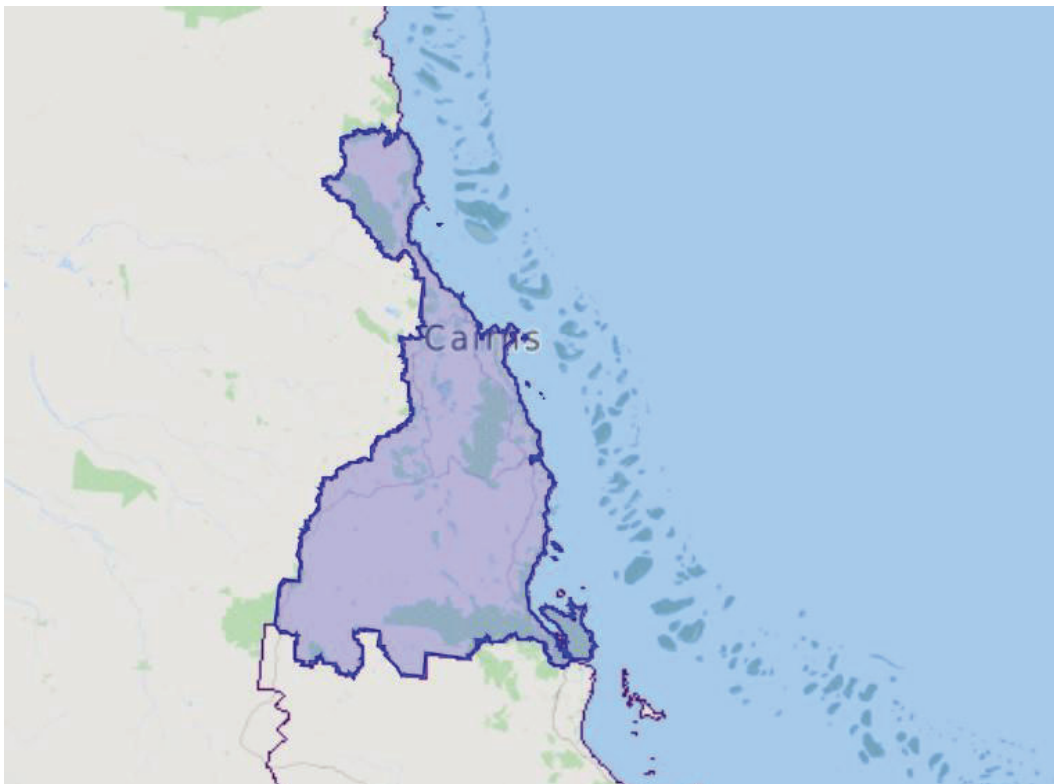
MAP 2B - TABLELANDS COMMUNITY – QUEENSLAND OUTBACK TABLELANDS SA2 – (PART MAREEBA SHIRE)



MAP 2C – TABLELANDS COMMUNITY – TABLELANDS LGAS (MAREEBA AND TABLELANDS)



MAP 3 – CAIRNS REGION COMMUNITY – CAIRNS SA4



11.0 Multiplier “Flow-on” Effects – Additional Expenditure Created in Kuranda

Relevant multipliers for estimation of impacts are as follows.

	Output \$m	Direct employment No.
Heritage (attraction)	1.00	5.93
Retail	1.00	8.87
Import	1.00	Nil
Food & beverage	1.00	8.65
Residential dwelling construction	1.00	3.25
Household expenditure	1.00	3.50

12.0 Car Travel Costs – Day Trippers

Advised Australian Taxation Office deduction allowance is 66 cents per km. In the analysis, 60 cents is used.

13.0 Visitor Length of Stay Averages Cairns Region

Following gives information on length of stay of international visitors from Tourism Research Australia IVS YE March 2017 in nights - Japan 3.3, Hong Kong 2.8, China 2.5, USA 3.7, UK 4.0, Germany 4.4.

It can be expected that with direct flights, average length of stay of Chinese visitors will increase.

14.0 Treatment of Retail Sales in Input Output Tables

Retail industry in National Input Output Tables is recorded as “value added” rather than total sales.

In the Cairns region, most of the goods sold would not be manufactured in the region and the cost of goods sold (excluding value added), have been recorded as “imports” with no flow through to the regional economy.

15.0 Expenditure at Airport

Every visitor to the region who comes through the airport generates expenditure at the airport including on airport operations, security (including customers, immigration, police), and shopping. Work carried out by Cummings Economics for Cairns Airport in 2010-11 on the economic impact of the airport indicated that average expenditure generated per passenger at the airport was of the order of \$120 per movement and \$240 per two-way movements. It is likely that with airport and aviation operation efficiencies, this figure would not have expanded greatly.

An amount of \$200 expenditure per visitor is brought to account in Table 21.

16.0 Proportion of Workforce in Construction and Operation, Living in Cairns

Census data indicates that of those who work in Kuranda at present, about 21% live in Cairns. For this analysis, it is assumed, that in the light of mitigation policies to draw as much workforce as possible from the Tablelands area, proportion from Cairns is of the order of 20 - 30% both during construction and operations.

APPENDIX 2 – CONSTRUCTION PHASE – MATERIALS SUPPLY CAPACITY REPORT